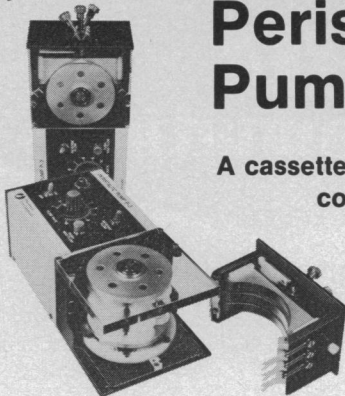


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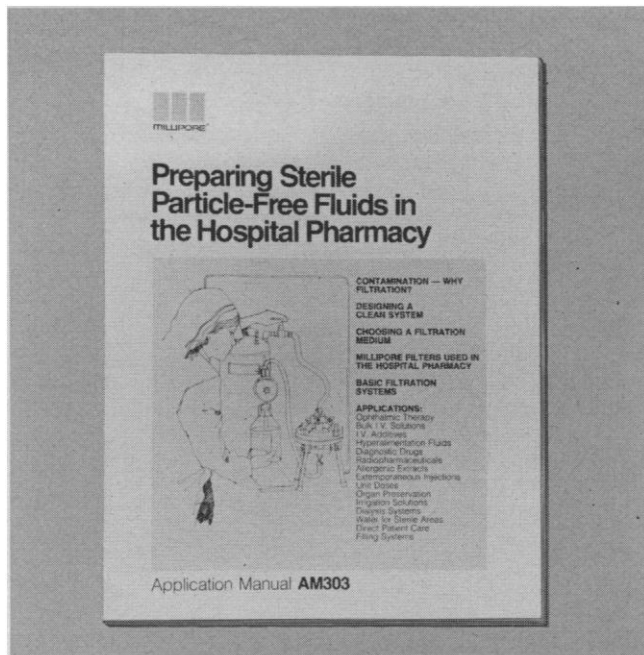
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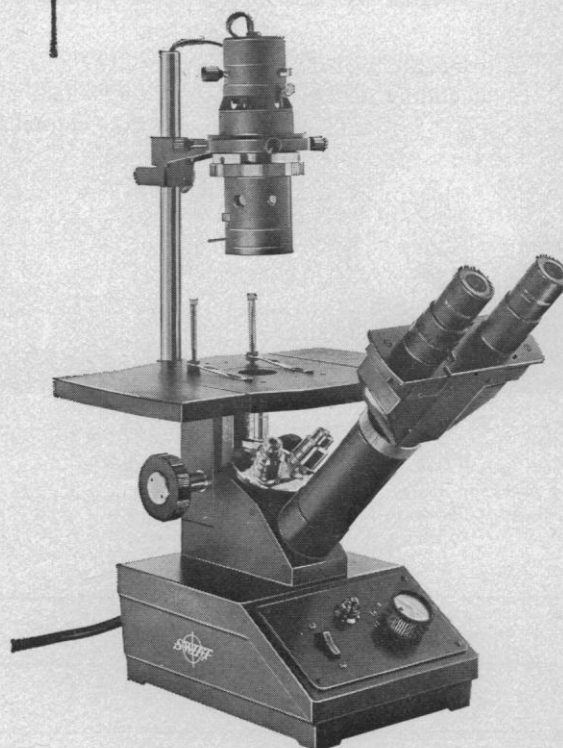
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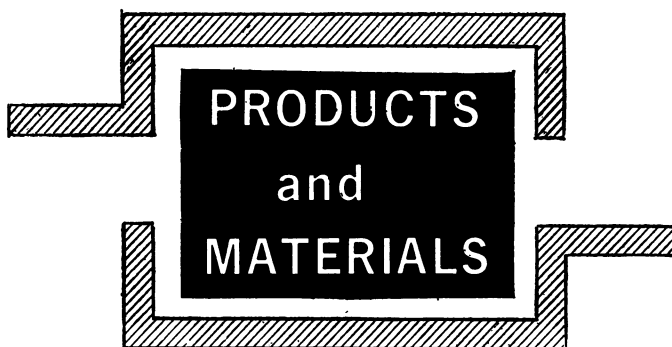
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Gammacoat kits include four serum standards (0.5 to 4.0 nanograms per milliliter), [<sup>125</sup>I]digoxin derivative, pH-

adjusted buffer concentrate, and 50 antibody-coated tubes. Among the reagents is an additive to minimize the variable protein interference effects from serum to serum. The method requires three pipettings and no centrifugation. Clinical Assays, Incorporated. Circle No. 811 on Readers' Service Card.

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The Helios planetarium (Fig. 1) demonstrates the relative motions of the planets around the sun. The planets can be positioned for different years or months and their progress with time may be studied. A star dome fits over the planetarium and illustrates lines of ascension and declination, the ecliptic and the celestial equator. The motor is driven by a 6-volt power supply (or batteries). The base may also be used to mount an earth globe and a moon to illustrate progression of seasons, eclipses, and, with the star dome, the various constellations visible at different latitudes. A 100-page handbook is also available to suggest projects for students. Science Related Materials. Circle No. 805 on Readers' Service Card.



Fig. 1. The Helios planetarium is adaptable to many teaching applications, including astronomy, navigation, and physical science.

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The model 145 Isotemp dry bath enables incubation under controlled conditions. The temperature range is ambient to 125°C. The sample blocks incorporate cone-shaped wells that offer advantages over cylindrical wells with regard to temperature uniformity ( $\pm 0.1^\circ\text{C}$ ). Blocks are available in eight different sizes from 5-sample capacity with 25-millimeter wells to 35-sample capacity with 6-millimeter wells. Temperature is controlled and maintained with solid state devices. Fisher Scientific Company. Circle No. 812 on Readers' Service Card.

