# Personnel Placement

Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, or national origin.

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

Display (Positions Open, Market Place, and so forth): \$145 per 25 millimeters (1 column inch), minimum, per insertion (25 millimeters equals 10 lines of 50 spaces and characters each). Ads over 25 millimeters billed at \$5.80 per millimeter. No charge for use of box number. Rates net. No agency commission for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

Advertising closing is each Wednesday,  $3\frac{1}{2}$  weeks before Friday issue date requested. Send copy for all positions wanted ads and display ads under 5 inches to:

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

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

Scherago Associates, Inc. 11 West 42nd Street New York, N.Y. 10036 Telephone: 212-736-1858

Blind Ad replies should be addressed as follows:

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

#### **POSITIONS WANTED**

Biochemist. Ph.D. 1966. Background: biogenic amines/CNS; needs position immediately. Jourdi-kian, 252 Washington Boulevard, Oak Park, Illinois 60302. Home telephone: 312-524-1756

12/9, 16, 23; 1/6

Biologist/Botanist, Ph.D., specialization in mycology, broad experience in microbiology. Long, dedicated teaching experience in biology, botany, microbiology, immunology. Publications. Seeking teaching and/or research position. S. Ahmad, 75 Brittany Drive, Amherst, N.Y. 14120.

Classical Virologist. Ph.D. Seeks challenging opportunity with established research group or will initiate programs. Experience with numerous herpes-virus systems of mammals, birds, reptiles, and fish. Vaccine and anti-viral drug chemotherapy. Publications. Box 436. SCIENCE. Box 436, SCIENCE.

Director, Regulatory Affairs/Toxicology. Ph.D. Safety testing of chemicals, products. Clinical evaluations. Directed preparation of IND's, NDA's, all approved. Management of OTC drug and consumer product development, organic chemistry, microbiology. Many publications, U.S. patents. Box 428, SCIENCE.

Experimental Therapy/Viral Oncology/Immunology Ph.D. 1967. Two years, postdoctoral; 8 years, medical school faculty. Last 4 years as head of hospital interdepartmental cancer research. Seeking institutionally funded position on associate level in research-teaching-administration. Box 437, SCI-

Marine Chemist. Ph.D. physical chemist with academic and administrative background and recent extensive work in chemical oceanography seeks position in academia, government laboratory, or research institute. Research emphasis preferred; will consider administrative or teaching position. Salary and location open. Box 438, SCIENCE. X

Molecular Biologist, M.A.; 2 years experience in amino acid analysis, protein purification, and enzyme analysis. Four years of electronics experience. Seeks position involving R & D of biological instrumentation. Box 439, SCIENCE.

Zoologist. Ph.D. Research in ichthyology, paleoichthyology, water pollution, aquatic biology. Relocate anywhere. Teaching, research, curating, consulting, field work. Box 440, SCIENCE.

#### POSITIONS OPEN

The Department of Neurosciences, School of Medicine, University of California, San Diego, is seeking qualified candidates (M.D. or Ph.D.) for a full-time, tenure-track position at the ASSISTANT PROFES-SOR level available July 1978. Candidates will be ex-SOR level available July 1978. Candidates will be expected to establish a strong research program in one of the following areas: developmental neuroanatomy, molecular neurobiology, neurochemistry of peptide hormones, and/or cellular neurophysiology. The position requires teaching in a specialty area at the graduate level and participation in undergraduate medical student instruction. Salary is competitive nationally. Send curriculum vitae, bibliography, and outline of professional and research interests to: Search Committee. Department of Neurosciences. M-Search Committee, Department of Neurosciences, M-008, University of California, San Diego 92093. The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF AGRONOMY (CROP PHYSIOLOGIST). The Department of Agronomy and Soils seeks a Ph.D. to teach underphysiology, preferably in the areas of photosynthesis and/or water relations. Salary is open. Applicants should submit résumé, statement of research interests, academic transcripts, and names of three referests, academic transcripts, and names of three references to: Dr. J. C. Engibous, Department of Agronomy and Soils, Washington State University, Pullman, Wash. 99164. Washington State University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR-BIOCHEMISTRY. Regular tenure-track position in the Department of Chemistry beginning fall 1978. Well-equipped research laboratory available. Research interest in the structure and chemistry of proteins, glycoproteins, or polysaccharides preferred, but other research areas considered. Postdoctoral experience required. Send curriculum vitae and one letter of reference to:
Robley J. Light, Department of Chemistry, Florida
State University, Tallahassee, Florida 32306. An
Equal Opportunity/Affirmative Action Employer.

ASSISTANT OR ASSOCIATE PROFESSOR, BIO-MATHEMATICS PROGRAM: teaching and re-search in modeling of biological systems, with preferred emphasis on ecosystems and agro-ecosystems, and in theory of model construction and validation. Ph. D. required in a combination of biology and mathematical science. Send résumé, names of three references, transcripts (recent graduates), and a letter describing research interests to: Dr. Harand a letter describing research interests to: Dr. Harvey J. Gold, Biomathematics Program, Department of Statistics, North Carolina State University, Box 5457, Raleigh, N.C. 27607. North Carolina State University is an Equal Opportunity/Affirmative Action Em-

#### POSITION IN BOTANY

Applications are invited for a position as assistant professor of botany with teaching emphasis in plant physiology and anatomy. Additional responsibilities will include general biology and other courses consistent with the individual's expertise. Research in sistent with the individual's expertise. Research in the primary discipline is required. Send three letters of reference, undergraduate and graduate transcripts, a curriculum vitae, and a statement of research interests to: Dr. G. L. Bintz, Department of Biology, Eastern Montana College, Billings, Montana 59101. Application deadline is 15 February 1978. Eastern Montana College is an Equal Opportunity Employer.

#### ASSISTANT PROFESSOR OF PHARMACOLOGY

The New Jersey School of Osteopathic Medicine seeks applications from individuals with postor biophysical actions of therapeutic and toxic agents. The appointment may be made as early as I July 1978. The individual will participate in teaching in collaboration with an established medical school department and will be encouraged to inaugurate in-dependent research with extramural support. Please send curriculum vitae, names of three references, and a statement of teaching and research interests

Dr. Gary Bailin
Chairman, Pharmacology Search Committee
College of Medicine and Dentistry of New Jersey
New Jersey School of Osteopathic Medicine
Box 55-AB
Piscataway, New Jersey 08854

An Equal Opportunity/Affirmative Action Employer

#### POSITIONS OPEN

ASSISTANT PROFESSOR OF CHEMISTRY, tenure-track position starting September 1978. We seek an organic or medicinal chemist with experience in an organic of medicinal chemist with experience in synthesis of molecules having biological or tox-icological importance; postdoctoral experience de-sirable. Excellent research opportunities; candidates must have a strong interest in undergraduate teachmust have a strong interest in undergraduate teaching. Applicants should submit a résumé, a statement of research interests, and have three letters of recommendation sent to: Michael Marron, University of Wisconsin-Parkside, Kenosha, Wis. 53141; telephone: 414-553-2430. Applications will be accepted through 1 March. University of Wisconsin is an Equal Opportunity Employer.

# UNIVERSITY OF GUELPH DEPARTMENT OF MICROBIOLOGY

ASSISTANT OR ASSOCIATE PROFESSOR. The appointee will participate in an established research program in the area of fish diseases. Applicants program in the area of fish diseases. Applicants should have a successful record in this area, or be experienced in serology/immunology and be prepared to apply this expertise to fish diseases. A strong background in general microbiology is necessary, and the appointee will be required to contribute to the department's diverse and extensive undergraduate and graduate teaching programs. The level of appointment will be commensurate with the qualifications and experience of the successful applicant. This position is available immediately. This position is available immediately.

ASSISTANT PROFESSOR. The appointee must have a strong background in microbiology and electron microscopy, and will be required to participate in the undergraduate and graduate teaching programs. He/she will be encouraged to establish an active research program, and will be expected to provide electron microscope expertise and assistance to other research programs in the department. This appointment will be made effective September 1978.

The Ph.D. degree is a requirement for both positions. The appointments will be probationary in nature and the granting of tenure will be considered within 5 years of appointment. Applications, including a detailed curriculum vitae and the names of three referees, should be sent to: Dr. D. C. Jordan, Chairman, Department of Microbiology, University of Guelph, Guelph, Ontario, Canada NIG 2W1 to arrive no later than 1 February 1978.

## SOUTHERN ILLINOIS UNIVERSITY SCHOOL OF MEDICINE

Division of Pharmacology, ASSOCIATE PROFES-SOR OF PHARMACOLOGY, Ph.D. or M.D. Appli-cants must have an established research program, preferably in the area of endocrine or biochemical preferably in the area of endocrine or biochemical pharmacology. Commitment to teaching medical pharmacology and participation in the graduate program is expected. Candidates should send curriculum vitae, summary of teaching duties, and the names of three references to: Dr. William H. Cline, Dr., Professor and Director, Division of Pharmacology, Southern Illinois University, School of Medicine, P.O. Box 3926, Springfield, Illinois 62708. An Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT PROFESSOR OF PHARMACOLOGY

Faculty position preferably for Ph.D. in pharmacology with 2 years of postdoctoral research and/or teaching experience. Candidate to assume teaching responsibilities and to develop independent research responsibilities and to develop independent research program in cardiovascular pharmacology or in toxicology. Submit curriculum vitae, bibliography, and a brief statement of research plans by 16 January 1978 to: Dr. H. George Mandel, Chairman, Department of Pharmacology, George Washington University Medical Center, 2300 Eye Street, NW, Washington, D.C. 20037.

