

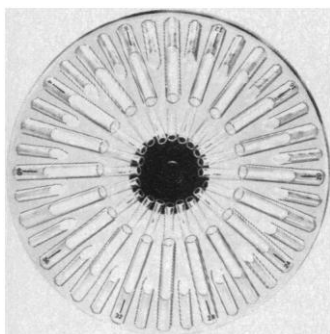
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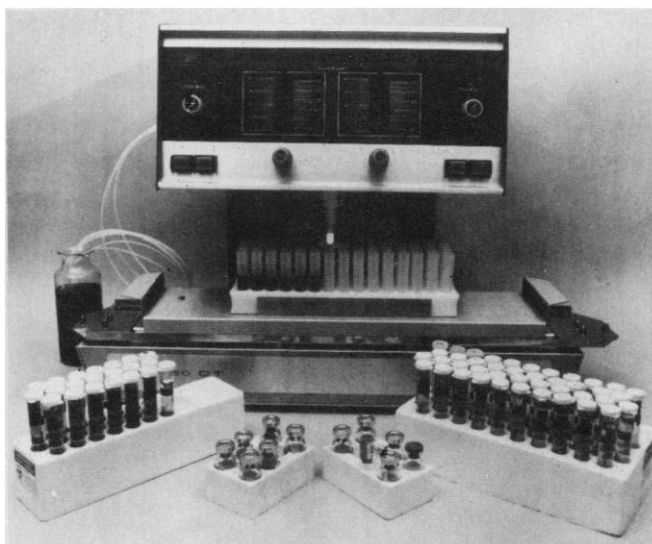
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Personnel Placement

Only those employers and individuals who do not discriminate on the basis of race, sex, religion, age, color, or national origin should submit Personnel Placement advertising.

POSITIONS WANTED: 40¢ per word; use of Box Number counts as 10 additional words. Minimum charge \$10. Prepayment required. This rate applies to individuals only; personnel agencies, companies, colleges, and universities take display rate for all advertising.

DISPLAY (POSITIONS OPEN, MARKET PLACE, AND SO FORTH): \$130 per inch, minimum, per insertion (1 inch is equivalent to 12 lines of 48 characters each). Ads over 1 inch billed to nearest quarter inch. No charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information must accompany all other advertising.

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Washington, D.C. 20005

POSITIONS WANTED

Anatomist, Ph.D. Three years of college teaching experience in anatomy, physiology, histology, embryology. Trained in electron microscopy. Seeking teaching position. Box 276, SCIENCE. X

Aquatic Biologist/Phycologist, Ph.D. Interest and background in freshwater and marine ecology, especially problems relating to algae. Seeks research and/or teaching post. Box 277, SCIENCE. X

Aquatic Ecologist/Limnologist, Ph.D. 1971. Good background in biology and chemistry. Five years of research experience in phycology, bacteriology, water chemistry, lake eutrophication, limnological surveys. Interests are diverse and flexible. Seeks research, consulting, or teaching position. Box 278, SCIENCE. X

Biophysics, Ph.D., University of Pennsylvania, December 1975. Background: structure determination of retinal disk membranes primarily through x-ray diffraction methods. Interested in membrane structure-function. Desires postdoctoral/research-teaching/industry position. Available in fall 1976. Box 279, SCIENCE. X

Biosystematist, Ph.D., teaching, research, 40 publications. Teach general botany, cytology, taxonomy. Seeks teaching/research. Box 280, SCIENCE. X

BOSTON. Clerical plus. Very bright person, degree, typing, genetic handicap. I can make it in the right position. Please write: Box 281, SCIENCE. X

6/11, 18, 25; 7/2

General Management, Ph.D., M.B.A. Will consider right opportunity almost anywhere. Prefers coastal city. Industry and academic experience in biomedical sciences. Box 282, SCIENCE. X

Meteorological Technician: A.A. and B.A. degrees. Will work for private sector or government. L. Baril, 10840 SW 42 Street, Miami, Florida 33165. Telephone: 305-221-1340. 6/11, 18

Pharmacologist, B.S. (1970). Six years of experience in neuropharmacology and GC-GC/MS analysis techniques. Publications and references. Desires research position. M. Lutz, M6440 Medical Science 1, Ann Arbor, Michigan 48109. X

POSITIONS WANTED

Ph.D. forest and wood science; broad range of experience and training in the environmental and wood product fields. Seeks extension-like or administration position. Résumé upon request. Available August 1976. Box 283, SCIENCE. X

Ph.D. (in medical biology). Three years of postdoctoral experience. Tumor immunology and biochemistry, regulation of cell proliferation. Seeks full-time research position. First-rate credentials. Box 284, SCIENCE. X

Plant Scientist, Ph.D. Distinguished 20-year research record, honors, society offices, books, fine teacher; broad interests in physiology, ecology, biochemistry; seeks academic position. Full-time teaching or administration happily accepted in preference to continuing at research institution under intense but unintelligent "mission" pressure. Box 285, SCIENCE. X

6/11; 7/2

R.D.H., M.S., doctorate soon. Strong preparation and considerable experience in research/teaching. Teaching fields: oral biology, dental hygiene, and medical science—atomy, physiology, biophysics, neurophysiology. Box 286, SCIENCE. X

Foreign-born Scientist, with strong background in hydrological and planktological investigations and much experience in work at sea and in lagoon and estuarine environments, seeks research or academic position. Available around June 1976. Box 260, SCIENCE. X

6/11, 18

Zoologist/Biochemist, M.S. Experienced analyst of chlorinated hydrocarbons. Interested in physiological effects of toxic compounds. Desires employment involving research into environmental contaminant and drug metabolism. A. Edwards, Hopkins Marine Station, Pacific Grove, California 93950. X

POSITIONS OPEN

In accordance with University principles of fair-practice employment, the Department of Pathology of the University of Pennsylvania School of Medicine invites applications for **academic positions** in the Chemistry Section of the Clinical Pathology Division. Minimum qualifications are: completion of an approved residency training program in laboratory medicine and Board certification in clinical pathology. Candidates with a strong academic background, an interest in teaching, and with experience in one or more phases of clinical chemistry would be given preference.

Send curriculum vitae to:

Dr. Dean A. Arvan
William Pepper Laboratory
Hospital, University of Pennsylvania
704 Gates Building/G1
Philadelphia, Pennsylvania 19104

ADJUNCT ASSISTANT PROFESSOR: Starting salary approximately \$16,000. Starting 1 July 1976. Requirements: Ph.D. and 1 or 2 years of postdoctoral training in gerontology and immunology including familiarity with cell fractionation and cellular immunity techniques, enzyme purification, radioactive counting techniques including radioautography, and experience with autopsy interpretation. *University of California, Los Angeles, is an Equal Opportunity/Affirmative Action Employer interested in receiving applications from minorities and women candidates as well as other qualified people.* Send curriculum vitae and three references to **Dr. Roy L. Walford, Department of Pathology, University of California, Los Angeles, Calif. 90024.**

ANATOMIST—INSTRUCTOR (M.S.); OR ASSISTANT PROFESSOR, Ph.D.

Duties include lecture and lab sections in undergraduate structure and function courses. Additional courses include undergraduate histology and microtechnique. Must be willing and capable of teaching other introductory undergraduate biology courses. Teaching experience necessary in above subjects. Salary \$10,500 to \$13,500 for 10 months. Send résumé, transcripts of all college and university work, and three letters of recommendation by 30 June 1976 to:

Miss Beth Palmer, Employment Office
FAIRLEIGH DICKINSON UNIVERSITY
285 Madison Avenue
Madison, N.J. 07940

An Equal Opportunity/Affirmative Action Employer, M/F

POSITIONS OPEN

ANALYTICAL CHEMIST/INVESTIGATOR. The Gastroenterology Unit at Mayo Clinic/Medical School seeks a research chemist for a full-time position. The group currently comprises a number of full-time investigators, M.D. and Ph.D., and is active in clinical research in gastrointestinal physiology and digestive diseases. We seek an independent, imaginative person with training and interests in enzymatic, chromatographic, and standard analytical procedures. Applicants would be expected to modify and automate existing techniques, to have some general supervisory duties and responsibility for quality control of these procedures, and to contribute to the research effort. Areas of ongoing research to which novel approaches might be developed include enzyme secretion, intraluminal digestion, and intestinal absorption. Experienced applicants with M.S. or recent Ph.D.'s will be considered. Applicants should supply a detailed curriculum vitae and a statement of their career interests, together with bibliography and names of references, to **Box 264, SCIENCE, Mayo Foundation is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT CURATOR (INVERTEBRATE ZOOLOGIST)

RESPONSIBILITIES: Development of the permanent exhibit galleries; care of the invertebrate collections; development of temporary exhibits; communication with public through publications, lectures, and so forth; research. **QUALIFICATIONS:** At least a master's degree in zoology, with specialization in invertebrate zoology. **SALARY:** Of interest to those presently earning \$9,500 to \$11,000. Send letter of application, curriculum vitae, and three references to:

Dr. G. E. Lammers, Chief Curator
Manitoba Museum of Man and Nature
190 Rupert Avenue
Winnipeg, Manitoba, Canada R3B 0N2

Competition closes 15 July 1976.