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The shelf-life of the preparations is extended to at least 120 days. These systems reduce the number of steps in radioimmunoassay and thereby save time. A system consists of 96 ready-to-use antibody tubes and 16 total-count tubes. The antibody tubes contain porous glass particles, with the antibody covalently bonded, suspended in phosphate-buffered saline that contains bovine serum albumin. The total-count tubes do not contain antibody. Each system also includes two 3.5-milliliter vials of digoxin tracer in phosphate-buffered saline that contains bovine serum albumin. Digoxin standards and reference controls are included. They are lyophilized to increase their shelf life. Digoxin standards are pooled human plasma at 0.0, 0.5, 1.0, 2.5, 5.0, and 10.0 nanograms of digoxin, per milliliter. The digoxin reference controls contain pooled human plasma with digoxin contents in the expected "normal" and "elevated" ranges of concentration for patients. Systems are available for counting either beta- or gamma-labeled antigen. Corning Glass Works, Biological Products Department. Circle No. 806 on Readers' Service Card.

#### Hydrocarbon Monitor

The series 1400 total hydrocarbon monitors (Fig. 2) are suitable for continuous or discrete measurement of emissions. A few parts per billion may be detected. The units use the principle of flame ionization gas chromatography. Options include choice of heated or unheated sampling systems, automated or manual operation, and single- or dual-channel capacity. The model 1440 single-channel unit features a flame ionization detector, a filter to remove particulate matter, a stainless steel bellows pump, a four-port switching valve, a back-pressure regulator, and a high-precision metering valve. The model 2440 system may be set up for continuous monitoring on one channel and for discrete analyses on the other. Varian Associates, Instrument Division. Circle No. 803 on Readers' Service Card.

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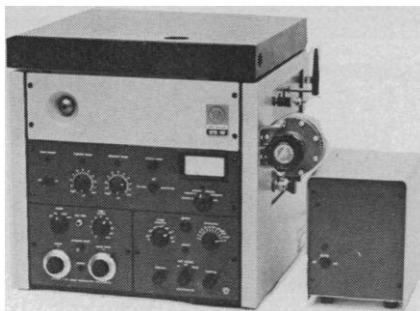


Fig. 2. The Varian series 1400 total hydrocarbons monitor features potential for automation of batch analyses when pneumatic operators are installed on the valves and a sequence programmer controls their operation.

with mesh sizes from 10 to 100 gauge may be used depending upon application. Preparation of cell suspensions or fragmented antibody gel for radioimmunoassay are among the uses of this device. E-C Apparatus Corporation. Circle No. 808 on Readers' Service Card.

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#### Literature

*Laboratory Apparatus* is a 270-page hardcover catalog of products from autoclaves to Warburg accessories. It includes alphabetic, numerical, and ASTM indexes. GCA/Precision Scientific. Circle No. 813 on Readers' Service Card.

*Analytical Systems—ISS/SIMS* describes an ion-scattering spectrometer which is capable of performing secondary ion mass spectrometry. The brochure describes applications for surface analysis, operating advantages and specifications. 3M Company. Circle No. 824 on Readers' Service Card.

*High Precision Measuring Instruments for Industrial Use* is an eight-page brochure devoted to a line of

optical and other products for production line, quality control, and industrial research. Carl Zeiss, Incorporated. Circle No. 814 on Readers' Service Card.

*Alfa Catalog of Research Chemicals and Materials* includes applications data and specifications of items for chemists, physicists, metallurgists, biologists, and materials scientists. Ventron Corporation, Alfa Products. Circle No. 815 on Readers' Service Card.

*The Perkin-Elmer Model 1220 Liquid Chromatograph* is described in detail in a 12-page brochure. Sections are devoted to basic principles of operation and to applications as well as specifications. Perkin-Elmer Corporation, Instrument Division. Circle No. 816 on Readers' Service Card.

*Photosensitive Devices* catalogs photomultipliers, phototubes, photoconductive cells, light sources, memory tubes, and video equipment. Hamamatsu Corporation. Circle No. 817 on Readers' Service Card.

*Stellite Alloys for Outstanding Resistance to Abrasive Wear, Adhesive Wear, Cavitation-Erosion* describes wear-testing of alloys and rates them according to their form and anticipated types of wear. Stellite Division, Cabot Corporation. Circle No. 818 on Readers' Service Card.

*Instrumatic Portable Hardness Tester* is a product-specification sheet describing a device that reads directly on Brinell, Rockwell, and Vickers scales. Hacker Instruments, Incorporated. Circle No. 819 on Readers' Service Card.

*MAPPS Off-Line Matrix Print/Plot System* discusses a means of using large computer systems for electrostatic writing in an off-line configuration. Versatec, Incorporated. Circle No. 820 on Readers' Service Card.

*Materials, Equipment and Systems for Chromatography, Electrophoresis and Membrane Technology* is a 100-page catalog including information on the hollow-fiber technique for rapid dialysis and ultrafiltration. Bio-Rad Laboratories. Circle No. 821 on Readers' Service Card.

*Particle Size Analysis and Powder Characterization* details services and capabilities. Particle Data Laboratories, Limited. Circle No. 822 on Readers' Service Card.