An Equal Opportunity Institution

CARDIOVASCULAR RESEARCH PROGRAM DIRECTOR. Senior cardiovascular research scientist to direct Cardiovascular Research Program of Oklahoma Medical Research Foundation. Established close working relationships with University of Oklahoma Health Sciences Center and other Oklahoma Health Center institutions. Responsibility for evaluation and development of existing and new clinical and laboratory research components, including small group and larger collaborative programs. Salary negotiable with excellent fringe benefits. Equal Opportunity/Affirmative Action Employer. Send curriculum vitae and letter of interest to: Chairman, Cardiovascular Director Search Committee, Oklahoma Medical Research Foundation, 825 Northeast 13th ma Medical Research Foundation, 825 Northeast 13th Street, Oklahoma City, Okla. 73104.

#### POSITIONS OPEN

### ASSISTANT AND/OR ASSOCIATE PROFESSOR(S) OF PHYSIOLOGY

The Department of Physiology and Biophysics has one or two positions available for which applications are invited. Candidates should have completed their M.D. or Ph.D. (medical physiology) at least 2 years prior to application and demonstrated scientific capabilities in their area of interest. To be considered, individuals, must have displayed an applitute of pabilities in their area of interest. To be considered, individuals must have displayed an ability to effectively teach in other areas of human physiology in a medical school setting. Preference will be given to candidates with research experience in renal physiology or neurophysiology, though applicants with expertise in other fields will also be considered. To apply please send curriculum vitae, bibliography, and names of three references to: Chairman, Search Committee, Department of Physiology and Biophysics, Hahnemann Medical College and Hospital, 235 North 15th Street, Philadelphia, Pennsylvania 19102. An Equal Opportunity/Affirmative Action Employer. All applications must be completed by 31 January 1978.

ASSISTANT RESEARCH PHYSIOLOGIST in the Cardiovascular Research Institute/Anesthesia Research Center, University of California, San Francisco. Respiratory, acid base, cerebral circulatory, barbiturate protection of injured brain, micro Po<sub>2</sub>, Pco<sub>2</sub> electrodes, mass spectrometry. Open now; salary of \$17,500, annually. Apply to: J. W. Severinghaus, M.D., 1386-HSE, University of California, San Francisco, San Francisco, Calif. 94143. The University of California is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

BIOLOGISTS. We anticipate two openings in biology beginning September 1978. Candidates should be broadly trained but with specific competence in one or more of the following areas: molecular biolone or more of the following areas: molecular biology, biochemistry, cell biology, organismic biology. We desire Ph.D. or equivalent, excellent teaching, and research interests. Send application, résumé, appropriate transcripts, and letters from three references to: Edward Flaccus, Secretary, Science Division, Bennington College, Bennington, Vt. 05201.

Bennington College is an Affirmative Action/ Equal Opportunity Employer.

# SHIPPENSBURG STATE COLLEGE SHIPPENSBURG, PENNSYLVANIA

BOTANIST. One-semester appointment available for Semester II, 1977–1978 (with the possibility of a tenure-track appointment). Course responsibilities include general botany and general biology. Ph.D. required. Rank and salary dependent on qualifications and experience. Apply before 23 December 1977 to: Dr. William E. Peightel, Chairman, Department of Biology, Shippensburg State College, Shippensburg, Pennsylvania 17257. An Equal Opportunity/Affirmative Action Employer.

#### CELL BIOLOGISTS

The Department of Anatomy and Neurobiology, Washington University School of Medicine, is planning to make two appointments in cell biology, for ning to make two appointments in cell biology, for individuals whose research interests are in the areas of molecular and developmental biology or cell ultrastructure, but not neurobiology. Appointees would be expected to engage in an active research program and would have the responsibility of participating in courses in microscopic anatomy and/or cell biology for medical and graduate students. Applications, which should include a curriculum vitae and the names of three referees, should be made by I January 1978 to: Dr. E. G. Jones, Department of Anatomy and Neurobiology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, Missouri 63110.

Washington University is an Equal Opportunity/Affirmative Action Employer.

firmative Action Employer

#### CELLULAR NEUROBIOLOGIST

The Department of Neurobiology is seeking a new faculty member at the assistant professor level. The department is especially, but not exclusively, interested in immunological, biochemical, and electron microscopical approaches, and in appointing women and minority people. Please send curriculum vitae, a brief outline of research plans, and the names of three references to:

> Search Committee Department of Neurobiology Harvard Medical School 25 Shattuck Street Boston, Mass. 02115

#### **POSITIONS OPEN**

#### **CHAIRMAN** DEPARTMENT OF FORESTRY MICHIGAN STATE UNIVERSITY

Candidates are invited to apply immediately; application deadline is 31 January 1978.

The chairman is responsible for administrative direction of all programs within the Department of Forestry—teaching, research, extension, and public service. The chairman reports directly to the dean of the College of Agriculture and Natural Resources. Salary will be commensurate with qualifications.

Qualifications: candidates must have doctoral de gree and at least one degree in forestry from an SAF-accredited institution. An established record of achievement in teaching, research, extension, or public service in forestry is required. Demonstrated administrative ability, strong leadership qualities, and a record of activity in professional affairs must

The department faculty includes 20 full-time members and eight members of other departments holding joint appointments in forestry. Current enrollment includes 342 undergraduates, 54 M.S. degree candidates, and 32 Ph.D. candidates.

Résumés and references should be sent to:

Dr. Randall B. Heiligmann Chairman of Search Committee Department of Forestry 126 Natural Resources Building Michigan State University East Lansing, Mich. 48824

Michigan State University is an Equal Opportunity

#### CARNEGIE-MELLON UNIVERSITY DEPARTMENT OF BIOLOGICAL SCIENCES CHAIRPERSON

Applications are invited for the position of department chairperson. This position involves major responsibilities for the continued growth of departmental research activities, as well as undergraduate and graduate training programs. The department is a newly organized unit of the College of Science (Mellon Institute of Science) and its members are actively engaged in research projects in the areas of biochemistry, biophysics, cell biology, genetics, and molecular biology. Interested candidates should possess a Ph.D. degree and excellent research credentials in related areas. Letters of inquiry and curriculum vitae should be sent to: Professor Robert D. Goldman, Chairman, Search Committee, Department of Biological Sciences, Mellon Institute of Science, Carnegie-Mellon University, 4400 Fifth Avenue, Pittsburgh, Pa. 15213.

### CHAIRPERSON DEPARTMENT OF BIOCHEMISTRY

The Albany Medical College of Union University seeks a highly qualified individual for the position of chairperson and professor of biochemistry. Ph.D. and/or M.D. required. A commitment to teaching and a record of accomplishment in research essential.

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

Dr. Lawrence A. Caliguiri, Chairman Biochemistry Search Committee Albany Medical College of Union University Albany, New York 12208

An Equal Opportunity/Affirmative Action Employer

#### CLINICAL IMMUNOLOGIST

Applications are invited for the position of director Applications are invited for the position of director of Clinical Immunology Laboratory in a new community-based medical school. The applicant should possess the M.D. or M.D.-Ph.D., should be familiar with the performance and application of standard and newer immunological tests, should have demonstrated excellence in immunological research, and and newer immunological tests, should have defining strated excellence in immunological research, and should have an active interest in teaching medical and graduate students. The applicant will be respon-sible for the development of a clinical immunology sible for the development of a clinical immunology laboratory, provide consultative services and serve as a liaison between physicians and professional immunologists. Appointment will be in the Departments of Medicine and/or Pediatrics and Microbiology and Immunology at the level of assistant or associate professor. Send curriculum vitae, list of publications, and three letters of recommendation to: Dr. George L. Wright, Jr., Director, Immunology Program, Department of Microbiology and Immunology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Va. 23501. An Equal Opportunity/Affirmative Action Employer. ative Action Employer

#### **POSITIONS OPEN**

#### CHAIRPERSON Department of Botany and Microbiology University of Oklahoma

Established scientist with demonstrated leadership and proven research record sought to be department and proven research record sought to be department chairperson while maintaining an active research program. Applicants must provide evidence of teaching credentials at both undergraduate and graduate levels. The department has 18 faculty members with broadly based research interests who are responsible for administering strong graduate and undergraduate programs in botany and microbiology. Inquiries and recommendations are welcome. By 1 February, 1978, applicants should supply a curricular program of the progr recommendations are welcome. By 1 February 1978, applicants should submit a curriculum vitae, list of publications, and at least three references to: Dr. Leonard Beevers, Department of Botany and Microbiology, 770 Van Vleet Oval, University of Oklahoma, Norman, Oklahoma 73019.

An Equal Opportunity/Affirmative Action Employer

#### CHEMIST III

Applications invited for analytical chemist to conduct and supervise pesticide analyses of environ-mental samples. Position requires M.S. in analytical mental samples. Position requires M.S. in analytical chemistry or equivalent and experience in pesticide residue analysis, familiarity with mass spectrometry and chrometographic procedures and statistical design. Available immediately. Beginning salary \$14,219 per annum. Applications close 20 December. Send biographical résumé, transcripts, and names of three references to: Dr. W. B. Ennis, Jr., Professor and Center Director, Agricultural Research Center, University of Florida, 3205 SW 70th Avenue, Ft. Lauderdale, Fla. 33314. Ft. Lauderdale, Fla. 33314.