Applications are invited for a postgraduate position as **ASSISTANT HORTICULTURIST** beginning 21 July 1976. Competence in extraction and characterization of plant storage proteins and proteolytic enzymes is necessary. Experience in plant propagation and orcharding desirable. Appointment is for one year at a salary of \$11,050. Send a curriculum vitae and three reference letters to: **J. L. Titus, Department of Horticulture, 102 Horticulture Field Lab, University of Illinois, Urbana, Illinois 61801. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR

Applications are invited for a position at the level of assistant professor in the Department of Pharmacology. Applicants must have the Ph.D. degree in organic chemistry, a minimum of 5 years of postdoctoral experience in the synthesis of nucleosides, and strong commitment to collaborative research programs necessary for the development of antiviral and antineoplastic agents. Interested candidates should send curriculum vitae, transcripts, reprints, description of areas of research interests, and the names of three possible references by 15 June 1976 to **Dr. William H. Prusoff, Department of Pharmacology, Yale University School of Medicine, New Haven, Connecticut 06510.**

An Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR, Ph.D. phycology—cellular physiology or plant pathology—cellular physiology. Teaching and research experience advantageous. Send curriculum vitae and names of three references by 30 June 1976 to **Sherret S. Chase, Chairman, Search Committee, Department of Biology, State University of New York, Oswego, New York 13126. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR, BIOCHEMISTRY, starting fall 1976. Ph.D. and 1 to 2 years of postdoctoral experience with demonstrated productivity in research. Development of a strong research program and teaching of graduate, undergraduate, and medical students. Research interests in physical, organic, or analytical aspects of biochemistry preferred. Send curriculum vitae, a comprehensive plan for future research, and three letters of reference to: **Dr. Raymond R. Myers, Chairman, Department of Chemistry, Kent State University, Kent, Ohio 44242. Kent State University is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

ASSISTANT PROFESSORS

Applications are invited for two positions at the level of assistant professor in the Section of Developmental Therapeutics of the Yale Comprehensive Cancer Center: academic appointments and teaching will be in the Department of Pharmacology. Applicants must have the Ph.D. degree, postdoctoral experience, and a strong commitment to the collaborative and independent research programs necessary for the development of antineoplastic agents. One position is for a **medicinal chemist** with interest and experience in synthesis of anticancer agents and the other for an individual trained and experienced in **biochemistry, pharmacology, and/or molecular biology or virology** with special interest in elucidating the molecular mechanism of action of cytotoxic agents. Interested candidates should send curriculum vitae, transcripts, reprints, description of areas of research interests, and the names of three possible references by 15 June 1976 to **Dr. Alan C. Sartorelli, Department of Pharmacology, Yale University School of Medicine, New Haven, Connecticut 06510. Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR OF BIOCHEMISTRY

Academic career opportunity for Ph.D. in biochemistry with postdoctoral experience in molecular genetics or physical biochemistry. Expected to develop strong research program, in an area such as nitrogen fixation, energy production, protein synthesis, macromolecular interactions, or membrane biochemistry. Teaching responsibilities include undergraduate and graduate biochemistry. Send immediately a letter of application with curriculum vitae, a summary of research interest, and three letters of reference to: **Dr. David Strumey, Chairman of the Search Committee, Department of Biochemistry and Microbiology, Cook College, Rutgers University, New Brunswick, New Jersey 08903. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR/BIOLOGY: Tuscarawas Campus, New Philadelphia, Ohio. Candidate must be qualified to teach microbiology, human anatomy and physiology, zoology, and general biology at the freshman and sophomore level. Ph.D. required. Salary range: \$11,500 to \$12,500. Salary dependent on qualifications and experience. Position available 16 September 1976. Deadline for completed applications: 1 July 1976. Address inquiries to: **Dr. A. B. Cibula, Box 17, Department of Biological Sciences, Kent State University, Kent, Ohio 44242. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR OF BIOPHYSICS

The Department of Biophysics and Theoretical Biology has a faculty opening in the area of structural studies. We are interested in persons whose research and teaching interests are in x-ray diffraction, electron microscope image analysis, or related fields. Interested applicants, who should have substantial postdoctoral experience and demonstrated evidence of independence in research, may send curriculum vitae, bibliography, statement of research interests, and the names of three references to: **Dr. Robert Haselkorn, Department of Biophysics and Theoretical Biology, The University of Chicago, 920 East 58 Street, Chicago, Illinois 60637. From the time of its original charter, the principle of the University of Chicago has been to appoint scholars without regard to race, color, religion, sex, or national origin.**

ASSISTANT PROFESSOR ORGANIC MEDICINAL CHEMISTRY POSITION AVAILABLE SEPTEMBER 1976

Applications are invited from persons possessing a Ph.D. degree, with teaching and research experience. A degree in pharmacy is desirable. The responsibilities of this individual include undergraduate and graduate teaching in the area of organic medicinal chemistry. Candidates must have the ability to relate medicinal chemistry to the practice of pharmacy. The successful candidate must have, or be in the process of developing, a vigorous research program in organic medicinal chemistry. The appointment is on a 9-month (academic year) basis with salary commensurate with experience and training. Please send a curriculum vitae, along with names of three references and a summary of research plans, to:

**Dr. Glenn D. Appelt, Chairperson
Search Committee
School of Pharmacy
University of Colorado
Boulder, Colorado 80309**

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

POSITIONS OPEN

ASSISTANT PROFESSOR, SCHOOL OF HEALTH SCIENCES. Qualifications: Ph.D. in anatomy with some expertise in a clinical area (hematology, human genetics, and so forth). Minimum of 2 years of teaching experience. Some medical school background. Ability to advise medical technology students desired. Demonstrated creativity in teaching. Salary dependent on qualifications and experience. Duties: teaching beginning and advanced human anatomy courses with cadaver dissection. Participation in curriculum planning and some administration. Student advising in medical technology and pre-professional programs. Send letter of application, résumé, and a list of three references to: **Professor Les Hart, Chairman, Anatomy Search Committee, School of Health Sciences, Grand Valley State Colleges, Allendale, Michigan 49401. Grand Valley State Colleges is an Equal Opportunity Employer.**

BIOCHEMIST

A postdoctoral position is available immediately for a biochemist to work on electrophoretic and isoelectric focusing analysis of irradiated muscle proteins. Experience with above materials and techniques is highly desirable. Applicants with training in other aspects of protein chemistry will also be considered. Salary is competitive. Send curriculum vitae, references, and reprints to: **Professor Nicholas Catsimopoulos, Biophysics Laboratory, Department of Nutrition and Food Science, Massachusetts Institute of Technology, Cambridge, Mass. 02139. An Equal Opportunity/Affirmative Action Employer.**

BIOLOGY

Wilson College has an opening at the rank of assistant professor in the Division of Natural Sciences and Mathematics beginning September 1976 for a Ph.D. biologist. Primary teaching responsibilities in physiology and histology—electron microscopy; additional ones may be in developmental, cell, or general biology. The individual should be prepared to direct undergraduate research. Submit résumé and three letters of reference before 30 June to **Dr. Louise Monack, Wilson College, Chambersburg, Pa. 17201. An Equal Opportunity Employer.**

The School of **BIOLOGICAL SCIENCES** seeks individuals with research interest and experience at the molecular or cellular level of developmental biology. Instructional duties will include upper-division courses in cell and molecular biology and embryology and the individual will be expected to develop a productive research program.

This position will be filled September 1976 at the assistant professor level unless a person has considerable experience beyond the Ph.D. degree.

Those interested in being considered should send a curriculum vitae to **Dr. Glenn W. Todd, Director, School of Biological Sciences, Oklahoma State University, Stillwater, Oklahoma 74074. The University is an Equal Opportunity/Affirmative Action Employer.**

BOTANIST—INSTRUCTOR, M.S.; OR ASSISTANT PROFESSOR, Ph.D.