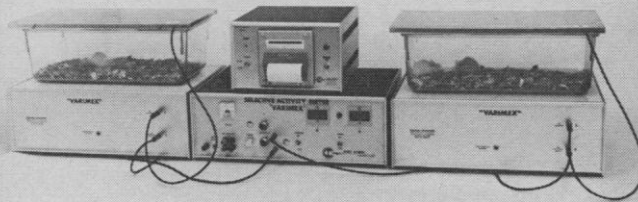
*Analytical Standards Manuals and Kits* is an eight-page bulletin of items of use in qualitative and quantitative chemical analysis. PolyScience Corporation. Circle No. 823 on Readers' Service Card.



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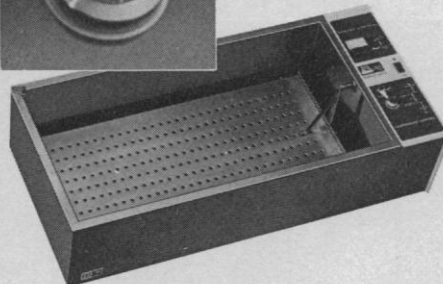
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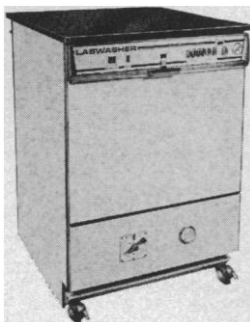
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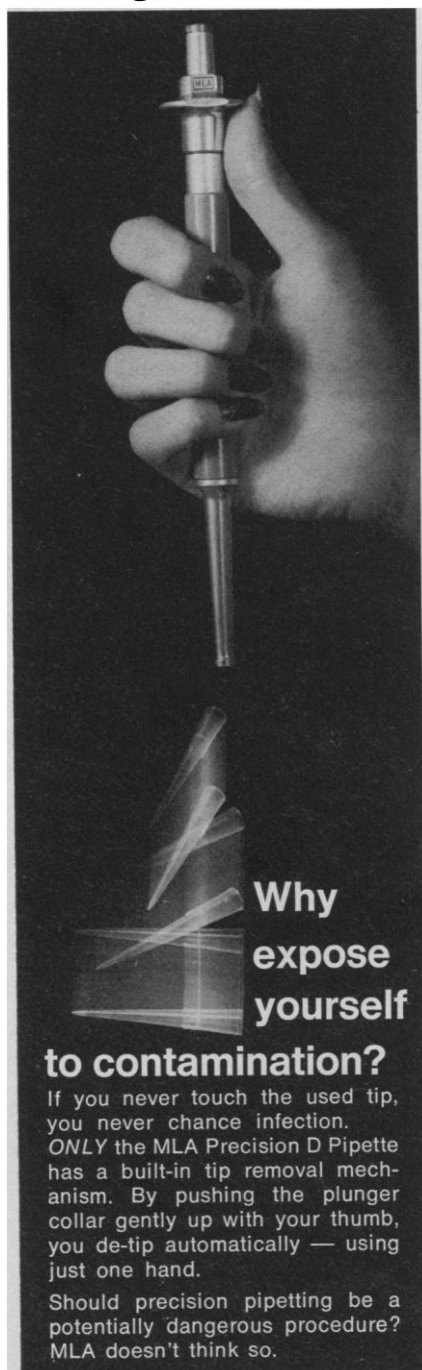
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Minorities welcome. Salary \$15,500. Appointment for 1 year with option for renewal if mutually agreeable and funds are available.

### ENVIRONMENTAL SCIENCES FACULTY

Richmond College, an upper-division unit of the City University of New York, is searching for a senior faculty member to assume the direction and future planning of the graduate program in Environmental Sciences. Required: Ph.D. in relevant area of science or engineering and established reputation in the field.

We are also seeking to fill a full-time position in the earth sciences (that is, geology, physical meteorology, or physical oceanography) within the Environmental Sciences program; Ph.D. required.

Rank and salary commensurate with qualifications.

Résumés and references to: **Dr. A. M. Levine, Richmond College, 130 Stuyvesant Place, Staten Island, New York 10301**.

*Affirmative Action/Equal Opportunity Employer*

14 JUNE 1974

## POSITIONS OPEN

### DEPARTMENT OF METALLURGY AND MATERIALS SCIENCE

At The University of Pennsylvania in Philadelphia is seeking candidates for the position of **Professor of Metallurgy and Materials Science and CHAIRMAN of the Department**. Curriculum vitae, including list of publications and research interests, should be submitted to **Professor R. Maddin, Chairman, Advisory Committee on Selection, LRSM Building, Philadelphia, Pa. 19174**. Applications should be submitted no later than 31 August 1974. *An Equal Opportunity Employer.*

### CHAIRPERSON THE UNIVERSITY OF MICHIGAN-DEARBORN DEPARTMENT OF NATURAL SCIENCES

A growing, multidisciplinary, undergraduate department in an urban university having concentrations in chemistry, experimental biology, physics, biochemistry, and biophysical science, seeks a chairperson for September 1975. Applicants should have proven ability in teaching and research involving undergraduates. Administrative experience is desirable. Field of specialization is open. Interested applicants should send curriculum vitae and the names of three references to **Chairperson, Search Committee, Department of Natural Sciences, University of Michigan-Dearborn, 4901 Evergreen Road, Dearborn, Michigan 48128**. Closing date for applications is 1 September 1974. *A Nondiscriminatory Affirmative Action Employer.*

### CHAIRMAN, DIVISION OF TUMOR IMMUNOLOGY ST. JUDE CHILDREN'S RESEARCH HOSPITAL

St. Jude Children's Research Hospital is seeking a distinguished scientist to organize and chair a division of tumor immunology. Applications are invited from persons with demonstrated expertise in basic immunology. Letters of application, with curriculum vitae, should be sent to

**Dr. R. G. Webster  
Chairman, Search Committee  
St. Jude Children's Research Hospital  
P.O. Box 318  
Memphis, Tenn. 38101**

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Male and Female*

### STATE UNIVERSITY OF NEW YORK AT STONY BROOK DEAN FOR UNDERGRADUATE STUDIES

Stony Brook invites nominations and applications for the newly created position of Dean for Undergraduate Studies, a major post designed to enhance the intellectual integrity and coherence of undergraduate education. This Dean directs the Center for Curriculum Development and the staff and resources of an existing Office of Undergraduate Studies. The Dean will participate in the formulation of academic policy and corresponding resource and personnel decisions.