COORDINATOR OF RESEARCH AND SPON-SORED PROGRAMS. The Medical University of South Carolina is seeking to fill an expanded (full-time) position as coordinator of research and spon-sored programs. Principal duties of this position insored programs. Principal duties of this position include the evaluation and processing of proposals for extramural funding of projects in the areas of biomedical research, of education in health fields and of health care delivery systems as well as the identification of sources of support. This high administrative post will involve close participation with the faculty and administration in strengthening research activities and in identifying changes in funding patterns in ties and in identifying changes in funding patterns in the areas mentioned above. The coordinator will re-port to the vice president for academic affairs. Fa-miliarity with the programs of the National Institutes of Health and other federal and private agencies with interests in health affairs is mandatory as is a back-ground in scientific research. A Ph.D. and/or a proground in scientific research. A Ph.D. and/or a professional degree at the doctoral level is required. Send credentials, including names and addresses of three references, by 20 December 1977 to: Dr. B. Baggett, Chairman, Search Committee for a Coordinator of Research and Sponsored Programs, Department of Biochemistry, Medical University of South Carolina, Charleston, South Carolina 29403. The Medical University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF RESEARCH for a large mental health-mental retardation organization. Must have: Ph.D. or equivalent, minimum of 5 years experience, multidisciplinary background, population and medical genetics, psychiatry, epidemiology, advanced statistics, some computer programming. Publications required, both as senior author and in edited journals. Exciting challenge with close university participation. Send résumé to: Director of Personnel, Box 388, Louisville, Ky. 40201.

#### PERIGLACIAL LABORATORY DIRECTOR Quaternary Research Center University of Washington

The Quaternary Research Center invites appli-cations for the position of director of its Periglacial cations for the position of director of its Periglacial Laboratory. The laboratory is designed to carry out studies of frost-action processes in soils and to investigate permafrost problems, including implications for Quaternary paleoclimatology and sedimentology. Applicants should have experience both in field and laboratory investigations and have broad interests in Quaternary studies and polar research. The director will be expected to supervise graduate student research and teach such appropriate courses as may be agreed. Appointment will be at the associate or full professor rank with salary commensurate with experience. Apply to: Director, Quaternary Research Center, University of Washington, Seattle, Washington 98195. Closing date for applications is 15 February 1978. February 1978.

The University of Washington is an Affirmative

Action/Equal Opportunity Employer

Renal Pharmacologist Physiologist PhD SmithKline Corporation, a diversified multi-national pharmaceutical

firm located in Philadelphia, Pa., is seeking an experienced Pharmacologist or Physiologist to supervise a Renal Pharmacology laboratory. The successful candidate should be interested in research directed towards the discovery and pharmacological characterization of new diuretic drugs and should have broad training in vascular, endocrine and biochemical aspects of renal function.

Preference will be given to individuals with the following

- PhD in Pharmacology or Physiology with broad training in renal pharmacology or physiology.

  1 to 5 years of direct lab experience beyond the Doctor-
- ate in renal Pharmacology/Physiology
- Demonstrated capability in initiating and conducting independent research.
- Specific interest and experience in hypertension and supervisory experience highly desirable.

SmithKline offers an excellent compensation program and opportunity for professional growth. Please send resume with salary histroy to: Mr. W.B. Flagg, SMITHKLINE CORPORATION, 1544 Spring Garden Street, P.O. Box 7929, Phila., Pa., 19101. An

opportunity employer,

SmithKline Smith Kline & French Laboratories

The Department of Physical Oceanography at the Woods Hole Oceanographic Institution has 2 positions available.

### ASSISTANT SCIENTIST

The candidate should be interested in the dynamics of largescale ocean circulation and waves, and be competent in numerical modelling and computer simulation techniques. We will have available in Woods Hole an improved terminal link with the high-speed computational facility at N.C.A.R. for this research. Required education is a PhD in Physical Oceanography.

#### POSTDOCTORAL INVESTIGATOR

Applicants should have a recent degree in physical sciences and a good background in geophysical fluid dynamics. Applicants should be capable of carrying out work at sea and planning independent research in the field of ocean circulation. The successful candidate will participate in the Local Dynamics Experiment (June 1978) of the joint US-USSR POLYMODE experiment. The appointment will be for a 1year term with renewal for a second year to be considered at the end of that term.

Interested candidates for these positions should send resumes to:



Mr. Valentine Worthington, Chairman PHYSICAL OCEANOGRAPHY **DEPARTMENT WOODS HOLE OCEANOGRAPHIC** INSTITUTION

Woods Hole, MA 02543

An Equal Opportunity Employer M/F

#### Cardiovascular **Pharmacologist**

An excellent opportunity is now available for recent PH.D. in Pharmacology with a major research interest in the field of hypertension. Preference will be given to individuals with expertise in biochemistry of the cardiovascular system concerning such topics as membrane structure and function, enzymology and comparative biochemical evaluation.

#### Virologist

A Research Scientist position is open for PH.D. Virologist interested in Human Virus Vaccine Development. Experience in mechanisms and techniques for the isolation and immunological evaluation of viral antigens from human viral pathogens will be helpful. Responsibilities include collaboration with present group, the development of original programs, and ability to demonstrate scientific and administrative leadership.

These opportunities are available with Wyeth Laboratories, a leading pharmaceutical firm located in Suburban Philadelphia. We are offering an excellent salary along with comprehensive benefits plan, if you have an interest and are qualified for this position, please submit your curriculum vitae including salary requirements and references to:

JOHN W. PINKERTON PERSONNEL DEPARTMENT



LABORATORIES P.O. Box 8299 Philadelphia, Pa. 19101

An Equal Opportunity Employer, M/F/H

SENIOR VISITING

#### FELLOWSHIP PROGRAM

Centre for Interdisciplinary Studies in Chemical Physics
The University of Western Ontario London, Ontario, Canada.

The Centre for Chemical Physics at The University of Western Ontario was formed in 1973 to encourage research in those areas of science which overlap more than one of the traditional disciplines. Centre membership includes faculty members who are active in research in applied mathematical physics about the programments. who are active firesearch in applied matter-ematics, physics, chemistry, engineering, botany, biophysics, nuclear medicine and radiation oncology, together with students and post doctoral fellows.

The Centre invites applications for its Senior Visiting Fellowship Program from the ranks of established scientists working in areas that bridge two or more of the above disciplines. The Fellowships are tenable for a period of up to 12 months, and provide a period of up to 12 months, and provide funds for travel, partial or complete living support at U.W.O., and some research support. During the tenure of their Fellowships, visitors will be expected to work in conjunction with Centre members.

Since the Centre's formation, Visiting Fellowships have been awarded to scientists from 13 countries. Interested persons are asked to write to:-



Dr. J.C.F. MacDon-Chairman, Visiting Fellows Committee, Centre for Inter-disciplinary Studies in Chemical Phys-

ics, The University of Western Ontario, LONDON, Ontario, Canada N6A 3K7

for application forms and additional information.

# UNIVERSITY OF PAPUA NEW GUINEA

(PORT MORESBY)

Applications are invited from medical/science graduates for the following post in the DEPART-MENT OF HUMAN BIOLOGY—TUTOR/SENIOR TUTOR IN PHARMACOLOGY/PHYSIOLOGY. Must have honours degree or equivalent and must possess appropriate postgraduate qualifications in pharmacology and have some expertise in physiology. The Department adopts the integrated approach to the teaching of Human Biology which comprises human anatomy, physiology, blochemistry and pharmacology. The courses extend over three semesters during the second and third years of the undergraduate programme presented to medical and dental students. Appropriate teaching experience in medical schools in developing countries would be an advantage. Other duties will include assistance in the preparation and instruction of laboratory and tutorial classes and any other projects operated by the Department where those projects are related to the teaching function of the Department. Limited research facilities and funds are available. The teaching and research laboratories are reasonably equipped and some modern apparatus, particularly in the areas of cytology and biochemistry, are available. Further information about this position may be obtained from the Chairman, Department of Human Biology, Medical Faculty, U.P.N.G., P.O. Box 5623. Boroko, Papua New Guinea. The successful applicant will be expected to take up duties in February, 1978. SALARIES: Senior Tutor Grade 1—K8,883—K9,863pa. Tutor—K7,113—K8,127pa. (£1 sterling = K1.42). In addition, an allowance of K1,300 per annum if single is payable. An extra K1,000 Marriage Allowance and K156 per child Child Allowance may also be payable. Applications should include detailed curriculum vitae, a recent small photograph and the names and addresses of three referees. Conditions include provision of housing, annual leave fares, study leave and FSSU superannuation. In some cases it may be possible to make an appointment on secondment. Further details and the conditions of appointment are available from the Secretary, Bo

# Manager research facilities of the second secon intense pulsed neutron source (IPNS) projects

Argonne National Laboratory's main research center near Chicago is seeking a professional who can coordinate the design, development, construction, installation, and commissioning of advanced experimental instrumentation needed for fundamental studies of condensed matter with neutrons. Position reports to Project Manager, for all activities involving neutron scattering and radiation effects facilities and associated instrumentation

Research studies will focus on both scattering measurements using peak thermal fluxes of 1016 n/cm2-sec and peak epithermal fluxes of 2x1016 n/cm2-sec eV at 1eV-and radiation damage measurements using the gamma-free fast neutron fluxes of 2x1014 n/cm2-sec expected to be available from the IPNS project.

Position requires a PhD or equivalent in Physics, Chemistry, Metallurgy or Nuclear Engineering and significant research experience on condensed matter with neutrons. Ideal candidate will demonstrate strong leadership ability, imagination, and the ability to take innovative approaches to solving technical problems.

We offer commensurate salary, and fine benefits along with outstanding potential for professional growth. Send resume, including salary history to: Mr. Walter McFall, Argonne National Laboratory, 9700

South Cass Ave., Argonne, III 60439



#### **ARGONNE** NATIONAL LABORATORY

An Equal Opportunity Employer, M/F, HDCPD

#### **POSITIONS OPEN**

Board-certified or Board-qualified **DERMA-TOLOGIST**, with prior experience in the field of photobiology and research experience with animals, for academic position in large Eastern medical center. *An Equal Op*portunity/Affirmative Action Employer. Box 441, SCIENCE.