Duties include lecture and lab sections in undergraduate nonmajors and majors botany courses and cover lecture and lab sections in zoology. Opportunity exists to teach cell biology and advanced botany courses. Teaching experience required in above subjects. Salary \$10,500 to \$13,500 for 10 months. Send résumé, transcripts of all college and university work, and three letters of recommendation by 30 June 1976 to:

**Miss Beth Palmer, Employment Office
FAIRLEIGH DICKINSON UNIVERSITY
285 Madison Avenue
Madison, N.J. 07940**

An Equal Opportunity/Affirmative Action Employer, M/F

CELL BIOLOGIST POSTDOCTORAL POSITION

Available 1 July 1976. Prefer candidate with background in cell culture and cell biology. Research training will focus on the isolation of cell variants, karyology, and cell hybridization. Send curriculum vitae and names of two persons familiar with candidate's research potential to:

**Gretchen Darlington, Ph.D.
Department of Medicine
Cornell University Medical College
1300 York Avenue, Room F-209
New York, New York 10021**

An Equal Opportunity Employer

POSITIONS OPEN

CARDIOVASCULAR PHYSIOLOGIST

Assistant professor (Ph.D. and/or M.D.) with interests in cardiovascular research in conscious and unconscious animals, to collaborate with a fully equipped laboratory studying myocardial ischemia in basic science department in a large medical center. Send curriculum vitae and two letters of reference to **Box 288, SCIENCE.**

CARDIOVASCULAR PHYSIOLOGIST—Faculty opening for individual with an M.D./Ph.D. degree. Two years of postdoctoral experience is desirable. Excellent teaching and research opportunity. Salary and professional rank are open. Address inquiries to **J. E. Whitney, Chairman, Department of Physiology, The University of Arkansas for Medical Sciences, Little Rock, Arkansas 72201. The University is an Equal Opportunity/Affirmative Action Employer.**

Saginaw Valley State College is seeking candidates for the positions of:

CELL BIOLOGIST, associate or full professor—Ph.D. with major in structure and functioning of eukaryotic organisms.

MICROBIOLOGIST, assistant/associate professor—Ph.D. or near Ph.D. in microbiology with background in human nutrition and/or strong physiology background.

Teaching experience required and salary negotiable. Deadline: 14 June 1976.

Send letter of application and résumé to: **Personnel Director, Saginaw Valley State College, 2250 Pierce Road, University Center, Mich. 48710. Saginaw Valley State College is an Equal Opportunity Employer.**

DEPARTMENT CHAIRMAN AND FACULTY POSITIONS—BIOLOGY. At least one and possibly two positions open. Ph.D. plant physiologist and Ph.D. geneticist sought, one of which must have at least 3 years of full-time teaching experience and be interested in directing the Department of Life and Earth Sciences in health-related and environmental programs. Possibility of additional future administrative responsibilities exist. Send curriculum vitae with three references to: **Marvin E. Camburn, Division of Natural Science and Mathematics, Mercyhurst College, Erie, Pa. 16501.**

UNIVERSITY OF CALIFORNIA, IRVINE SCHOOL OF BIOLOGICAL SCIENCES CHAIR, ECOLOGY AND EVOLUTIONARY BIOLOGY

A position is now available for an appointment at the full professor level as chair in the Department of Ecology and Evolutionary Biology in the School of Biological Sciences at the University of California, Irvine. Candidates must have an active research program. Marine biology or ecological energetics are preferred, although individuals in other areas of ecology and evolutionary biology will be considered. Candidates should submit curriculum vitae particulars as soon as possible to **Dean Howard A. Schneiderman, School of Biological Sciences, University of California, Irvine, Irvine, California 92717. Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.**

CURRICULUM DEVELOPMENT TECHNICAL EDUCATION

The Massachusetts Institute of Technology is seeking a person with related experience to assist in all phases (design, evaluation, materials development, teacher training) of projects involving development of post-high school programs in electronics and other technologies for an Iranian sponsoring agency.

Please submit résumé to **Personnel Office, Massachusetts Institute of Technology, 400 Main Street, Cambridge, Mass. 02139. Attention: Job No. D76-53. An Equal Opportunity/Affirmative Action Employer.**

DIRECTOR, VISIBILITY LABORATORY SCRIPPS INSTITUTION OF OCEANOGRAPHY

Senior scientist to teach and head academic/research division employing 50. Annual budget of \$1 million in federal contracts and grants. Areas focused on optical oceanography, atmospheric optics, and image processing. Salary approximately \$30,000 depending on qualifications. Send curriculum vitae by 30 June to: **Dr. W. H. Munk, A-025, Chairman, Visibility Laboratory Search Committee, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, Calif. 92093. University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.**

**CSIRO
DIVISION OF FISHERIES AND OCEANOGRAPHY
CRONULLA, N.S.W.
DIVISION OF TROPICAL CROPS AND PASTURES
BRISBANE, QLD.**

**CHIEF OF DIVISION (2 POSITIONS)
GENETICS RESEARCH LABORATORIES
MOLECULAR AND CELLULAR BIOLOGY UNIT
NORTH RYDE, N.S.W.
OFFICER-IN-CHARGE**

CSIRO has a broad charter for research into primary and secondary industry areas. The Organization has approximately 7000 employees—2200 of whom are research and professional scientists—located in Divisions and Sections throughout Australia.

**(1.) REF: PG320/552 - DIVISION OF FISHERIES AND
OCEANOGRAPHY**

GENERAL: The position of Chief of the CSIRO Division of Fisheries and Oceanography, will become vacant in February 1977 upon the retirement of Dr. K. Radway Allen.

The Division has its major laboratory at Cronulla, near Sydney. Other scientific groups of the Division are located in Laboratories in Perth and near Brisbane. The Division has a total staff of approximately 160, of whom some 60 are professional scientists.

The Division's programs are concerned with studies both of the fisheries resources and of the marine environment. They embrace a wide range of scientific disciplines and emphasis is placed on an integrated, multi-disciplinary approach wherever this is appropriate. The Division has undergone substantial expansion over the last 3 years and it is the Executive's intention that this process should continue. Up to the present, emphasis has been placed on expansion of work on the fisheries resources and on basic estuarine ecology in relation to the preservation of the quality of estuarine environments. It is intended that the next phase of expansion will be the initiation of an active program in high seas oceanography, in both its physico-chemical and biological aspects. To support both this and the fisheries program, the Organization has proposals to construct a large (67 m) specially designed ocean-going research vessel, which it is hoped will be in service in 1979.

The oceanographical program has strong interests in continental shelf waves, theories of ocean circulation, variability of the marine climate, ocean productivity and ecology and chemistry of heavy metals in the sea. The Division is in the forefront of the application of satellite tracked buoys to ocean circulation.

In its fisheries programs, the Division, which works closely with Commonwealth and State fisheries departments, concentrates on fisheries of major national importance. It has large projects on prawns, rock lobsters and tuna and is commencing a large quantitative acoustic survey of the offshore fish resources. It is expected that the latter aspect of the work, and associated biological studies, will become of increasing importance if the principle of a 200-mile Economic Zone is adopted.

The estuarine program is concentrated on a multidisciplinary study, conceptualized around a carbon model, of the basic mechanisms of Australian estuaries as a background for future environmental management problems. Currently the program is based upon a local pristine system.

The Division also has a strong electronics group engaged in the development of advanced instrumentation for all its programs.

The scientific programs are also supported by a computer centre linked to the very large CSIRO network, good mechanical workshops and a comprehensive library.

The Division owns four vessels between about 13 m and 25 m, and numerous small craft. It has on long term charter for the rock lobster program, a 43 m vessel, and a 27 m trawler for the acoustic survey.

New laboratories at Perth and Brisbane are under construction and the existing facilities at Cronulla are being expanded. The new buildings will be completed in about August 1976.

The Chief will be responsible to the Executive for the development, scientific direction and integration of the research programs of the Division, and will be expected to collaborate with other Australian and overseas marine research bodies.

**(2.) REF: PG850/485 - DIVISION OF TROPICAL CROPS AND
PASTURES**

GENERAL: The position of Chief of the CSIRO Division of Tropical Crops and Pastures will become vacant when Dr. E. M. Hutton, Chief of the Division, previously known as the Division of Tropical Agronomy, retires early in 1977.

The Division is the main research group in CSIRO responsible for studies on tropical and sub-tropical crops and pastures. The Division has its headquarters at the Cunningham Laboratory in Brisbane and a second major laboratory at Townsville. In addition, field laboratories and experimental areas are maintained elsewhere in Queensland at Lawes, Samford, Mundubbera, Beerwah and Woodstock, in Western Australia at Kununurra and in the Northern Territory at Katherine.

The Division has some 80 scientific staff and a total staff of approximately 280.