Please direct all correspondence to: **James B. McKenna, Chairman, Search Committee, State University of New York, Stony Brook, New York 11790**.

*Stony Brook is an Equal Opportunity/  
Affirmative Action Employer*

### ECOLOGICAL TEAM WORKER

Highly motivated, energetic; experience working with life scientists and/or natural areas would be beneficial. Exciting 18-month national survey, base in Michigan or Tennessee, opportunity for travel and work with senior scientists to prepare a comprehensive ecological reserve program. Salary commensurate with experience. Send résumé to **The Institute of Ecology, Suite 101, 1717 Massachusetts Ave., NW, Washington, D.C. 20036**.

### ENVIRONMENTAL EPIDEMIOLOGIST

National professional health association is looking for health scientist with experience and training in environmental health and epidemiology, as well as working familiarity with toxicology. Responsible work with consultants to design and conduct investigations on environmental health hazards within the United States. M.D. or Ph.D. in health science required. Salary \$25,000 to \$30,000 per year depending on experience. Those interested or desiring further information should write or call: **Dr. Richard L. Wade, Director, Program Services, American Public Health Association, 1015 18th St., NW, Washington, D.C. 20036**. Telephone: 202-467-5040. *Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

**EPIDEMIOLOGIST**—Mount Sinai School of Nursing, Department of Community Medicine. Full-time medical care epidemiologist with experience both in research and education in community medicine. M.D. required. Forward curriculum vitae to: **Kurt W. Deuschle, M.D., Chairman, Department of Community Medicine, Mount Sinai Medical Center, Fifth Avenue and 100 Street, New York, N.Y. 10029**. *An equal opportunity/affirmative action employer.*

### EPIDEMIOLOGIST/BIostatistician

Office of Environmental Sciences of the U.S. Environmental Protection Agency seeks a research administrator for Chief, Epidemiology Branch, Health Effects Division in Washington, D.C. Ph.D. in epidemiology or biostatistics and at least 3 years of related experience required. Responsibilities include planning, managing, and evaluating research for the collection and analysis of data on selected health indicators in populations exposed to pollutants. Salary from \$28-36K commensurate with qualifications.

For further information call (collect) **Ms. L. Bowman at (202) 755-0260** or write: **EPA, Personnel Management Division, Room 3019, 401 M Street, SW, Washington, D.C. 20460**. *EOE*

### FACULTY POSITION

It is anticipated that a faculty position will become available 1 July 1974. Applicants must be experienced teachers of gross anatomy and have an active research program in progress.

Send curriculum vitae and the names of three referees to: **Chairman, Department of Human Anatomy, School of Medicine, University of California, Davis, California 95616**.

*An Equal Opportunity Affirmative Action Employer*

### FACULTY POSITION

Department of Poultry Science seeks faculty member with interest in poultry management research and teaching. Ph.D. in applicable area (for example, animal physiology) is required. Position available about 1 January 1975. Apply to **Head, Department of Poultry Science, The Pennsylvania State University, 213 Animal Industries Building, University Park, Pa. 16802**.

*An equal opportunity employer*

### GENETICIST, Ph.D.

Position available September 1974. Teach introductory courses in genetics and develop graduate course in specialty. Interest in molecular-biochemical genetics preferred. Send résumé, transcripts, and three letters of recommendation to:

**Dr. David W. Eldridge  
Department of Biology  
Baylor University  
Waco, Texas 76703**

### MARINE CHEMIST

To conduct shipboard and laboratory aspects of environmental hydrocarbon studies in the North Pacific.

**Qualifications:** M.S. in a natural science or B.S. plus research experience; familiarity with procedures for environmental hydrocarbon analysis; demonstrated ability to work at sea.

Send curriculum vitae and two letters of reference to **Dr. D. G. Shaw, Institute of Marine Sciences, University of Alaska, Fairbanks, Alaska 99701**.

*Equal Opportunity  
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### UNIVERSITY OF SASKATCHEWAN WESTERN COLLEGE OF VETERINARY MEDICINE

**Position:** Professor and Head of Department of Veterinary Pathology.

**Professional Qualifications:** D.V.M. and Ph.D. or equivalent, for example, Diplomate ACVP an asset.

**Duties:** Responsible to the dean for the work of the department. General supervision of the department and, in consultation with tenured members, supervises the quality of and assigns teaching duties. Is responsible for staff and equipment in the department and for budget preparation and control.

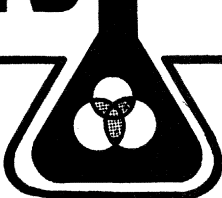
Direction of research and service programs of department.

**Salary:** Negotiable.

**Effective Date:** 1 July 1974 (Negotiable)

Applications to: **Dean, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0, Canada**.