#### PENNSYLVANIA

DIRECTOR OF THE AUDITORY RESEARCH LABORATORY, University of Pittsburgh School of Medicine-Eye and Ear Hospital of Pittsburgh, De-Medicine-Eye and Ear Hospital of Pittsburgh, Department of Otolaryngology: direct and stimulate basic science research projects in the auditory system and related areas and demonstrate potential to attract outside sources of funding fulfill the educational responsibilities of the University of Pittsburgh and University Health Center Hospitals; supervise the administration and coordination of the Auditory Research Laboratory; possess an M.D. or Ph.D. degree and be recognized nationally and internationally as a leader in auditory systems research. F. Owen Black, M.D., Eye and Ear Hospital of Pittsburgh, 230 Lothrop Street, Pittsburgh, Pennsylvania 15213. An Affirmative Action/Equal Opportunity Employer.

EVOLUTIONARY BOTANY POSITION: available beginning August 1978 for an assistant or associate professor with a broad botanical background to teach a large introductory botany course and to develop a research program in evolutionary biology of velop a research program in evolutionary biology of plants with emphasis on areas such as experimental systematics, population genetics, or population ecology. Salary is dependent on qualifications. Applicants should arrange for a résumé, transcripts, and three letters of reference to be sent to: J. S. Boyer, Chairperson of Search Committee, Department of Botany, University of Illinois at Champaign-Urbana, Urbana, Illinois 61801. Telephone: 217-333-6109. Applications should be completed by 1 February for full consideration. consideration.

niversity of Illinois is an Affirmative Action/ Equal Opportunity Employer.

FACULTY OPENING-The Division of Applied Mechanics, Department of Mechanical Engineering, Stanford University, invites applications for a position at the assistant professor (possibly higher) level. Desired are applicants with a high capability for re-Desired are applicants with a high capability for research and graduate level teaching in the area of general continuum mechanics, including viscoelasticity and plasticity, with both theoretical and computational considerations. Ph.D. is required. Send resumé, transcripts, and names of three referees to: Professor C. R. Steele, Division of Applied Mechanics, Stanford University, Stanford, Calif. 94305. Stanford University is an Equal Opportunity/Affirmative Action Employer.

#### THE UNIVERSITY OF TEXAS AT AUSTIN

FACULTY POSITIONS, MICROBIOLOGY: applications are invited for two assistant professor positions which will be available fall 1978. Outstanding applicants at a higher level will also be considered. applicants at a figure level will also be considered. Candidates with research interests in medical microbiology, somatic cell biology, and the biochemical aspects of eucaryotic and procaryotic microgranisms are especially encouraged to apply. Applicants should submit their transcripts, curriculum vitae, bibliography, statement of research interests, and references to: Dr. David T. Gibson, Department of Microbiology, The University of Texas at Austin, Austin, Texas 78712.

Affirmative Action/Equal Opportunity Employer.

State University of New York at Stony Brook—FACULTY POSITIONS available in the Department of Pharmacological Sciences. Senior position requires 5 years of postdoctoral experience, demonstrated ability to conduct independent and innovative research (January 1978). Assistant professor level requires minimum of 2 years postdoctoral experience, potential to develop independent research (July 1978). Preferred areas of research interest for above positions are neuropharmacology, endocrine pharmacology, and environmental pharmacology. Visiting assistant professor, beginning January 1978, supported by state and research funds with research interest in molecular pharmacology. yantary 1978, supported by state and research indica-with research interest in molecular pharmacology. Send résumé and references to: Chairman, Search Committee, Department of Pharmacological Sciences, State University of New York at Stony Brook, Stony Brook, New York 11794. Equal Opportunity Affirmative Action Employer.

#### **POSITIONS OPEN**

# HOWARD UNIVERSITY FACULTY POSITIONS AVAILABLE

The Department of Anatomy invites applications for faculty positions in: (i) cell biology, (ii) histology, and (iii) gross anatomy-embryology beginning I July 1978. Candidates must be qualified to teach in one of the above disciplines to medical, dental, and graduate students. The candidate should have a strong academic background in the anatomical sciences and an active and independent research program in the biomedical area. Prior medical or dental school teaching experience is highly desirable. Salary is competitive. The departmental and university environments are highly conducive to the pursuit of firstrate research and instruction. Qualified applicants are invited to submit a curriculum vitae, transcripts, and four references to: Chairman, Department of Anatomy, College of Medicine, Howard University, 520 W Street, NW, Room 1105, Washington, D.C. 20059, by January 1978. Howard University is an Equal Opportunity/Affirmative Action Employer. The Department of Anatomy invites applications for

COLBY-SAWYER COLLEGE

Spring Term 1978
Applications invited for two full-time zoology and biology faculty positions at the rank of instructor or assistant professor. Strong interest in teaching, Ph.D., and ability to teach other biological sciences desired. Send application and three recommendations by 1 January 1978 to: Dean of the College, Colby-Sawyer College, New London, N.H. 03257. An Equal Opportunity Employer.

### **FACULTY POSITIONS** IN ANATOMY

Two positions are available effective 1 July 1978. One position is for either an assistant or associate professor to teach in histology and neuroanatomy. The other is for an assistant professor to teach in histology and growth anatomy. Candidates should be actively involved in research. Interested applicants should send a current curriculum vitae and the names of three references to: Dr. A. Peters, Chairman, Department of Anatomy, Boston University School of Medicine, 80 East Concord Street, Boston, Mass. 02118. An Equal Opportunity Employer.

MICROBIOLOGICAL ECOLOGIST, Ph.D., assist-MICROBIOLOGICAL ECOLOGIST, Ph.D., assistant professor level beginning fall 1978. Postdoctoral experience preferred. The successful candidate will be expected to develop an active research program and participate in undergraduate and graduate teaching. Send résumé, names and addresses of three references, and a brief outline of research and teaching interests by 1 February 1978 to: Chairman, Search Committee, Department of Biology, New Mexico State University, Las Cruces, New Mexico 88003. New Mexico State University is an Equal Employment Opportunity/Affirmative Action Employer.

#### MOLECULAR BIOLOGIST

The Cellular and Molecular Biology Faculty of Colorado State University is seeking a molecular geneticist with at least 2 years of postdoctoral experience (or the equivalent) in molecular events of replication, transcription, or translation. The candidate will teach molecular genetics at the undergraduate and graduate levels and pursue a vigorous research pro-

Faculty rank and departmental affiliation are negotiable. Anticipated starting date is September 1978. Deadline for receipt of applications is 15 January

Applicants should forward a current curriculum vitae, copies of their most significant publications, and arrange for three letters of recommendation to be sent to:

Chairman, Graduate Faculty of Cellular and Molecular Biology, Department of Zoology and Entomology, Colorado State University, Fort Collins, Colorado

Colorado State University is an Equal Opportunity/ Title IX Employer. Equal Opportunity Office-Room 314, Student Services Building. Inquiries from qualified ethnic minority and/or female candidates are es-pecially welcomed.

#### **POSITIONS OPEN**

The Department of Earth and Planetary Sciences, Washington University, has available a position for a SOLID-EARTH GEOPHYSICIST beginning with the fall semester 1978. The successful candidate must have the following attributes: demonstrated creativity and promise of excellence in research and teaching; intent to develop a vigorous graduate research program in theoretical or experimental geophysics; research interest in broad-scale terrestrial and/or planetary geoscience; interested in teaching geophysics, structural geology, and other topics of interest at the graduate and undergraduate levels. The position carries the opportunity for appointment as Fellow of the McDonnell Center for Space Sciences. It is intended that the candidate be hired as an assistant professor, but more experienced individuals with exceptional qualifications will be considered for a senior position. Washington University is an Equal Opportunity/Affirmative Action Employer. Send résumé, statement of future research interests, and names of at least three references to: Larry Haskin, Chairman, Department of Earth and Planetary Sciences, Washington University, St. Louis, Missouri 63130. Applications received through 1 February 1978.

IMMUNOLOGIST: immediate opening for full-time, Ph.D. research position. Join a team of virologist, biochemist, electron microscopist, and clinical immunologist studying human and experimental cancers. Background in tumor immunology desirable but not essential. Pleasant suburban hospital (nonprofit) setting. Good schools. Easy access to university. Send curriculum vitae to: M. Gokcen, M.D., Ph.D., 4141 Golden Valley Road, Minneapolis, Minn. 55422.

Ph.D. with experience in POPULATION GENETICS using electrophoretic and chromatographic techniques for the selection, propagation, and strain identification of mariculture animals. Send résumé and three references to: Oswald A. Roels, Director, The University of Texas Port Aransas Marine Laboratory, Port Aransas, Texas 78373. An Equal Opportunity/Affirmative Action Employer.

# PHARMACIST Ph.D.

Merck Sharp & Dohme is presently offering an excellent career opportunity for an individual to join our Pharmaceutical Manufacturing Technical Services Staff. This department requires a creative innovator familiar with the latest manufacturing equipment. Duties will include developing new processes and techniques to improve present methods, preparing and revising production formulas, troubleshooting production problems, and assisting in the transition of new products from research laboratories to production operations

A Ph.D. in pharmacy with 1 or 2 years of experience in the pharmaceutical industry is required.

An excellent salary and benefits program accompany this position at our modern suburban Philadelphia loca-

If interested, please send complete résumé with salary information to:

JACQUES P. KUENY

Merck Sharp & Dohme Division of Merck & Co., Inc.