The objective of the Division is to develop an understanding of con-

straints to crop and pasture growth in tropical and sub-tropical Australia and means by which they may be overcome. It is intended that, under the control of the Chief, centres of scientific emphasis with leadership of high scientific calibre will be further developed within the Division on the subjects of nitrogen flows and pathways in ecosystems, the genetics of plant adaptation and stress physiology in plants. Agronomic studies will be aimed at developing principles for predicting crop and pasture performance under the widely varying conditions in northern Australia. These areas of research are related to the present work on plant introduction and breeding, plant physiology, plant nutrition, legume bacteriology, plant chemistry and biochemistry, and nutritive value of plants for livestock.

Collaborative research is carried out with scientists in a number of CSIRO Divisions, Universities, State Departments of Agriculture and other bodies, and the Division has active contacts with tropical agricultural research bodies overseas.

The Chief will be responsible to the Executive for the development, scientific direction and integration of the research programs of the Division and for collaboration with other research bodies.

**(3.) REF: PG690/1 - MOLECULAR AND CELLULAR BIOLOGY
UNIT**

GENERAL: The newly established Unit situated at North Ryde forms, with part of the Division of Animal Production, the CSIRO Genetics Research Laboratories. Its objective is the application of Molecular Genetics and Cellular Biology to problems of industry, human welfare and animal production.

The Unit has ten research scientists with some 20 support staff and 15 site service staff organized into three main research groups whose present research interests include—

- The molecular evolution of influenza virus.
- DNA breakage and repair and its application to the development of new antibiotic systems.
- Mechanisms of differentiation, in particular the properties of cell recognition and differentiation factors.

The Unit is well equipped for its present activities including node access to the CSIRO Cyber 76 computer. It has close working relations with other Divisions of CSIRO including the Divisions of Applied Organic Chemistry, Food Research, Protein Chemistry and Animal Production.

Applicants for the position of Officer-in-Charge should have research achievements in one of the areas of research existing in the Unit, or in nucleic acid research, somatic cell genetics, microbial genetics, or some other aspect of cell biology.

SALARY: Salary for the appointments will be the subject of negotiation but will be not less than A\$29,582 per year for the Chiefs and not less than A\$26,960 per year for the Officer-in-Charge.

TENURE: The appointments carry Commonwealth Superannuation privileges subject to normal conditions. It is normal practice to make term appointments to such positions with subsequent options for a further term, if mutually desired, or for a senior research position in the Organization.

FURTHER INFORMATION: Dr. A. E. Pierce, a member of the CSIRO Executive and Chairman of the Appointment Committees for these positions will be visiting Britain and the U.S.A. during the periods 12 to 23 July and 27 July to 6 August 1976 respectively, and will be available for discussions concerning the appointments with applicants and other interested parties including those who may have advice to offer on how the positions might be filled. Those wishing to discuss the appointments should contact the **Minister (Scientific), Australian Scientific Liaison Office, 64 Kingsway, London WC2B 6BD, England** or the **Counsellor (Scientific), Embassy of Australia, 1601 Massachusetts Avenue, N.W. Washington, D.C. 20035**. It may be possible to arrange such discussions at a number of points in Great Britain and the United States. Scientists interested in discussing the appointments should ensure that the appropriate overseas office is contacted in ample time to enable suitable arrangements to be made.

Further information on the Divisions and Unit is available on request from the **Acting Secretary (Administration, CSIRO, P.O. Box 225, Dickson, A.C.T., 2602, Australia)**.

Applications for the positions stating full personal and professional details, the names of at least two referees, and quoting the relevant reference number should reach:

**The Acting Secretary (Administration)
CSIRO
P.O. Box 225
Dickson, A.C.T. 2602
Australia**

by 2 July 1976.

POSITIONS OPEN

The Australian National University invites applications for appointment as **DEPUTY DIRECTOR, NHMRC Social Psychiatry Research Unit**, from persons with wide interests and research experience in social psychiatry and epidemiology. Applications are sought from psychiatrists with research experience and publications in the social and clinical areas and also from behavioral scientists with appropriate training and interests. Appointment for up to 5 years in first instance. A contract appointment for 3 years with return fares for appointee and family may be considered. Salary: Aust.\$22,247 per year; clinical loading of Aust.\$4,000 per year may be paid in some circumstances. Current exchange rate is A\$1 = US\$1.24. Reasonable travel expenses and assistance with housing. Further information from **Academic Registrar, Australian National University, P.O. Box 4, Canberra, A.C.T., 2600, Australia**, with whom applications close 19 July 1976.

The Australian National University invites applications for appointment as **PROFESSOR AND ALTERNATE HEAD, Department of Neurobiology**, Research School of Biological Sciences. The Department has an active program of research in the neural basis of behavior of perception of lower animals, mainly insects and crustacea. Preference given to biologists in areas of study already followed by the Department, particularly the study of vision in all its aspects in animals with compound eyes, but other fields not ruled out. Applicants must have international reputation in their field, show evidence of the highest research ability, and should be capable of leading experimental and theoretical research in neurobiology. Appointment to retirement age (67 years). Salary: Aust.\$25,955 per year; exchange rate A\$1 = US\$1.24. Reasonable travel expenses and assistance with housing. Superannuation benefits available. Further information from **Academic Registrar, Australian National University, P.O. Box 4, Canberra, A.C.T., 2600, Australia**, with whom applications close 16 July 1976.

DIRECTOR THE CARY ARBORETUM OF THE NEW YORK BOTANICAL GARDEN MILLBROOK, NEW YORK 12545

Permanent senior position for established scientist active in theoretical and applied plant or vegetation research to assume overall institutional leadership by July 1977. Successful experience in botanic gardens, arboreta, and administration highly desirable. The 5-year-old, 2000-acre Cary Arboretum is the implementive, environmental arm of the New York Botanical Garden specializing in the promotion of the environmental responsibility through botanical research and education and in the establishment and development of living collections. Disciplines represented at the Arboretum include dendrology (and urban forestry), genetics, pathology and mycology, wildlife ecology, ecology (and environmental assessment), horticulture, and environmental education. Complete résumé, reprints of publications, salary history and requirements, and three letters of reference should reach the **Director, Search Committee** before 1 September 1976. Further information available on request.

EXECUTIVE DIRECTOR

The Maritime Transportation Research Board of the National Academy of Sciences/National Research Council is seeking an Executive Director to administer and direct its professional staff. Incumbent will have delegated authority for independent action and decisions in accordance with institutional policies. Candidates must have a superior knowledge of marine transportation systems, as well as the demonstrated ability to organize, direct, coordinate, and accept responsibility for management of major activities in the field of maritime research. An important aspect of this position is the ability to maintain liaison with top-level administrators in federal agencies. A Ph.D., or equivalent, in a related field and approximately 10 years of related experience is desirable. Applicants should send résumés to: **Kent Howard, Commission on Sociotechnical Systems, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418**. *An Equal Opportunity Employer.*

POSITIONS OPEN

DIRECTOR ECOLOGICAL RESEARCH CENTER

Candidates should have the doctorate degree in a field related to ecology as well as experience in research and research administration. Field experience, a solid publication record, and a systems approach to research planning would be assets. A terrestrial ecologist should have marine interests and vice versa. Will develop an ecological research program from the St. Thomas Campus and administer the St. John Ecological Research Station. May be called upon to teach. Send inquiries to: **Dr. Norwell Harrigan, Director, Caribbean Research Institute, College of the Virgin Islands, St. Thomas, U.S. Virgin Islands 00801**.

ELECTRON MICROSCOPIST

Research on inner ear development requires an experienced individual who is well versed on techniques of otic tissue preservation and sectioning. To supervise technicians in electron microscopy and to teach techniques of electron microscopy to medical students and physicians. Previous faculty experience required. Applications should include a curriculum vitae, list of publications, and names of three persons who will serve as references. Send to:

**David A. Hilding, M.D.
Department of Otolaryngology
University of Illinois
1855 West Taylor
Chicago, Illinois 60612**

ENDODONTICS—The University of Louisville School of Dentistry invites applications for a full-time temporary instructorship in the Department of Endodontics. The position is for 1 year only. Candidates should hold the D.D.S. or D.M.D. degree and have some teaching and/or research experience plus a clinical expertise in endodontics. Interested individuals should write to **Robert W. Mendel, D.D.S., Chairman, Department of Endodontics, School of Dentistry, Health Sciences Center, Louisville, Kentucky 40201**. *An Equal Opportunity/Affirmative Action Employer.*

ENVIRONMENTAL TOXICOLOGY

Openings for **doctoral candidates and postdoctoral research associates** in an NIEHS-sponsored environmental toxicology training program. Opportunities for the study of toxic substances in the human environment as well as the legal, economic, and social issues involved in developing control alternatives. Stipends available. Send curriculum vitae and letter outlining your interest in this field to: **Professor Robert L. Metcalf, Environmental Toxicology Program, Institute for Environmental Studies, University of Illinois, 911 West High Street, Urbana, Illinois 61801**. *An Equal Opportunity/Affirmative Action Employer*

ENZYMOLOGISTS

Three postdoctoral positions available after 1 June 1976. Studies on enzymes pyruvate kinase, PEP carboxylase, or choline acetyltransferase. One- to 3-year appointments. Send résumés to

**Dr. Larry Cottam (Pyruvate kinase)
Dr. Louis Hersh (Choline acetyltransferase)
Dr. Thomas Smith (PEP carboxylase)**

Department of Biochemistry, University of Texas Health Sciences Center, 5323 Harry Hines Boulevard, Dallas, Texas 75235.