# BIOSCIENTISTS



At the **LAWRENCE LIVERMORE LABORATORY** in a rural community near San Francisco, the **Biophysical Cytology Program** is expanding its **diagnostic and quantitative cellular studies of genetic, carcinogenic and reproductive responses to environmental toxicity**. Exciting opportunities are open for the following key scientists:

**BIOPHYSICIST/REPRODUCTIVE BIOLOGIST** / Responsibilities include collaborative, highly interactive research on development and application of biophysical and cytological methods for monitoring and studying mechanisms of action of environmental agents on male germinal tissues. Ph.D. or equivalent in biology or biophysics, plus published evidence of original research in mammalian spermatogenesis, sperm physiology, quantitation of cell components and effects of radiation and other environmental mutagens.

**CELL BIOLOGIST/BIOCHEMIST** / Responsibilities include developing biochemical and biophysical assays to study mutants, culturing cells, designing and executing experiments, operating and maintaining diverse equipment, and organizing and ensuring smooth functioning of laboratory activities. M.S. or equivalent with molecular biology/biochemistry background and experience in tissue culture.

**BIOCHEMIST/CELL BIOLOGIST** / Established scientist to lead a small group effort on the chemistry and biology of chromatin. Particular emphasis is given to the roles of heterochromatin and repetitive-sequence DNA in mechanisms of mutagenesis, and chromosome structure and aberrations. An extraordinary mammalian system is available for study; others to be developed. Background should include Ph.D. and/or M.D. degree and experience in several of the following areas: research on nuclear proteins or chromatin, normal biochemical and physicochemical methodology, cell culture techniques, possibly mutagenesis detection and measurement, cytophotometry.

**CYTOTECHNOLOGIST** / Will be responsible for all phases of preparation and interpretation of cytological specimens, both as received directly from the clinic and after special processing in the laboratory. American Society of Clinical Pathology certification in CYTOTECHNOLOGY with at least two years' post-certification experience in a clinical cytopathology laboratory.

**CELL BIOLOGIST** / A senior position involving the supervision and coordination of a research team responsible for cytochemical processing and analysis of cervical-vaginal material, including development of new quantitative procedures. Ph.D. or M.D. with proven research ability. Familiarity with cytochemistry, cytophotometry and image analysis is desirable.

**CELL BIOLOGIST/BIOCHEMIST** / To lead and coordinate a "task group" effort of Cytological Markers for Mutant Cells Sampled from Intact Animals. Suitable markers for mutation are to be developed primarily with fluorescent probes, and applied to determining mutation frequencies using flow micro fluorimetric systems and cell culture techniques. Background should include a Ph.D. or M.D. degree and experience in several of the following areas: somatic cell mutations and markers; cell culture, immunologic, and enzymatic techniques, fluorescence methods, flow systems, protein chemistry, cytophotometry, mutagenesis, animal biopsy and dissection.

**BIOPHYSICIST/BIOLOGICAL ENGINEER** / A senior position involving supervision of others, with responsibility for analysis of cervical-vaginal cells by flow systems methods, instrumentation design, and data analysis by computer methods. Ph.D. (or M.S.) with broad general physical science background and experience with biomedical applications.

**CYTOCHEMIST/ORGANIC CHEMIST** / Responsibility is chemistry of cell staining emphasizing quantitative fluorescent methods for flow systems applications, including enzyme, protein, membrane, immunofluorescent, and nucleic acid staining. Ph.D. with experience in broad areas of cytochemistry and organic chemistry synthesis and proven ability to interact with other scientists.

**BIOLOGIST/CELL BIOLOGIST** / Involves the application of instruments for biophysical cytology to the investigation of chromatin structure and other problems, and requires close collaboration with other investigators. Ph.D. with broad experience in optical microscopy and in quantitative cytochemistry. Candidates for these positions should forward a curriculum vitae and bibliography to:

**Personnel Department,  
LAWRENCE LIVERMORE LABORATORY, University of California,  
P.O. Box 808 (SC064), Livermore, California 94550.**

The LAWRENCE LIVERMORE LABORATORY is an equal opportunity/affirmative action employer and welcomes applications from women and minority candidates. U.S. CITIZENSHIP REQUIRED.



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**LAWRENCE LIVERMORE  
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## POSITIONS OPEN

### GEOPHYSICIST

The Lamont-Doherty Geological Observatory of Columbia University announces a position with the seismology group as a Research Associate or Senior Research Associate. Candidates must have a strong background in seismic instrumentation and data analysis and will be expected to lead existing and initiate new programs of research involving observations of earth strain, tilt, and long-period seismic waves. Qualified candidates are invited to submit a résumé of their qualifications, publications, names and addresses of three references by August 15, 1974, to Dr. Lynn R. Sykes, Lamont-Doherty Geological Observatory, Palisades, New York 10964. Columbia University is an equal opportunity employer.

### BAMFIELD MARINE STATION POSITION OF DIRECTOR

The Management Council of the Western Canadian Universities Marine Biological Society (WCUMBS) invites applications for the post of Director of its Marine Laboratory at Bamfield on the west coast of Vancouver Island, British Columbia, Canada. The position will be full-time but the incumbent will probably be associated in an honorary or part-time capacity with one of the member Universities of WCUMBS (Alberta, British Columbia, Calgary, Simon Fraser or Victoria). Salary will be negotiable. Applicants should supply a brief biography including degrees, attainments and experience, a list of publications, the names of 3 referees and a statement of research interests. Views on the functions of a new marine laboratory serving a group of universities would be helpful to the Selection Committee. Applications close on 31 August 1974 and should be sent to Dr. D. M. Ross, President, WCUMBS, c/o Faculty of Science, University of Alberta, Edmonton, Alberta, T6G 2E9, Canada, who will supply further particulars about the position, the Station and the Society upon request.