Division of Merck & Co., Inc. West Point, Pa. 19486

An Equal Opportunity Employer

#### **POSITIONS OPEN**

HEAD, DEPARTMENT OF ZOOLOGY, UNIVER-SITY OF TENNESSEE, KNOXVILLE. The Zoology Department seeks a person of national professional stature as head, beginning 1 September 1978. The department has 27 full-time faculty members and an active graduate and undergraduate program, with a strong commitment to excellence in research and teaching; the potential head will be expected to exhibit strength in these areas. Applicants should send a résumé and have three letters of reference forwarded directly to: Chairperson, Search Committee, Zoology Department, University of Tennessee, Knoxville, Tenn. 37916. Application deadline: 1 February 1978.

University of Tennessee is an Equal Opportunity/ Affirmative Action/Title IX/Section 504 Employer. Women and minorities are encouraged to apply.

MOLECULAR GENETICIST. Washington State University is seeking a molecular or microbial geneticist with postdoctoral experience for September 1978. The successful candidate will have experience in recombinant DNA systems, demonstrated research ability, and the capability of establishing a sound research program. The position is tenure-track at the assistant or associate professor level. Affirmative Action|Equal Opportunity Employer. Applicants send curriculum vitae and the names of three references to:

David Hinrichs
Search Committee Chairman
Department of Bacteriology and Public Health
Washington State University
Pullman, Wash. 99164

PHYSIOLOGIST, Ph.D., beginning September 1978, assistant professorship. Biochemical-molecular orientation with interest in invertebrates preferred. To teach undergraduate physiology courses and direct a strong program of undergraduate research. Send letter of application, curriculum vitae, and three references by 15 January 1978 to: Chairman, Search Committee, Department of Biology, Lafayette College, Easton, Pa. 18042. Equal Opportunity/Affirmative Action Employer.

#### POSITIONS OPEN

The Department of Biology, University of North Dakota, seeks a PHYSIOLOGIST/ENDOCRINOLOGIST to fill tenure-track teaching/research position at assistant professor level. Appointment begins 15 August 1978. Expected salary range \$13,500 to \$15,500. Responsibilities include teaching an undergraduate physiology course at cellular and organ/system level, development of graduate level endocrinology course, participation in team-taught introductory biology course, and development of graduate research program. Send curriculum vitae, transcripts, and three letters of evaluation to: Dr. Lewis Oring, Department of Biology, University of North Dakota, Grand Forks, N.D. 58202. Apply before 15 February 1978. Affirmative Action/Equal Opportunity Employer.

#### **PHYSIOLOGIST**

North Carolina State University has an opening for an animal physiologist at the assistant professor level. Some background in neurophysiology preferred. Candidates should be prepared to teach graduate courses and to establish research and graduate programs. Please send curriculum vitae, three letters of recommendation, and an official transcript to: Dr. John F. Roberts, Interdepartmental Physiology Program, Department of Zoology, North Carolina State University, Raleigh, North Carolina 27607, before 15 January 1978. North Carolina State University is an Equal Opportunity/Affirmative Action Employer.

PLANT PHYSIOLOGIST (assistant or associate professor). The Department of Life Sciences, Indiana State University, anticipates a plant physiology position to begin summer 1978. The successful applicant will be expected to be active in the graduate program (both Ph.D. and master's degrees are offered). Teaching responsibilities will include plant physiology and participation in other botanical offerings by the department. Interested individuals should submit curriculum vitae, including evidence of an active research program, and have three letters of recommendation sent to: Dr. William J. Brett, Chairperson, Department of Life Sciences, Indiana State University, Terre Haute, Indiana 47809. Indiana State University is an Equal Opportunity Employer.

# FACULTY POSITIONS College of Medicine, King Faisal University Dammam, Saudi Arabia

Applications invited from qualified men and wom-

ni:
Biology
Chemistry
Physics
Anatomy
Human Physiology
Pathology
Epidemiology
Community Medicine
Biochemistry
Hematology
Biostatistics
Microbiology
Parasitology
Parasitology
General Surgery
Internal Medicine

Doctorate or equivalent degree required. Language of instruction is English. Positions available starting September 1978; interviews scheduled with the dean in the United States and Great Britain early in 1978.

Salary ranges (monthly salary in Saudi riyals or approximate annual equivalent in U.S. dollars)—professor: SR6,000 to 6,600 or \$20,300 to \$22,300; associate professor: SR4,800 to 5,800 or \$16,300 to \$19,600; and assistant professor: SR3,600 to 4,600 or \$12,200 to \$15,600.

(M.D. degree commands a higher salary, up to 50 percent if a clinical as well as academic appointment held.)

Free furnished accommodations. Airfare to and from Saudi Arabia once a year plus a 45- to 60-day holiday. No Saudi income tax.

Send complete curriculum vitae plus addresses and telephone numbers of three references to:

Mohammed T. Altorki, M.D., MRCP
Dean of the Medical Faculty
King Faisal University
c/o Saudi Arabian Educational Mission
2223 West Loop South, Suite 400
Houston, Texas 77027

Mohammed T. Altorki, M.D., MRCP Dean of the Medical Faculty King Faisal University P.O. Box 9 Isleworth, Middlesex TW7 4LZ England

Specify dates of teaching appointments and availability.

#### GRADUATE DEAN/COORDINATOR OF RESEARCH

#### UNIVERSITY OF IDAHO MOSCOW, IDAHO

The University of Idaho invites nominations and applications for the position of graduate dean/coordinator of research.

The University of Idaho was established in 1889, as Idaho's combined land-grant and state university. It enrolls approximately 8000 students in its Colleges of Agriculture, Business and Economics, Education, Engineering, Forestry Wildlife and Range Sciences, Law, Letters and Science, Mines, and Graduate School, and its other professional curricula in architecture, communications, home economics, music, and interstate programs in veterinary medicine and medical science.

Candidates must show professional competencies in dealing with instruction, research and graduate school activities, grants and contracts, and must exhibit an understanding of a comprehensive university, in both its professional and liberal arts functions, and must demonstrate proficiency in an administrative role. A position description and desired qualifications are available upon request.

Completed applications with current curriculum vitae must be received by 1 January 1978

Search Committee
Graduate Dean/Coordinator of Research
c/o Everett V. Samuelson, Dean
College of Education
University of Idaho
Moscow, Idaho 83843
Telephone: 208-885-6772

The University of Idaho is an Affirmative Action/Equal Opportunity Employer and Educational Institution.

# **Microbiologists** Geneticists BS/MS

Research position for an M.S.-level (or equivalent training as a) microbiologist or geneticist experienced in modern techniques of microbial genetics.

Additional position is available in applied microbiology at the B.S./M.S. level to conduct antibiotic fermentations.

For further information and consideration, please direct a résumé of your qualifications to: Manager, Research Employment, Schering-Plough Corporation, 60 Orange Street, Bloomfield, New Jersey 07003.

# SCHERING-PLOUGH CORPORATION WE ARE AN EQUAL OPPORTUNITY

EMPLOYER, M/F

# NEUROANATOMIST AND CELL PHYSIOLOGIST THE DEPARTMENT OF PHYSIOLOGY-ANATOMY UNIVERSITY OF CALIFORNIA, BERKELEY

Invites applications to fill two faculty positions at the assistant professor level. One position is for a neuroanatomist whose primary teaching responsibilities will be in advanced neuroanatomy and either anatomy or histology. The other position is in cell physiology with responsibility to teach in cellular physiology or general physiology courses. The positions are at the assistant professor level; however, candidates at the beginning associate professor level will also be considered. In addition to excellence in teaching, individuals must have extremely promising credentials in research. Candidates should be thoroughly involved in an ongoing, active research project and be successful contributors to that area. Research areas of interest are neurobiology with emphasis in morphological approaches and areas of cell physiology, such as receptor function, membrane biology, motility, ultrastructural analysis, or developmental biology. Interested individuals should write a letter explaining their qualifications for the particular posi-tion and enclose a current curriculum vitae and a list tion and enclose a current curriculum vitae and a list of three or more persons who could act as referees to: Search Committees, Department of Physiology—Anatomy, University of California, Berkeley, California 94720. Applications must be received by 31 January 1978. Applications from women and minority candidates encouraged. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL SECTION, biochemistry, available immediately for research in the enzymes of yeast glycolipid biosynthesis. Background in enzyme purification and protein characterization desired. Send curriculum vitae, one letter of reference, and names of two additional references to: Dr. Robert Liebe Benerature of Chemistre Plantic Committee Programmers of Chemistre Plantic Committee Programmers of Chemistre Plantic Committee Plantic Pla ley Light, Department of Chemistry, Florida State University, Tallahassee, Florida 32306.

An Equal Opportunity/Affirmative Action Employer

#### POSTDOCTORAL POSITION

Available immediately: for studies of the purifica-tion, assay, kinetics, and immunology of collagen and serum protease inhibitors. Send résumé to:

Dr. Lawrence D. Aronson B-220 Life Science Building Department of Medicine Michigan State University East Lansing, Mich. 48824

POSTDOCTORAL POSITION. ELECTROPHYS-IOLOGY—PHARMACOLOGY. Available immediately: NIH funded. To study nerve cells in tissue culture using voltage clamp and fluctuation analysis with on-line computer facilities. Experience in electrophysiology with microelectrodes essential, computer programming, and biophysical orientation desirable. Send curriculum vitae and references to: Dr. Fred Sachs, Department of Pharmacology, State University of New York, Buffalo, N.Y. 14214.