An Equal Opportunity Employer

Department of Anatomy, University of Colorado Medical School. **JUNIOR FACULTY MEMBER** sought. Active research program in neuro- or cellular biology. Interest in teaching neuroanatomy. Send curriculum vitae, reprints, bibliography, and references to: **Chairman, Department of Anatomy, University of Colorado Medical School, 4200 East 9 Avenue, B111, Denver, Colorado 80220**. *Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION available September 1976 or later. Professor and head, Department of Foods and Nutrition. Provide leadership in teaching, research, and service activities. Doctorate in nutrition, foods, institution administration, or related area required. Send résumé to: **Dr. Elizabeth T. Sheerer, Chairperson, Search Committee, School of Home Economics, Dawson Hall, University of Georgia, Athens, Georgia 30602**. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

Newly approved Mineral Processing Engineering Program needs **SENIOR AND JUNIOR FACULTY** before August 1976. This is a tenure track opportunity. Background desired includes appropriate degrees and experience in coal preparation, coal conversion, or process metallurgy. Contact **Dean, College of Mineral and Energy Resources, West Virginia University, Morgantown, W. Va. 26506**.

FACULTY POSITION AVAILABLE

A faculty position is available at the Freshwater Biological Institute in the College of Biological Sciences of the University of Minnesota. Applicants should have a Ph.D. and several years of experience in research in phycology, with special emphasis on algal nutrition, physiology, and ultrastructure. They should be able to demonstrate through published research that they have made significant contributions to science. It is anticipated that the position will be filled at the assistant professor level, but the possibility of hiring at a higher rank exists. The academic appointment will be held in the Department of Botany and that department will have the responsibility for the assignment of teaching duties. Applications should be sent to **Dr. John M. Wood, Freshwater Biological Institute, P.O. Box 100, Navarre, Minn. 55392**.

An Equal Opportunity/Affirmative Action Employer

FACULTY POSITION IN BIOCHEMISTRY—A visiting or temporary faculty position is available in the Department of Biochemistry at the State University of New York at Buffalo for the period 1 September 1976 to 31 August 1977. A Ph.D. in biochemistry and experience in course preparation and lecturing are required. Responsibilities include lecturing in undergraduate, graduate, or professional programs and participation in a biochemistry laboratory course. Research opportunities in the laboratory of a full-time faculty member are available. Salary commensurate with qualifications and experience. Interested individuals should send a curriculum vitae and three references to the **Acting Chairman, Department of Biochemistry, G 56 Farber Hall, State University of New York at Buffalo, Buffalo, N.Y. 14214**.

An Equal Opportunity/Affirmative Action Employer. No person in any relationship with the State University of New York at Buffalo shall be subject to discrimination because of race, sex, national origin, religion, color, or age.

Applications are invited for an anticipated **FACULTY POSITION** for fall 1976. Candidates should be prepared to initiate a vigorous research program in some phase of molecular genetics or molecular aspects of development and to participate in the departmental teaching program at both the undergraduate and graduate levels. A curriculum vitae, a statement regarding future research plans, and three letters of recommendation should be sent to **Dr. Albert Siegel, Biology Department, Wayne State University, Detroit, Michigan 48202**.

Wayne State University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN PHYSIOLOGY

The University of Health Sciences/The Chicago Medical School is seeking a **physiologist** at the level of senior assistant professor or associate professor. The individual will be expected to have had a productive research background in cardiovascular physiology with teaching experience in a medical school. Send résumé to **Chairman, Department of Physiology and Biophysics, The Chicago Medical School, 2020 West Ogden Avenue, Chicago, Illinois 60612**. *An Equal Opportunity/Affirmative Action Employer.*

GENERAL SCIENCE INSTRUCTOR

Undergraduate teaching position available September 1976 (or earlier) for science generalist. Franklin University is a fully accredited, 4-year metropolitan commuter college offering degrees in business and technology. We need an innovative, interdisciplinary person committed to undergraduate teaching who can develop and teach two new introductory, descriptive survey courses in natural and physical science. Minimal requirements: master's degree and teaching experience. Application deadline: 1 July. Letters and résumés to:

**Sidney Kelly, Dean
Franklin University
201 South Grant Avenue
Columbus, Ohio 43215**

An Equal Opportunity Employer

POSITIONS OPEN

MEDICINAL CHEMIST/ORGANIC CHEMIST

The University of Wisconsin, Madison, School of Pharmacy, is seeking a Ph.D. medicinal or organic chemist for a nontenure track position with an expected duration of 3 to 5 years. The major responsibility will be to teach undergraduate medicinal chemistry. The development of an independent research program will be encouraged, with preference given to candidates having experience in GC-mass spectroscopy, as well as the development of interdisciplinary interactions with other biomedical personnel in this area. A curriculum vitae and the names of three referees should be sent to **Dr. C. R. Hutchinson, School of Pharmacy, 425 North Charter Street, Madison, Wisconsin 53706 (Telephone: 608-262-7582)**. The closing date for all applications is mid-July 1976. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

PHYSIOLOGY DEPARTMENT

Applications are invited for individuals interested in teaching human physiology in a chiropractic college with highly motivated, enthusiastic students. Ph.D. in human physiology with teaching experience required. Send curriculum vitae with list of publications to: **Academic Dean, P.O. Box 5502, Spartanburg, S.C. 29304**.

POSTDOCTORAL POSITION CELL BIOLOGY

A position is available for September 1976 in the laboratory of Dr. Thoru Pederson. Research on heterogeneous nuclear RNA-binding proteins and chromatin structure and function. Experimental systems include the cellular slime mold (*Dictyostelium*) and cultured mammalian cells. Applicants should have a strong background in physical biochemistry of nucleic acids and/or proteins. Send curriculum vitae and three letters of recommendation to: **Dr. Ashton Gibbons, Director of Personnel, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545**.

An Affirmative Action/Equal Opportunity Employer

PROGRAM EVALUATION/ CHILD HEALTH

Three-year project at the Public Health, Education, and Kennedy schools to develop interdisciplinary evaluation of the effectiveness of school health and services for handicapped children; to establish inter-school programs in teaching, student field experiences, and research in community child health evaluation; disseminate research findings to communities studied and to policy- and decision-makers.

Flint, Michigan, will be one of the sites; of the two yet to be selected, one will be in the Boston area.

We are seeking to fill three faculty positions at this time:

1) **PROJECT DIRECTOR**. Senior faculty position, strong background in ambulatory health services research and/or evaluation research and administrative experience in similar settings. Strong skills in quantitative methods are desirable.

2) **CLINICIAN** with interest in school health and/or handicapped children. We will consider two half-time persons, one in each of these areas with half-time clinical appointment possible at Children's Hospital Medical Center. Background in health services or evaluation research required.

3) **JUNIOR FACULTY/RESEARCH ASSOCIATE**. Strong background in community organization (especially health services, education, or child welfare). Practical experience in community health care delivery or planning desirable.

A wide range of disciplines will be considered: sociology, anthropology, public health, social psychology, educational policy research, social evaluation and measurement, and organizational behavior. Previous experience in community-based service or research highly desirable.

Please send curriculum vitae to:

Robert J. Haggerty, M.D., Chairman
Department of Health Services
Harvard School of Public Health
677 Huntington Avenue, Room 302
Boston, Massachusetts 02115

Minority (including handicapped) and women candidates are particularly encouraged to apply.