#### Title: Assistant Professor

**Description:** Special Assistant Professorship for reproductive physiologist with Ph.D. with experience in blood flow measurement, radioimmunoassay, neuroendocrinology, bioassays and mechanism of hormone action. Postdoctoral experience desired. Resume, reprints of publications, and three names of references should be sent no later than 1 July 1974 to Dr. Lloyd C. Faulkner, Department of Physiology and Biophysics, Colorado State University, Fort Collins, Colo. 80521.

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## **Dynapol** **RESEARCH**

The Goal: Dynapol was formed to solve the food additive problem through use of a unique technology. We are assembling the core scientific, technical, and management teams necessary to continue our research programs.

The Positions: Our progress has led to an immediate need for the following positions:

### **SR. RESEARCH BIOLOGIST** **Microbiology**

You should have a Ph.D. in microbiology or microbial biochemistry or physiology with 5 to 10 years academic or industrial experience to set up and supervise screens to evaluate interaction of intestinal bacteria and polymeric food additives. In addition, you must be able to plan and carry out basic research programs on microbiological aspects of macromolecule biomembrane interactions.

### **SR. RESEARCH CHEMIST**

Our process development area requires a senior research chemist with a Ph.D. and 3 to 10 years polymer synthesis and modification experience, plus some exposure to process development and/or pilot plant operation. This position requires considerable knowledge of organic chemistry and offers supervisory potential.

The Results: It's up to you! If you are excited by our pioneering approach to safe food additives and you want to contribute your unique ideas, join our team. Submit your résumé in confidence to the Personnel Administrator:

**Dynapol**

**1454 Page Mill Road**  
**Palo Alto, Calif. 94304**  
*An Equal Opportunity Employer*

## **NATIONAL INSTITUTES OF HEALTH DIRECTOR NATIONAL HEART AND LUNG INSTITUTE**

The National Institutes of Health invites nominations and applications for the position of Director, National Heart and Lung Institute (NHLI). One of ten research Institutes at NIH, NHLI supports research and research training programs by grants and contracts with academic and industrial institutions. NHLI conducts and supports basic and clinical research related to cardiovascular and pulmonary disease.

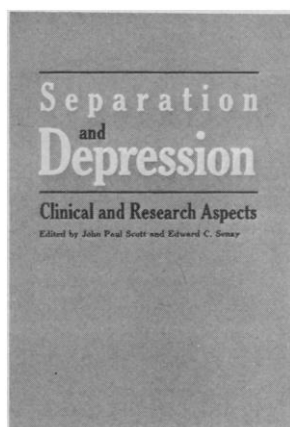
Applicants should have a doctorate in science, medicine, or both, and demonstrated achievement and stature in a relevant biomedical discipline. The M.D. degree will not be considered as an absolute requirement. The position requires a high degree of judgement, leadership and executive ability.

Position is top U.S. Civil Service grade, located in Bethesda, Maryland. Letters of application, with curriculum vitae and lists of publications and references, should be sent to the Chairman of the Search Committee:

**Robert S. Gordon, Jr., M.D.**  
**Director of the Clinical Center**  
**NATIONAL INSTITUTES OF HEALTH**  
**Building 10, Room 1N-212**  
**Bethesda, Maryland 20014**

Letters must be received by 21 June 1974 to be considered.

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## **Separation and Depression**

Edited by  
**John Paul Scott**  
and  
**Edward Senay**

This volume brings together contributions from behavioral biology, animal behavior studies, clinical psychopharmacology, psychoanalysis, and social systems research and, thus, bridges the gaps between animal behavior models and the human clinical situation.

256 pages. Illustrations and tables. A comprehensive index, and references. Retail price: **\$19.95**. AAAS Member price (with check accompanying order): **\$16.95**. ISBN-087168-094-7

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## POSITIONS OPEN

### NEUROPHARMACOLOGY

Applications are invited for a position in neuropharmacology at the **ASSISTANT or ASSOCIATE PROFESSORSHIP** level. Experience in teaching is desirable. The successful applicant will be expected to develop active research program, and assist in teaching medical and graduate students. Please send complete curriculum vitae, including publications, and arrange to have sent three letters of recommendation to: **Dr. Rubin Bressler, Department of Pharmacology, University of Arizona College of Medicine, Tucson, Arizona 85724.** *The University of Arizona is an equal opportunity employer.*

**THE UCLA NEUROPSYCHIATRIC INSTITUTE** conducts multidisciplinary educational and scientific programs related to neurological and psychiatric illness and mental retardation.

Occasional openings available for academic personnel in biological, behavioral and social sciences, and health-related professions. Equal opportunity employer with vigorous affirmative action program. Applications from women and members of minority groups receive top priority. Write: **L. J. West, M.D., 760 Westwood Plaza, Los Angeles, California 90024.**

### PHARMACOLOGIST-PHYSIOLOGIST

New Medical school seeks top-quality teacher and scholar to teach pharmacology and some physiology to first-year medical students in an integrated organ-system self-instructional program. Ph.D. or equivalent required. Medical school experience, postdoctoral training and teaching experience are highly desirable. Rank open. Send curriculum vitae and ask three referees to write on your behalf to: **Dr. John H. Caster, Coordinator-Academic Appointments, Box 5, School of Medicine, Southern Illinois University, Carbondale, Ill. 62901.**

*An Equal Opportunity/Affirmative Action Employer*

### PHYSIOLOGIST

Opportunity to develop physiology component of an integrated curriculum in a baccalaureate program for new primary health care practitioners—health associates. Assistant professor level. *An Equal Opportunity Employer.* Send curriculum vitae to: **Archie S. Golden, M.D., Director, Health Associate Program, The Johns Hopkins University School of Health Services, 624 North Broadway, Baltimore, Maryland 21205.**

### PREDOCTORAL AND POSTDOCTORAL APPOINTMENTS IN GERONTOLOGY

For training and research in physiology, biophysics, biochemistry, or biology of aging. NIH-established stipends include dependency allowances. U.S. citizenship or permanent residence required. Immediate appointment.