#### **POSITIONS OPEN**

Two tenure-track POSITIONS in cell physiology-development and genetics-botany are available September 1978. Ph.D. required. Teaching primary but research encouraged. Salary competitive. Send resumé, including names of three references, by I February to: R. Gehrig, Chairman, Biology Department, Russell Sage College, Troy, N.Y. 12180. An Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF CALIFORNIA, IRVINE. Several positions available for **POSTDOCTORAL FELLOWS**, beginning summer 1978, in the Center for Pathobiology. Recent Ph.D. required, preferably in the area of cell biology, developmental biology, or genetics. Candidates to work on problems of pattern formation, determination, morphogenesis, or stem cell differentiation in hydra (with Doctors H. R. Bode or R. D. Campbell), *Drosophila* (with Doctors P. J. Bryant or H. A. Schneiderman), or amphibians (with Dr. S. V. Bryant). *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply*. Arrange for three letters of are encouraged to apply. Arrange for three letters of reference to be sent, and submit résumé and brief reference to be sent, and submit resume and offer description of research interests and experience to: Dr. S. V. Bryant, Center for Pathobiology, University of California, Irvine, Irvine, California 92717. Closing date: 31 January 1978.

POSTDOCTORAL POSITION in colour vision research. Applicant should have experience with psychophysical methods and optical apparatus.

Salary: \$11,000 per annum with some possibility of supplementary salary for teaching one course in the Department of Psychology.

Send curriculum vitae and names of three references

Dr. P. K. Kaiser Department of Psychology York University 4700 Keele Street Toronto, Ontario, Canada M3J 1P3

POSTDOCTORAL POSITION available for research in enzyme control mechanisms. Experience search in enzyme control mechanisms. Experience in enzymology and membranes preferred. See Chen, Canellakis; *Proc. Nat. Acad. Sci. U.S.A.* 74, 3791 (1977), and related references. Please send curriculum vitae and references to: **Dr. E. S. Canellakis, Department of Pharmacology, Yale University School of Medicine, New Haven, Conn. 06511.** 

POSTDOCTORAL POSITION available January POSTDOCTORAL POSITION available January 1978 for research on nucleoregulatory proteins in connective tissues. Candidates should be experienced in histology, biochemistry, and electron microscopy. A strong interest and ability in all areas of cell biology is desired. Salary is \$10,085 plus benefits for 1 year. Send curriculum vitae and two letters of reference to: Dr. Frederick Wezeman, Department of Pathology, Michael Reese Medical Center, 29th and Ellis Avenue. Chicago. Illinois 60616. Ellis Avenue, Chicago, Illinois 60616.

#### POSTDOCTORAL RESEARCH POSITION

Available for M.D. or Ph.D. investigating behavioral and metabolic aspects of human food and water intake regulation. Strong interest and/or background in intermediary metabolism, catecholamine metabolism, neuropharmacology, and/or neuroendocrinology is desirable. Send curriculum vitae and references to: Dr. Robert Campbell, University of Rochester School of Medicine, Monroe Community Hospital, 435 East Henrietta Road, Rochester, N.Y. 14603.

POSTDOCTORAL RESEARCH POSITION avail-POSTDOCTORAL RESEARCH POSITION available immediately to study DNA-containing tumor viruses at the molecular level; especially the genetic interactions between host and virus. Send curriculum vitae and three letters of recommendation to: Dr. William Meinke, Microbiology Department, College of Medicine, University of Arizona, Tucson, Arizona 85724. The University of Arizona is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.

# TENURED PROFESSORSHIP CHEMICAL ENGINEERING COLUMBIA UNIVERSITY

Associate or full professor. Requirements: doctorassociate of full professor. Requirements: doctor-ate; teaching experience; proven ability to instruct; and maintenance of vigorous research program in chemical engineering. Reply with résumé before 1 February 1978 to: Chairman, Department of Chem-ical Engineering, Columbia University, New York, N.Y. 10027.

Columbia University is an Equal Opportunity/Af-

#### **POSITIONS OPEN**

#### POSTDOCTORAL TRAINING IN PHYSIOLOGY

Postdoctoral training position available for 1 year beginning January 1978 to study factors controlling turnover of lung proteins. Biochemical training and commitment to pulmonary research desirable. Ph.D. or M.D. required. Salary \$10,000. Send curriculum vitae and names of three references to: Dr. D. Eugene Rannels, Department of Physiology, The Milton S. Hershey Medical Center, The Pennsylvania State University, Hershey, Pennsylvania 17033.

Equal Opportunity Employer

**PROJECT MANAGER** for multidiscipline, environmental research project. Good administrative skills mental research project. Good administrative skills and several years progressive experience are required. Must coordinate the work of specialists in botany, wildlife, fishery, assessment, economics, and other pertinent environmental fields. Formal training in appropriate biological sciences is necessary. Incumbent also must be conversant with assessment, modeling, and related approaches. The incumbent will be expected to develop a strong professional base with appropriate publication activity.

Reply in confidence with detailed résumé to: E. P. Galbraith, BATTELLE-NORTHWEST, P.O. Box 999, Richland, Washington 99352.

An Equal Opportunity/Affirmative Action Employer

The University of Illinois, Department of Psychology, has a tenured position involving teaching and research, for a senior person in QUANTITATIVE (mathematical, statistical, measurement) PSYCHOLOGY for the fall 1978, and is seeking applications and nominations. Rank and salary are open but persons who meet the qualifications for a full professorship are preferred. Candidates from any subsorship are preferred. Candidates from any substantive area of psychology who have a strong background in mathematics and an outstanding record of ground in mathematics and an outstanding record of research and scholarship will be considered. Applications will be accepted immediately, and preferably by 1 March 1978 in order to insure consideration. The University of Illinois is an Equal Opportunity/Affirmative Action Employer. All candidates will be given careful consideration and evaluated on merit. All inquiries and nominations, as well as complete applications (curriculum vites and names of three or All inquiries and nominations, as well as complete applications (curriculum vitae and names of three or four persons to whom inquiries can be addressed) should be sent to: Professor Samuel S. Komorita, Department of Psychology, University of Illinois, Champaign, Illinois 61820; telephone 217-333-0446.

**RESEARCH ASSOCIATE**: to study the structural dynamics of contractile and motile cells. Must have: dynamics of contractine and motine cents. Must have, experience with photon correlation spectroscopy, some knowledge of muscle physiology, and Ph.D. Send résumé and references to: Dr. Francis D. Carlson, Department of Biophysics, The Johns Hopkins University, Charles and 34th Streets, Baltimore, Maryland 21218. Equal Opportunity Employer, M/F.

SALES ENGINEER. Nationally known laboratory SALES ENGINEER. Nationally known laboratory animal cage manufacturer needs a qualified person to coordinate sales with engineering and production. Experience in cage field necessary as responsibilities include assisting in new product development. We offer negotiable salary, excellent advancement opportunity, and usual benefits, plus bonus and profit-sharing. Telephone: Merle Ulberg at 616-382-2803, collect, or send résumé to: UNIFAB CORPORATION, 5260 Lovers Lane, Kalamazoo, Mich. 49002.

# SENIOR TROPICAL BIOLOGIST UNIVERSITY OF MIAMI

The Department of Biology seeks a candidate to coordinate and direct a broad developing program in tropical biology. Applicants must have expertise in research and teaching and demonstrated ability in funding research programs. Rank (which can include department chairmanship) and salary are open. Send curriculum vitae to: Tropical Search Committee, Department of Biology, University of Miami, Coral Gables, Fla. 33124. The University of Miami is an Equal Opportunity/Affirmative Action Employer.

an Equal Opportunity/Affirmative Action Employer.

WILDLIFE SPECIALIST (BIRD DAMAGE). Davis Campus. Develop and disseminate to county farm advisers and various other clientele information on prevention and control of damage caused by various bird species. Coordinate research. M.S. in biological science required; Ph.D. preferred. Three years experience. Refer to #7736, Personnel Administrator, Cooperative Extension, University of California, Berkeley, Calif. 94720. Closing: 15 January 1978. An Equal Opportunity Employer, M/F.

#### DIRECTOR, DIVISION OF **BLOOD DISEASES AND** RESOURCES

The National Institutes of Health, Public Health Service, is recruiting for the position of Director, Division of Blood Diseases and Blood Resources, National Heart, Lung, and Blood Institute. This position involves the planning, implementation, and management of research grant and contract programs and training programs in blood diseases and blood resources. It includes basic and applied research on blood resources. It includes basic and applied research on such blood diseases as the hemophilias, sickle cell anemia, and Cooley's anemia. It also includes research on blood and blood products for transfusion and the management of the nation's blood resource. The Division's budget is approximately \$60 million per year and it has a staff of approximately

The Director is required to have had substantial background and experience related to blood diseases and/or blood banking. The position also requires demonstrated managerial experience and an ability to communicate with individuals at all organizational levels and with varying educational experience. An M.D. or Ph.D. (or equivalent experience) is required. This is a career Civil Service position with a salary range of \$42,000 to \$47,500. Selection for and allocation of this position are subject to the approval of the U.S. Civil Service Commission. Appointment may also be made under the United States Public Health Service Commissioned Corps Program which may provide supplemental salary benefits under some circumstances.

For additional information, contact Dr. Robert L. Ringler, Chairman, Search Committee: (301) 496-1078. Applications in the form of a resume and a Personal Qualifications Statement (SF-171) should be sent by January 30, 1978 to Dr. Robert L. Ringler, Deputy Director, National Heart, Lung, and Blood Institute, Building 31, Room 5A49, 9000 Rockville Pike, Bethesda, Maryland 20014. An Equal Opportunity Employer

#### NATIONAL INSTITUTES OF HEALTH

# RESEARCH **BIOLOGIST**

Searle Laboratories, the Chicago area pharmaceutical division of G.D. Searle & Co., has an immediate opening in the Department of Biological Research for a Research Biologist in Reproductive Endocrinology.