POSITIONS OPEN

PATHOLOGIST CHAIRPERSON OR HEAD DEPARTMENT OF PATHOLOGY

Position available at the Peoria School of Medicine, one of the three clinical schools within the University of Illinois College of Medicine. Applicants must be graduates of an approved medical school, Board-certified in one of the boards of pathology, licensed or eligible for licensure in the State of Illinois, and have experience in administration, teaching, and/or research. Duties include the development of programs in undergraduate, graduate, and continuing education in pathology; the recruitment of faculty to meet the needs of the department; the development of an effective relationship with the clinical faculty; the support of research and other scholarly activities of the department; and representing the Department of Pathology to the Dean and other departments. Salary and academic rank will be commensurate with experience and qualifications. The position is available at present. Starting date to be negotiated. Interested persons should send their curriculum vitae to:

Dr. F. J. Grundbacher, Chairman
Pathology Search Committee
Peoria School of Medicine
1400 West Main Street
Peoria, Illinois 61606

Applications will be accepted until 15 August 1976. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.*

POSTDOCTORAL POSITION—Immunochemistry and biophysics. U.S. citizenship required. Position is immediately available for a person with a recent Ph.D. in biophysics or biochemistry. The research deals with the use of nuclear magnetic resonance spectroscopy to study the interactions of antibodies and haptens and model systems. Interdisciplinary training is emphasized in this program. Send curriculum vitae including references to: **Dr. C. F. Brewer, Department of Pharmacology, Albert Einstein College of Medicine, Bronx, N.Y. 10461**.

ORNITHOLOGIST WILDLIFE ECOLOGIST and PLANT PATHOLOGIST/BOTANIST

ERT has immediate needs for dynamic leaders (Senior Staff) for its expanding Terrestrial Ecology program.

If you have the qualifications and an interest in the environmental consulting area, we have challenging careers available.

Qualifications: Ph.D. or M.S. with experience, in an appropriate discipline. Ability to manage study design, field sampling, data analysis, and report writing. Also responsible for proposal preparation, client contact, and development of our total ecological capabilities. Previous consulting experience desirable.

These positions will be located at our corporate headquarters in Concord, Mass. Some travel is required.

Please forward to the address below your current resume and salary requirements, with at least three pertinent references. Materials will be held in strictest confidence.

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Lynn Aschenbrenner, Personnel Office
696 Virginia Road
Concord, MA 01742
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POSITIONS OPEN

MICROBIOLOGY

A faculty position is available as of 1 September 1976 for a Ph.D. or M.D. with expertise in and desire to teach about mechanisms of bacterial pathogenesis in man. Primary teaching responsibility will be for lecturing in this area and for organizing the laboratory section of a course in microbiology for 100 medical students. Establishment of a research program, preferably with a molecular orientation, will also be expected.

Salary and rank commensurate with experience.

Applications together with curriculum vitae and the names of three referees should be addressed to **Dr. D. J. Tipper, Department of Microbiology, University of Massachusetts Medical School, Worcester, Mass. 01605**.

UNIVERSITY OF MINNESOTA MINERALOGIST-GEOCHEMIST

The Department of Geology and Geophysics invites applications for a faculty position at the assistant professor level in the above-mentioned broad field. The position is open fall 1976. Candidates with postdoctoral research experience and a strong background in the physical sciences are preferred. An associate professor level appointment (without tenure) may be considered for more experienced candidates. Please submit résumé and three letters of reference to: **Professor J. H. Stout, Search Committee Chairman, Department of Geology and Geophysics, University of Minnesota, Minneapolis, Minn. 55455**. *The University of Minnesota is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION

Openings for postdoctoral positions in the Division of Nutritional Sciences at Cornell occur periodically in areas of nutrition, nutritional biochemistry, and food economics. Interested individuals should inquire as to availability and send curriculum vitae to **M. C. Nesheim, Director, Division of Nutritional Sciences, Cornell University, Ithaca, New York 14853**. *Cornell University is an Affirmative Action/Equal Opportunity Employer.*

R & D MANAGER FOR DIAMOND APPLICATIONS

We are a medium-sized, well-established, basically family corporation in N.Y.C. We enjoy an excellent reputation as leaders in our field.

Recently we have begun exploring the extraordinary, even unique, qualities of diamond for scientific and industrial applications. The project needs a full-time technical manager, broadly based in science, to develop these activities.

The problems encountered will require:

1. Mechanical engineering skills, including a lot of gadgeteering.
2. Knowledge of one or more of the following fields:
—Physics (especially solid state)
—Optics (especially lasers)
—Crystallography
3. Interest in business management

Ideally, the candidate should be a self-starter, able to recognize new applications for diamond and develop them into marketable products. The position will involve some travel and liaison work with other laboratories and industries.

If you have interest in this opening, please submit a résumé to **Box 263, Science**.

POSITIONS OPEN

FLINDERS MEDICAL CENTRE

Applications are invited for the post of:

SCIENTIFIC OFFICER, Class III/IV (Physicist)
Department of Anaesthesia and Intensive Care

Salary: within the range \$14,815 to \$16,680 per year depending upon qualifications and experience.
Qualifications: Ph.D. or M.Sc. and experience in applied physical science.

The appointee will be expected to apply the principles of physical science to the maintenance and development of equipment used for providing general and regional pain management. This will involve, for example, experience in gas chromatography, and mass spectrometry measurements of blood and gas concentrations of drugs are essential. The successful applicant will also be expected to assist in developing a teaching program for medical and nursing staff in the principles of clinical measurement.

Further information is available from **Professor M. J. Cousins**.

Applications, including curriculum vitae and the names of three referees, should be addressed to:

The Administrator
Flinders Medical Centre
Bedford Park, S.A. 5042
Australia

Applications close 18 June 1976.

POSTDOCTORAL POSITION

Immediate opening for recent Ph.D. interested in studying the effects of toxic substances on the structure and function of the nervous system. Send résumé and references to: **Dr. P. Spencer, Assistant Professor of Pathology and Neuroscience, Kennedy Center, Albert Einstein College of Medicine, Bronx, New York 10461. An Equal Opportunity Employer.**

**QUEEN'S UNIVERSITY, KINGSTON,
ONTARIO, CANADA**
**DEPARTMENT OF MICROBIOLOGY AND
IMMUNOLOGY**

POSTDOCTORAL POSITION

Recent Ph.D. in biochemistry or immunochemistry, skilled in the isolation and characterization of proteins. To work on immunological studies of heart protein antigens. Salary minimum—\$10,000 per annum. Send curriculum vitae and names of three references to:

Dr. David Eidinger, Professor
Department of Microbiology and Immunology
Queen's University
Kingston, Ontario K7L 3N6, Canada

POSTDOCTORAL POSITION to participate in research on biochemical mechanisms involved in blood coagulation and fibrinolysis. Competence in protein chemistry essential, experience in immunology helpful. Position available 1 July 1976 for U.S. citizens and permanent residents, for up to 3 years. Send application or address inquiry to: **Dr. Andrei Z. Budzynski, Temple University Health Sciences Center, Department of Medicine, 3400 North Broad Street, Philadelphia, Pa. 19140. Telephone 215-221-3988. An Equal Opportunity/Affirmative Action Employer.**

TWO POSTDOCTORAL POSITIONS IN CELL BIOLOGY

Available immediately. (i) To study the drug effects on the kinetics of normal and tumor cells in experimental animal models. Experience in handling animal tumors and knowledge of cell kinetics and chromosome cytology are desirable. (ii) To study the relationship between DNA damage and chromosome aberrations in mammalian cells. Experience in DNA fractionation essential. Must be interested or experienced in chromosome cytology. Salary \$10,000 per year, more with experience. Send curriculum vitae and three letters of recommendation directly to: **Dr. Potu N. Rao, Department of Developmental Therapeutics, The University of Texas System Cancer Center, M. D. Anderson Hospital and Tumor Institute, Houston, Texas 77030. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION

Available immediately for research on the biochemical-genetic regulation of temperature-sensitive cytoplasmic mutants of tobacco. Training in enzymology, nucleic acids, and organelle isolation preferred. Salary of \$12,000. Résumé and three references to:

Dr. John G. Scandallos
Professor and Head
Department of Genetics
North Carolina State University
P.O. Box 5487
Raleigh, North Carolina 27607

North Carolina State University is an Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOW

M.D. or Ph.D. to be part of a team analyzing the role of humoral and cellular immune responses to specific murine leukemia virus (MuLV) polypeptides in the establishment and maintenance of dormant MuLV infections. Available 1 July 1976. Salary \$10,000 to \$12,000 depending on relevant experience. Submit curriculum vitae, résumé of thesis, and three letters of reference to **Dr. E. Frederick Wheelock, Department of Microbiology, Thomas Jefferson University, 1020 Locust Street, Philadelphia, Pa. 19107. Thomas Jefferson University is an Equal Opportunity/Affirmative Action Employer.**