**Box 308, SCIENCE**

### UNIVERSITY OF NEW BRUNSWICK

#### Department of Biology SCANNING ELECTRON MICROSCOPY TECHNICIAN

Required to operate and maintain a Cambridge S4-10 scanning electron microscope and related equipment. Duties will include specimen preparation, photography, and possibly some transmission electron microscopy. Most work will be with biological material.

Previous experience of scanning electron microscopy would be advantageous, but training will be given where necessary.

Starting salary up to \$9000 depending on qualifications and experience.

Application with names of two referees to **Dr. W. D. Seabrook, Department of Biology, University of New Brunswick, Fredericton, N.B., Canada.**

## POSITIONS OPEN

### RADIATION BIOLOGIST/BIOPHYSICIST

Postdoc to study in vivo radiation-induced DNA damage and repair mechanisms in normal nondividing brain and brain tumor. Experience with radiation sources, isotopes, ultracentrifugation, neurobiology, tissue culture, enzyme biochemistry and biostatistics desirable. Salary greater than \$10,000, position available immediately. **Dr. K. T. Wheeler, Brain Tumor Research Center, Department of Neurosurgery, University of California Medical Center, San Francisco, Calif. 94143.**

### RESEARCH ASSOCIATE POSITION

For person interested in the primary structure of animal virus RNA. Experience with Sanger's two-dimensional electrophoresis technique required. Funds available for 3 years. Apply with curriculum vitae and references. **M. E. Reichmann, Department of Microbiology, University of Illinois, Urbana, Illinois 61801.**

### RESEARCH ASSOCIATE

Ph.D. in Microbiology with research and/or clinical experience in the subspecialty of mycology. Please submit résumé and references to: **Wadley Institutes of Molecular Medicine, 9000 Harry Hines, Dallas, Texas 75235, Attention: J. E. Robertson/Personnel Director, (214) 358-4111, ext. 366 and 367.**

### RESEARCH ASSOCIATE

Biophysicist or biomedical engineer with physiology background to take charge of research program to develop carbon dioxide laser surgical instrumentation and techniques.

**Dr. Hugh Beckman  
Sinai Hospital of Detroit  
6767 West Outer Drive  
Detroit, Michigan 48235**

### RESEARCH TRAINING

Postdoctoral training positions in Respiratory Physiology are open at the Department of Physiology, University of Florida. Emphasis is on basic research in various aspects of respiration. An opportunity is provided for experience in clinical applications. Information: **Dr. A. B. Otis and Dr. Marc Jaeger, Department of Physiology, College of Medicine, University of Florida, Gainesville 32610.**

### TERRESTRIAL ECOLOGIST UNIVERSITY OF MINNESOTA, TWIN CITIES CAMPUS

Applications are invited for a temporary position beginning in September 1974 to teach an upper-division introductory course in ecology for one quarter and an advanced course in nutrient cycling and energy flow in terrestrial ecosystems. Appointment will be at the rank of Assistant Professor for 1 year; the possibility of reappointment remains open. Please send curriculum vitae and three references to **Dr. E. J. Cushing, Chairman, Search Committee, Department of Ecology and Behavioral Biology, University of Minnesota, St. Paul, Minn. 55101.**

*An Equal Employment Opportunity; Applications from Women and Minority Persons Encouraged.*

### N.I.H. TRAINEESHIP IN VETERINARY ANATOMY

Academically interested D.V.M.'s are invited to apply for graduate training positions involving graduate studies, research and teacher training leading to the Ph.D. degree. Apply to:

**Alvin F. Weber, D.V.M., Ph.D.  
Professor, Department of Veterinary Biology  
234 Veterinary Science Building  
University of Minnesota  
St. Paul, Minn. 55101**

### TUMOR IMMUNOLOGIST

Senior scientist, experienced in assessing cellular immune reactivity. To conduct independent research and to participate in collaborative, multidisciplinary programs in tumor biology. Send complete curriculum vitae, reprints, and names for references, to

**Box 309, SCIENCE**

## FELLOWSHIPS

### POSTDOCTORAL FELLOWSHIP

Postdoctoral fellowship in Microbiology. Mount Sinai School of Medicine of the City University of New York, Department of Microbiology, is awarding an NIH-sponsored fellowship for postdoctoral research in any of the following areas: Immunoglobulin structure and function, cell organelle biochemistry, microbial control mechanisms, temperate phage regulation, viral genetics and immunology, viral biochemistry. Available 1 July 1974. Send curriculum vitae to: **Dr. Ed Kilbourne, Chairman, Department of Microbiology, Mount Sinai School of Medicine of City University of New York, Fifth Ave. at 100 Street, New York, N.Y. 10029.** *An equal opportunity employer.*

**TWO-YEAR POSTDOCTORAL FELLOWSHIP** available immediately. Emphasis on therapeutic ratio studies of multiple modality treatment effects on normal cell population dynamics in vivo, and on an in vivo/in vitro murine tumor system. Outstanding clinical oncology interest and rapport. Applications from demonstrably efficacious candidates are solicited. **S. Leshner, Director, Cancer Research Unit, Allegheny General Hospital, 320 East North Avenue, Pittsburgh, Pa. 15212.**

### POSTDOCTORAL FELLOWSHIP

Available July 1974 for candidate with background in Cell Biology or Electrophysiology who is interested in transport phenomena in cell membranes. Submit curriculum vitae and two letters of recommendation.