The primary duty involves professional level research in ovarian physiology with particular emphasis on steroidogenesis and ovarian receptors.

Candidates must have an M.S. in Physiology/Biochemistry with a strong background and training in Endocrinology. Ability to work with experimental animals and proficiency in biochemical and surgical techniques are essential.

We are offering an excellent salary and benefit package, as well as the opportunity for personal growth and professional satisfaction. Your resume and salary history should be submitted to:

A. Abelman, Ph.D.

**SEARLE** 

Searle Laboratories P.O. Box 5110 Chicago, IL 60680

Equal Opportunity M/F . . . A Practice, Not Just a Policy

#### のののののののののののののののののの

The Department of Earth and Planetary Sciences, Washington University, has a position available in the fall semester 1978 for a **GEOSCIENTIST** in one of the following areas:

the following areas:

1) Structural geology—research interest in quantitative approach to broad-scale problems of terrestrial structure; strong background in geophysics and rock mechanics essential; experience in fieldwork

desirable.

2) Resources geology or resources engineering—research interest in technology and economics of low-grade ores, recycling, conservation. Specializatow-grade ores, recycling, conservation. Specialization may be in economic geology, geochemistry, chemical engineering, and so forth, but knowledge of extraction technology, resource planning, and mineral economics essential.

3) Metamorphic petrology—strong theoretical background required, research interest in hydrothermal metamorphism, ore deposits preferred.

4) Other—we will consider candiates in fields

4) Other—we will consider candiates in fields that complement those of our present staff (that is, outside of geochemistry, sedimentary or igneous petrology, paleontology); preference is for candidates with strong interests in planetary science or in geological planning for use of land or other

The successful candidate must have the following attributes: demonstrated creativity and promise of excelence in research and teaching; intent to develop excelence in research and teaching; intent to develop a vigorous graduate research program; desire to teach courses in field of interest and related fields of geoscience at undergraduate and graduate levels. The position carries the opportunity for appointment as Fellow of the McDonnell Center for Space Science. It is intended that the candidate be hired as an assistant professor, but more experienced individuals with exceptional qualifications will be considered for a senior position. Washington University is an Equal Opportunity/Affirmative Action Employer. Send résumé, statement of future research interests, and names of at least three references to: Larry Haskin, Chairman, Department of Earth and Planetary Sciences, Washington University, St. Louis, Missouri 63130. Applications received through 1 February 1978.

かめいものとうとうとうとうとうとう

#### 3XKC

## DEPARTMENT OF BOTANY UNIVERSITY OF ALBERTA EDMONTON, ALBERTA, CANADA TWO POSITIONS

PLANT ECOLOGIST. Applications are invited from senior plant ecologists with physiological interests to teach and direct research at the graduate level in one or more of the following areas: autecology, physiological ecology, and population ecology; to contribute to ecology and environmental biology contribute to ecology and environmental biology courses at the undergraduate level and to direct or become significantly involved in the management and use of one of the largest controlled environmental facilities on the continent. Candidates with strong interests in controlled environment as well as field studies of the flora of Western or Northern Canada are preferred. The starting date, 1 July 1978, is negotiable. Salary will be commensurate with qualifications. Current minimum annual salary for professor is \$30,100. Applicants should send a curriculum vitae, complete list of publications, and five reprints of most significant work, and also arrange for at least three letters of reference to be sent to: Professor P. three letters of reference to be sent to: Professor P. R. Gorham, Chairman, Department of Botany, University of Alberta, Edmonton, Alberta, Canada T6G 2E9; telephone: 403-432-3247 before 1 February 1978.

PALEOBOTANIST. Applications are invited for the position of assistant professor to commence I July 1978. Ph.D. in paleobotany specializing in megafossils required. Successful candidate will be expected to teach one or more courses in paleobo-tany, an undergraduate biology course, supervise graduate students in paleobotany, and actively purgraduate students in paleobotany, and actively pursue his/her own research interests. Current minimum annual salary is \$17,625. Applicants should submit curriculum vitae with a list of all publications, reprints of three most important papers, and request three persons to send letters of recommendation to: Dr. David D. Cass, Chairperson of Paleobotany Search Committee, Department of Botany, University of Alberta, Edmonton, Alberta, Canada T6G 2E9; telephone: 403-432-5520. Closing date for receipt of all application materials is 1 February 1978.



### ひめのむむめのむめのむめん CALIFORNIA POLYTECHNIC STATE UNIVERSITY

SAN LUIS OBISPO

The Biological Sciences Department is seeking qualfiled applicants to fill six faculty positions at the assistant professor level, in the following disciplines, available fall 1978.

- PLANT TAXONOMIST/FIELD BOTANIST with training in plant geography or floristics. Duties include teaching general botany, plant taxonomy, field botany, and plant ecology
- **VERTEBRATE PHYSIOLOGIST** with training in human physiology. Duties include teaching human physiology and general zoology.
- VERTEBRATE ZOOLOGIST with proficiency in human cadaver anatomy and neurobiology. Duties include teaching human anatomy, general zoology, and/or general biology.
- FISH BIOLOGIST with training in ichthyology, freshwater fisheries, and acquaculture. Duties include teaching courses in those areas and conservation and general zoology or biology
- CLINICAL PARASITOLOGIST/MICROBIOL-OGISTS. Expertise in clinical parasitology and microbiology required. Previous experience with medical laboratory technology programs and/or possession of a medical laboratory technician license desirable. Duties include teaching general microbiology and parasitology.
- PLANKTON BIOLOGIST. Duties include teach-

6) PLANKTON BIOLOGIST. Duties include teaching plankton biology and (mainly) zoology.

Ph.D. is required for all positions. Salary: \$14,256 to \$17,136 per academic year. Applications must be received on or before 1 February 1978. Submit application, four letters of recommendation, curriculum vitae, transcripts, statement of philosophy on teaching and research, and personal data sheet to: Dr. John K. Hampton, Jr., Head, Biological Sciences Department, California Polytechnic State University, San Luis Obispo, Calif. 93407.

Affirmative Action/Equal Opportunity/ Title IX Employer.

#### **POSITIONS OPEN**

TEACHING OVERSEAS: BIOLOGY, CHEM-ISTRY, MATHEMATICS, PHYSICS, at American ISTRY, MATHEMATICS, PHYSICS, at American University of Beirut, Lebanon, starting October 1978. Assistant professorships for Ph.D.'s with teaching and research experience. Specialties sought—Biology Department: zoology, ecology, developmental biology, plant physiology, cell biology. Chemistry Department: analytical (instrumentation), inorganic (coordination and physical), organic (natural products), physical (spectroscopy); Mathematics Department: statistics, topology, computer sciences; and Physics Department: solid state, theoretical nuclear. Usual contract is for 3 years, round-trip travel, plus fringe benefits. Send résumés and letters of recommendation via airmail to: Chairman of approrecommendation via airmail to: Chairman of appro-priate department, American University of Beirut, Beirut, Lebanon. Affirmative Action/Equal Opportunity Employer.

#### VETERINARIAN

University of Pennsylvania, School of Veterinary University of Pennsylvania, School of Veterinary Medicine, an Affirmative Action Employer, solicits nominations and applications for the Jacques Jenny Professorship of (Veterinary) Orthopedic Surgery. Please send curriculum vitae to: Dr. John R. Brobeck, Chairman of ad hoc Committee, University of Pennsylvania G/4, Philadelphia, Pa. 19104.

ZOOLOGIST, LIBERAL ARTS

ZOOLOGIST, LIBERAL ARTS
Seek Ph.D. zoologist, special competence in physiology or developmental biology. Full responsibility for zoological curriculum; shared responsibility for development and teaching in general education program. Experience in history/philosophy of science advantageous. Send letter of inquiry to: Dr. Frederick Gregory, Chairman, Division of Science, Eisenhower College, Seneca Falls, N.Y. 13148. Eisenhower College: sen Faul Opportunity/Affinative Action College is an Equal Opportunity/Affirmative Action Employer.

#### **PROGRAMS**

#### DOCTORAL PROGRAM—PHARMACOLOGY

Medical University of South Carolina, Department of Pharmacology, seeks qualified candidates for Ph.D. program. Interdisciplinary environment with research capabilities ranging from gas chromatography-mass spectrometry through cell cultures and animal studies to clinical studies of patients with disease. Research training is available in biochemical pharmacology, physiological pharmacology, drug metabolism, toxicology, analytical chemistry, and clinical pharmacology. Stipends available: \$3900 per year. Contact: Graduate Training Director, Department of Pharmacology, Medical University of South Carolina, Charleston, S.C. 29401.

PHYSIOLOGY GRADUATE AND POSTDOCTO-RAL TRAINING. The Department of Physiology, University of Arizona, College of Medicine, invites applications from qualified individuals interested in pursuing the Ph.D. degree in physiology. Applications are now being accepted for August 1978 entrance into the graduate program. In addition, post-doctoral positions are available from time to time. Fellowships and teaching assistantships are available for individuals accepted into the training programs of the department. The department provides facilities for study at both pre- and postdoctoral levels in cardiovascular, neural, renal, muscle, endocrine, and cellular physiology. For further information write: P. C. Johnson, Head, Department of Physiology, University of Arizona, College of Medicine, Tucson, Arizona 85724. The University of Arizona is an Equal Opportunity/Affirmative Action/Title 1X/ an Equal Opportunity/Affirmative Action/Title IX/ Section 504 Institution.