The University of Utah College of Medicine, Salt Lake City, Utah, invites nominations and applications for the position of **PROFESSOR AND CHAIRMAN** of the Department of Anatomy. This position requires an academic anatomist holding the Ph.D. and/or the M.D. degree with substantial teaching, research, and administrative abilities to provide leadership in a large University Health Sciences Center. *The University is an Equal Opportunity/Affirmative Action Employer. Thus, applications from women and minority groups are encouraged.* Inquiries, including a curriculum vitae, should be sent to **Dr. Carlos Eyzaguirre, Chairman, Anatomy Search Committee, Department of Physiology, College of Medicine, University of Utah, Salt Lake City, Utah 84132.**

RESEARCH ASSOCIATE/POSTDOCTORAL

Research associate/postdoctoral position available immediately for person to study receptor-mediated transport of immunoglobulin G in oocyte and yolk sac membranes. Call or write

Dr. Thomas F. Roth
Department of Biological Sciences
University of Maryland Baltimore County
Catonsville, Maryland 21228
Telephone: 301-455-2254

Affirmative Action/Equal Opportunity Employer

RESEARCH INSTRUCTOR in neurology and pediatrics. Biochemist to assist in diagnosis and management of inborn errors of metabolism and to study mechanisms of cation transport. Experience with amino acid analyzer, gas chromatography and with thin lipid membranes is desirable. A Ph.D. and 2 years of postdoctoral experience are required. The applicant must be capable of independent investigation in the areas of enzyme chemistry, protein purification, and membrane biophysics. Contact: **University of Washington, Division of Neurology, RG-20, Seattle, Washington 98195.**

RESEARCH POSITIONS

Nuclear Medicine

CHEMIST: For synthesis of organic and inorganic compounds and their radiolabeled counterparts.

TECHNOLOGIST: To work on chemical-biological problems in radiopharmaceuticals. Chemistry background helpful and experience with radionuclides or computers desired.

RADIOPHARMACEUTICAL SCIENTIST: For development of new radiopharmaceuticals. Solid background needed in experimental and clinical uses.

Contact: **Dr. Richard P. Spencer, University of Connecticut Health Center, Farmington, Conn. 06032. Telephone: 203-674-3120.**

An Equal Opportunity/Affirmative Action Employer, M/F

POSTDOCTORAL POSITION IN FUNCTIONAL MORPHOLOGY.

A 2-year postdoctoral research position with limited teaching responsibilities is available for a person interested in joining a program concentrating on biomechanics, functional morphology, or biostatistics. Particularly desirable is the willingness and ability to master experimental techniques such as electromyography, stress analysis kinematics, or stereophotogrammetry. Teaching responsibilities entail organization and supervision of laboratory sessions on human gross anatomy for allied health professional undergraduates during fall semester. Starting date 1 September 1976 or sooner. Starting salary \$12,000 per annum. Send inquiries and curriculum vitae to: **Dr. Jack Stern, Department of Anatomical Sciences, Health Sciences Center, State University of New York at Stony Brook, Stony Brook, New York 11794. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION: analytical or environmental chemist, Ph.D., with extensive experience in trace metal analysis and technique development using atomic absorption. Experience in atmospheric chemistry and/or chemical oceanography desirable. Research on trace metal distribution, sources, and fluxes in the marine atmosphere and ocean. Position available in August. Send résumé and two references to **R. Duce, Graduate School of Oceanography, University of Rhode Island, Kingston, Rhode Island 02881. An Equal Opportunity/Affirmative Active Employer.**

Applications are invited for the position of a **POSTDOCTORAL RESEARCH ASSOCIATE** for 2 years beginning immediately for an NIH-supported research project to identify, isolate, and reconstitute a transport function of erythrocyte and/or adipose cell membranes. The background of biochemistry or cell biology with particular interest in molecular aspects of membrane structure and functions is required. Please send complete curriculum vitae and three reference letters to **Dr. Chan Y. Jung, Biophysics Laboratory, VA Hospital, State University of New York at Buffalo, 3495 Bailey Avenue, Buffalo, N.Y. 14215.**

POSTDOCTORAL AND RESEARCH ASSOCIATE POSITIONS available. Some experience in one or more of the following areas desirable: blood platelets, coagulation, particularly factor VIII area, protein isolation and characterization, enzymes, hormone receptors. Academic atmosphere and good opportunity to grow for a qualified candidate. Send curriculum vitae and names of three references to **P. Ganguly, St. Jude Children's Research Hospital, Memphis, Tennessee 38101. An Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATES— BIOCHEMISTRY

Postdoctoral positions for research on the comparative biochemistry and mechanism of action of acid phosphatases, and on the mechanism of action and anomalous kinetics of aryl sulfatase A are available now for 1 to 3 years and pay up to \$12,000 depending on the experience of the applicant. Applicants must have a strong background in protein chemistry, kinetics, or comparable areas of biochemistry. *Purdue University is an Equal Access/Equal Opportunity University.* Send résumé, publications list, and three letters of reference to **Professor Robert L. Vanetten, Chemistry Department, Purdue University, West Lafayette, Indiana 47907.**

VERTEBRATE ZOOLOGIST: Assistant professor to teach human anatomy, general zoology, general biology, comparative vertebrate anatomy. Requirements for the Ph.D. degree must be fulfilled. Disciplines preferred are comparative vertebrate anatomy, vertebrate evolution, mammalogy, or ichthyology. Applicants must send a letter of application, written résumé, and three references to **Dr. George Becker, Chairperson, Department of Biology, Metropolitan State College, 250 West 14 Avenue, Denver, Colorado 80204, by 1 July 1976. An Equal Opportunity Employer.**

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Supervision of a staff of 15-20 professional and non-professionals, involving technical direction, performance evaluation and personnel development. Responsibilities include planning, budgeting, and directing environmental, residue and metabolism programs necessary for registration of pesticides with EPA encompassing EPA guideline environmental studies and plant and animal metabolism studies with radiolabeled pesticides, residue methods and data from field tests.

A minimum 3 years demonstrated record of accomplishment as a supervisor and ability to communicate effectively required. Background should include experience in one or more of the following areas: residue analysis, metabolism, registration of pesticides and/or pharmaceuticals. Formal training in chemistry or biological sciences desired.

PESTICIDE RESIDUE CHEMIST

Position in pesticide residue development requiring thorough understanding of gas, liquid and thin layer chromatography and specialized trace detection techniques. Knowledge of separation and clean-up technology applicable to biological samples is important. Formal training in analytical chemistry and/or biological sciences desired.

**ENTOMOLOGIST AND INSECT
TOXICOLOGIST**

Experienced Ph.D. or M.S. with training and/or background in crop protection entomology and insect toxicology to enter an industrial insecticide screening and evaluation program with administrative and/or scientific growth opportunities.

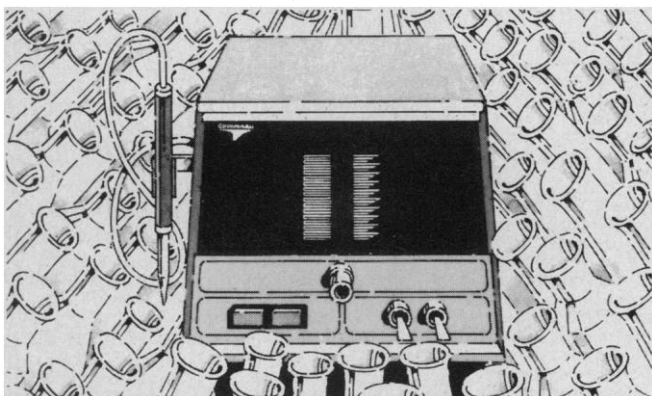
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POSITIONS OPEN

RESEARCH ASSOCIATE: Position available 1 July 1976. Salary, dependent upon past experience in DNA repair processes, to \$14,000. Experience in cell culture work essential. Interested persons should send their résumés to **L. H. Hurley, Ph.D., Division of Pharmacy, University of Kentucky, Lexington, Kentucky 40506.** An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE (postdoctoral) for a Ph.D. in nutrition biochemistry or biochemistry to study factors influencing synthesis and turnover of low molecular weight zinc binding proteins (metallothionein). This is a full-time, nontenured position funded up to 3 years. Salary level approximately \$12,000. Send curriculum vitae and three letters of recommendation to **Dr. P. D. Whanger, Department of Agricultural Chemistry, Oregon State University, Corvallis, Oregon 97331.** Oregon State University is an Affirmative Action/Equal Opportunity Employer.

THE UNIVERSITY OF MICHIGAN RESEARCH PERSONNEL (Transportation, Safety, Law, Economics, Political Science)

The Highway Safety Research Institute of the University of Michigan seeks a number of research professionals to staff an expanding program of applied policy research focused on the problems of transportation and safety. The research program will involve a series of multidisciplinary projects examining policy formulation, policy implementation, information utilization and future studies.