**V. Everett Kinsey, Ph.D., Director  
Institute of Biological Sciences  
Oakland University  
Rochester, Michigan 48063**

### POSTDOCTORAL FELLOW

Regulation of mammalian protein synthesis and turnover. Please send résumé and two letters of recommendation to **Dr. James W. Drysdale, Department of Biochemistry, Tufts Medical School, Boston, Mass. 02111.**

### UNIVERSITY OF QUEENSLAND POSTDOCTORAL FELLOWSHIP

Solid-state physicist with experimental or theoretical experience in semiconductors to join solar energy project on photovoltaic cells using organic materials.

Salary in range \$A8,698 to \$A14,308 per annum, plus 10 percent superannuation.

Start early 1975. Appointment 1 year, renewable, maximum 3 years.

Write to **Professor L. E. Lyons, Department of Chemistry, University of Queensland, St. Lucia, Brisbane, Australia, Q. 4067.**

## TRAINING SESSION

### UNIVERSITY OF CHICAGO MULTIVARIATE ANALYSIS OF QUALITATIVE DATA TRAINING SESSION

September 4-7, 1974

Study in this session will focus on three powerful computer programs for the analysis of qualitative data by log-linear models and item analysis and scale construction. The session will include lectures and computer lab work. Write: **R. D. Bock, University of Chicago, 5835 S. Kimbark Ave., Chicago, IL 60637.**

## MARKET PLACE

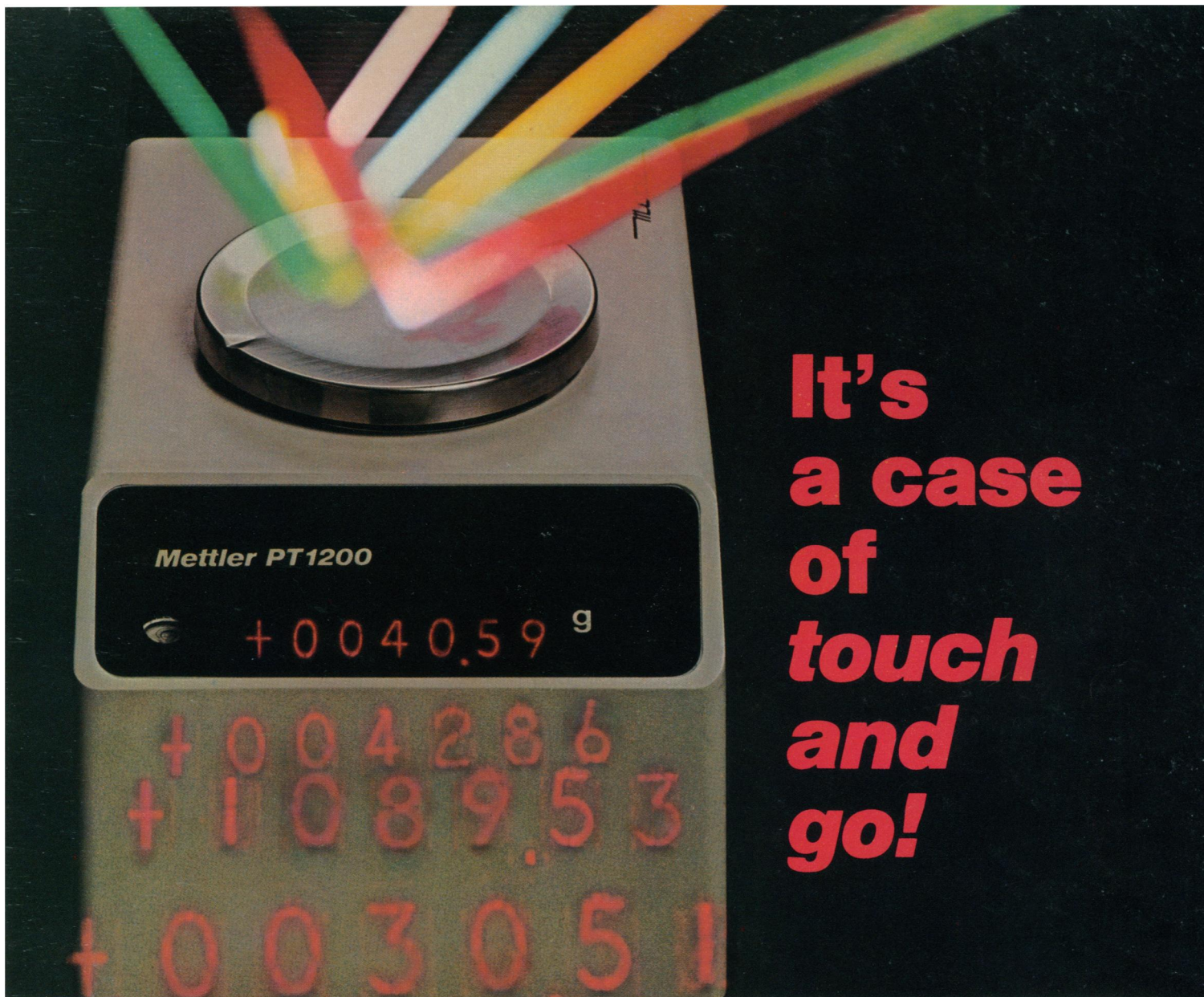
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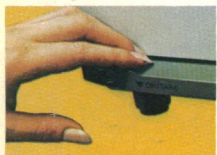
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