A GRADUATE PROGRAM in electron microscopy is offered at Hofstra University. It provides a 2-year training experience in postgraduate biology and electron microscopy, ending in an M.A. in biology and certificate of proficiency in E.M. from Hofstra University. Courses include electron microscopy for the biologist, electron microscopic analysis servicing the electron microscopic scanning. sis, servicing the electron microscope, scanning electron microscopy, and advanced techniques and theory. Limited financial assistance is available. Additional information may be obtained from: Dr. Gary W. Grimes, Director of the Program in Electron Microscopy, Biology Department, Hofstra University, Hempstead, N.Y. 11550. Telephone: 516-560-3261.

#### **SYMPOSIUM**

#### INTERNATIONAL SYMPOSIUM ON SUBSTRATE-INDUCED IRREVERSIBLE INHIBITION OF ENZYMES

Strasbourg, France 24 and 25 July 1978

The Symposium (Satellite Symposium of the 7th International Congress of Pharmacology) is intended to provide a forum for presentation of recent results and interchange of views on the biochemical, pharmacological and clinical advances made in this area. Invited speakers have been selected by a Scientific Committee consisting of B. Belleau (Montreal), M. Jung (Strasbourg), R. Rando (Boston), M. Sandler (London), and N. Seiler (Frankfurt). Some voluntary contributions will be permitted but will be limited in number. Further information may be obtained from the organizer, Dr. J. Koch-Weser, Centre de Recherche Merrell International, 16 rue d'Ankara, 67084 Strasbourg Cedex, France.

#### **FELLOWSHIPS**

POSTDOCTORAL FELLOWSHIPS for M.D.'s or POSTDOCTORAL FELLOWSHIPS for M.D.'s or Ph.D.'s available in radiation oncology. Established Special Radiation Cancer Center at University Medical Center in Kentucky-Blue Grass Region. Training in radiation oncology and related medical physics or radiobiology with emphasis on cancer treatment and cancer research. Program funded by NCI under NRS training award for postdoctoral training. Training lead to certification by American Board of Radiology. Inquiries to: Chairman, Department of Radiation Medicine, University of Kentucky Medical Center, Lexington, Kentucky 40506; telephone 606-233-5108.

PREDOCTORAL FELLOWSHIPS in physiology PREDOCTORAL FELLOWSHIPS in physiology and biophysics. Training in cardiovascular, cell, endocrine, muscle, neuro-, renal, and respiratory physiology. Applicants must submit GRE scores (verbal, quantitative, and one advanced test). Deadline for application is 15 April 1978. For application material, write: Department of Physiology and Biophysics, West Virginia University Medical Center, Morgantown, W.Va. 26506.

POSTDOCTORAL FELLOW. Applications are invited for an immediate postdoctoral research fellowship to work on the purification and cloning of interferon mRNA. Experience in nucleic acids technology or in vitro protein synthesis is desirable. Salary negotiable. Send application with curriculum vitae and names of two references to: Dr. P. Pitha, Ricchamical Viralory, Unit. The Johns Howking On. Biochemical Virology Unit, The Johns Hopkins On-cology Center, Baltimore, Maryland 21205.

#### **FELLOWSHIPS**

Drs. E. H. Sonnenblick, J. Scheuer, and 12 col-Drs. E. H. Sonnenblick, J. Scheuer, and 12 colleagues in cardiovascular research have NIH POST-DOCTORAL (M.D. or Ph.D.) RESEARCH TRAIN-ING POSITIONS available for 1978. Areas include: biochemistry, electrophysiology, and mechanics of cardiac muscle; coronary circulation and capillary exchange; hemodynamics and cardiovascular regulation. Interviews in New York or at FASEB meetings. Contact: Dr. J. Scheuer, Division of Cardiology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, N.Y. 10461.

FIVE POSTDOCTORAL FELLOWSHIP POSITIONS are available in fall 1978 for research in estuarine lagoon and nearshore continental shelf waters. Research areas include macroalgal systematics, zooplankton ecology, invertebrate development, benthic ecology, and ichthyology or marine geology. Request information brochure and application pack-

Dr. Marsh J. Youngbluth
Postdoctoral Program
Harbor Branch Institution
Route 1, Box 196-A
Fort Pierce, Florida 33450
The Institution admits students of any race, color,

age, sex, and national or ethnic origin

POSTDOCTORAL FELLOWSHIP. One-year, renewable to two, available immediately for work relatnewable to two, available immediately for work relating to the mechanisms of micropinocytic ingestion in isolated capillary endothelium. Applicant should have experience in assays for membrane-associated enzymes and preferably experience with membrane purification techniques. Stipend: \$10.000 per annumbus benefits. Inquiries, curriculum vitae, and three letters of recommendation to: Dr. Roger C. Wagner, Section of Cell and Molecular Biology, School of Life and Health Sciences, University of Delaware, Newark, Delaware 19711. Delaware 19711.

The University of Delaware is an Affirmative Action/ Equal Opportunity Employer

#### **GRADUATE STUDY**

#### **GRADUATE STUDY**

TEACHING AND RESEARCH ASSISTANTSHIPS TEACHING AND RESEARCH ASSISTANTSHIPS available in biology (emphases in physiology, microbiology/genetics, plant science, population biology, marine science, developmental biology). Salary range: \$3375 to \$4275 for 9-month M.S./Ph.D. programs. For descriptive brochure, write: Graduate Chairman, Department of Biology, University of Houston, Houston, Texas 77004.

#### MARKET PLACE

Inspire yourself with a calendar that gives dates of scientific discoveries. Beautifully hand-lettered, and illustrated with electron micrographs, with thought-provoking quotations for each month. \$4.50 each + .50 postage and handling. Orders of 5 or more cost only \$4.00 each including postage and handling. BLUE CAT PRODUCTIONS, BOX 151, LANSING, NY 14882.

# LIVE LEECHES

Throughout the year delivery Informations and delivery

RICARIMPEX 33980 AUDENGE (France)



QUARACELL Products, Inc. P.O. Box 147 Baldwin, New York 11510 Tel. 516/681-5032

Circle No. 161 on Readers' Service Card



Circle No. 29 on Readers' Service Card

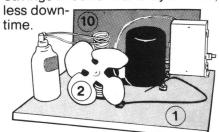
# At Revco, our newest improvements are out of sight!

(5)

Many times what you don't see is what you get. That's why more doctors, scientists and researchers choose Revco ULTra-Low® temperature freezers than any other make. The "heart" of the matter is Revco dependability. Revco performance.

Always a leader, always an innovator, Revco now introduces a series of product improvements that give you a "hidden" advantage when you insist on a Revco freezer.

1.New, improved electrical wiring harness. Consolidation of electrical components for easier servicing. Savings in out-of-warranty service;



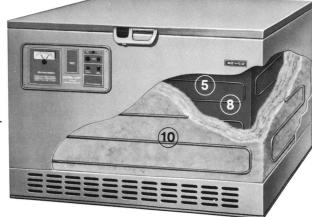
2.Improved air cooling of mechanical parts such as compressors, transformers and electrical components.

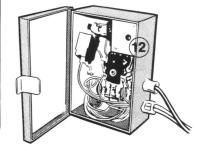
**3.**Obstruction-free backside for easier door clearance.

- **4.** Voids created by polyurethane deterioration at low temperatures eliminated by combined use of polyurethane and fiberglass. No "hot spots."
- **5.**Improved contact of evaporator coil with tank for better heat transfer.
- **6.**Larger bore capillary tube (metering device) to maintain maximum efficiency of refrigerant flow.

- **7.** Specially formulated refrigerants for maximum performance.
- **8.**Horizontal and increased mass flow of refrigerant plus better oil control to compressors. Cooler running and better lubricated compressors; longer unit life.
- **9.** Increased refrigerating capacity with new refrigerants means better load-carrying ability. Less temperature fluctuation; quicker pulldown.
- **10.**Condenser coils redesigned for greater capacity. Greater room temperature tolerance.

11. Welding in inert atmosphere produces superior evaporator and condenser tubing joints.





**12.** Pressure and temperature limit switches and timers on 2nd & 3rd stages. A real equipment saver!

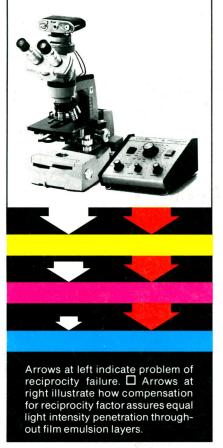
At Revco, we make our freezers the way our competition wishes they could.

Send for our newest (and improved) full-color catalog.



The world's leader in ULTra-Low® temperature equipment.

1100 Memorial Drive•West Columbia, S. C. 29169•Telephone: 803/796-1700•TWX: 810-666-2103•Cable: Revco



# Color-balanced photomicrographs come easy with EXPOSTAR™ Shutter Control.

The AO EXPOSTAR Shutter Control automatically integrates light intensity and film reciprocity with time, to give you perfect color-balanced photomicrographs every time. ☐ It's very simple to use. Just look up the recommended settings for the film in the reference manual, and set the knobs accordingly. A photo cell and capacitor at the film plane automatically monitor the light level and will close the shutter when enough light has been accumulated to satisfy the film ASA rating and the reciprocity factor. ☐ Accommodates 35mm, 31/4" x 41/4" and 4" x 5" cut film camera backs. Time and bulb settings are included. Handles ASA film speed range from 8-6400. ☐ Start getting perfect photomicrographs every time. Send for a brochure. American Optical, Scientific Instrument Division, Buffalo, NY 14215.