Candidates are sought from the fields of law, economics, political science, transportation and related disciplines. Senior applicants are expected to have a Ph.D. or equivalent terminal degree plus substantial experience in applied research. Appointments will be at a rank and compensation level commensurate with educational level and experience.

Forward résumé to:

**Office of Professional and Administrative Staff
Services
1030 "C", LS & A Building
The University of Michigan
Ann Arbor, Michigan 48109**

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RESEARCH SCIENTIST

Position now open for individual with a master's in virology or biochemistry or a bachelor's degree in chemistry with at least 2 years of experience in biochemistry or molecular virology.

Duties will include research into the metabolism of antiviral agents in infected and uninfected cell cultures, isolation and purification of viral enzymes, and biochemical assays for nucleic acids.

Write, giving experience and salary requirement:

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VISUAL PSYCHOPHYSICS

Eye Research Institute of Retina Foundation intends to hire a permanent staff member specializing in psychophysics to begin work in late 1976 or early 1977. The candidate should be well versed in quantitative psychophysical techniques and should be interested in the physical and physiological bases of visual performance. The most important criterion is excellence in quality of research, but two other factors will be weighed: (i) The candidate should be interested in having contact with patients and supervising clinical measurements taken on patients by other workers. The position is meant to be filled by someone who can act as an informed adviser in the development of new clinical techniques. This activity will require a time commitment of 1 day per week. (ii) The successful candidate should be sufficiently advanced to initiate and pursue his or her own independent program of research and compete successfully for grant funds. Seed money for the initial period will be provided from institutional funds to allow the psychophysics research program to start immediately.

Send curriculum vitae and names of references to:

**Director
Department of Retina Research
Eye Research Institute of Retina Foundation
20 Stanford Street
Boston, Massachusetts 02114**

POSITIONS OPEN

SENIOR RESEARCH ASSOCIATE

Applications are invited for the position of senior research associate at the Worcester Foundation for Experimental Biology which is a full-time multidisciplinary research institution. Applicants must have 3 years of postdoctoral experience demonstrating a productive research background in (i) the hormonal control of sperm maturation and survival in the epididymis, (ii) nonhormonal and hormonal treatment for the control of male fertility, and (iii) expertise in the radioimmunoassay of blood plasma steroids. Candidates should have an academic background in male reproductive physiology, the physiology of fertilization, and a good appreciation of the problems involved in the development of chemical contraception for the male. Send résumés and letters from three references to: **Dr. Ashton Gibbons, Director of Personnel, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.**

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FOUR TEMPORARY POSITIONS AVAILABLE

Biology Department at UCLA has three temporary teaching and one teaching/coordinator positions available September 1976. Applicants should have Ph.D. degree and ability to teach large undergraduate courses and graduate seminars. Positions are: (i) teach introductory biology, core course in general and cell physiology, and seminar; (ii) teach introductory biology, core course in general or animal physiology, and course in sensory physiology; (iii) teach introductory biology, core course in developmental biology, and seminar; (iv) coordinate and teach in introductory biology—this position requires administrative ability and experience in a very large course (about 800 students per quarter). Send curriculum vitae and names of three references before 1 July 1976 to: **Search Committee, Biology Department, University of California, Los Angeles, Calif. 90024.**

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PROGRAMS

DOCTORAL PROGRAM IN ENVIRONMENTAL SCIENCE-PHYSICS TEACHING ASSISTANTSHIPS AVAILABLE

This multidisciplinary program is designed to provide an opportunity for students interested in an academic graduate physics program to participate in environment-related research. Formal course work emphasizes sound training in physics coupled with seminar and course work designed to familiarize students with problems of the environment. We encourage applications from women and members of minority groups. Appointments effective fall 1976. Contact:

**Dr. Mark Gurevitch, Chairman
Department of Physics
Portland State University
P.O. Box 751
Portland, Oregon 97207**

FELLOWSHIPS

PREDOCTORAL FELLOWSHIPS: Limited number of Graduate Student Stipends (\$5100 per year) remain available for September 1976 to highly qualified students interested in an interdisciplinary program in **MOLECULAR CELL BIOLOGY.** Faculty of over 40 has research interests in: animal virology, bacterial and cellular genetics, cancer biology, cellular immunology, membrane pathology, connective tissue metabolism, dental research, infectious disease, and structural biochemistry. Contact immediately: **Director of Graduate Studies, Department of Microbiology, University of Alabama in Birmingham Medical Center, Birmingham, Alabama 35294.**

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POSTDOCTORAL FELLOWSHIP

NIH Postdoctoral Fellowship available for biochemist (July 1977 to June 1979) to study pyrimidine biosynthesis and mammalian cell growth or hemoglobin synthesis (HbF, HbA_{1c}). Please address inquiries to:

**Phillip Sunshine, M.D.
Department of Pediatrics
Stanford University School of Medicine
Stanford, Calif. 94305**

POSTDOCTORAL FELLOWSHIP

Available for research on purification and characterization of androgen receptors of erythropoietic cells. The position is open to recent Ph.D. graduates (biochemistry, pharmacology, or related fields) and is for a 1- to 2-year period. The stipend is \$13,404, excluding fringe benefits. Locale is upstate New York research laboratory.

Box 287, SCIENCE

COURSES

BIOLOGICAL MAGNETIC RESONANCE COURSE UNIVERSITY OF WISCONSIN-MADISON

An advanced introduction to magnetic resonance spectroscopy and its biomedical applications will be held from 15 to 21 August 1976 at the **Department of Biochemistry, 420 Henry Mall, Madison, Wisconsin 53706.** Applications should be sent to **Professor William A. Gibbons, Course Chairman**, before the registration deadline of 15 June 1976.

Topics will include (i) proteins and nucleic acids—conformational change, denaturation, folding, and self-assembly of: (a) peptides and proteins, and (b) nucleosides, nucleic acids and carbohydrates. (ii) Binding, kinetics, mechanism studies of enzymes. (iii) ESR studies of metalloproteins, free radicals, and membranes. (iv) NMR studies of membranes, intercellular metals and metabolites, and tissue metabolism.

Lecturers will include J. Campbell, R. Deslauriers, R. Dwek, W. A. Gibbons, J. Hyde, P. Hart, D. Kearns, S. Koenig, J. Markley, W. H. Orme-Johnson, J. Peisach, J. Seelig, R. Shulman, and H. Wyssbrod.

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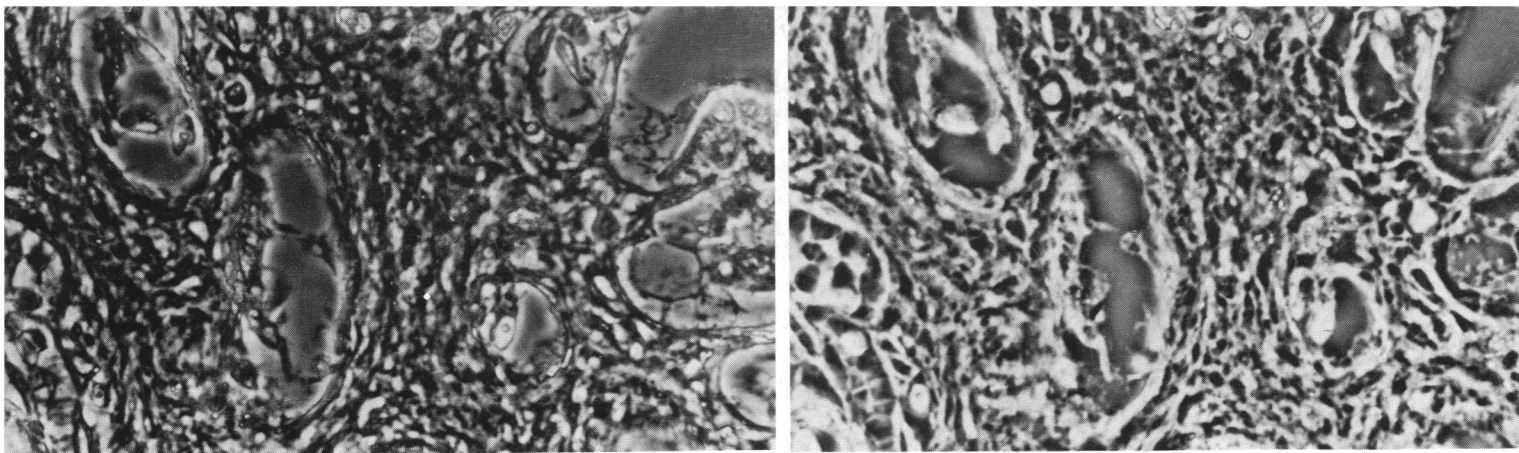
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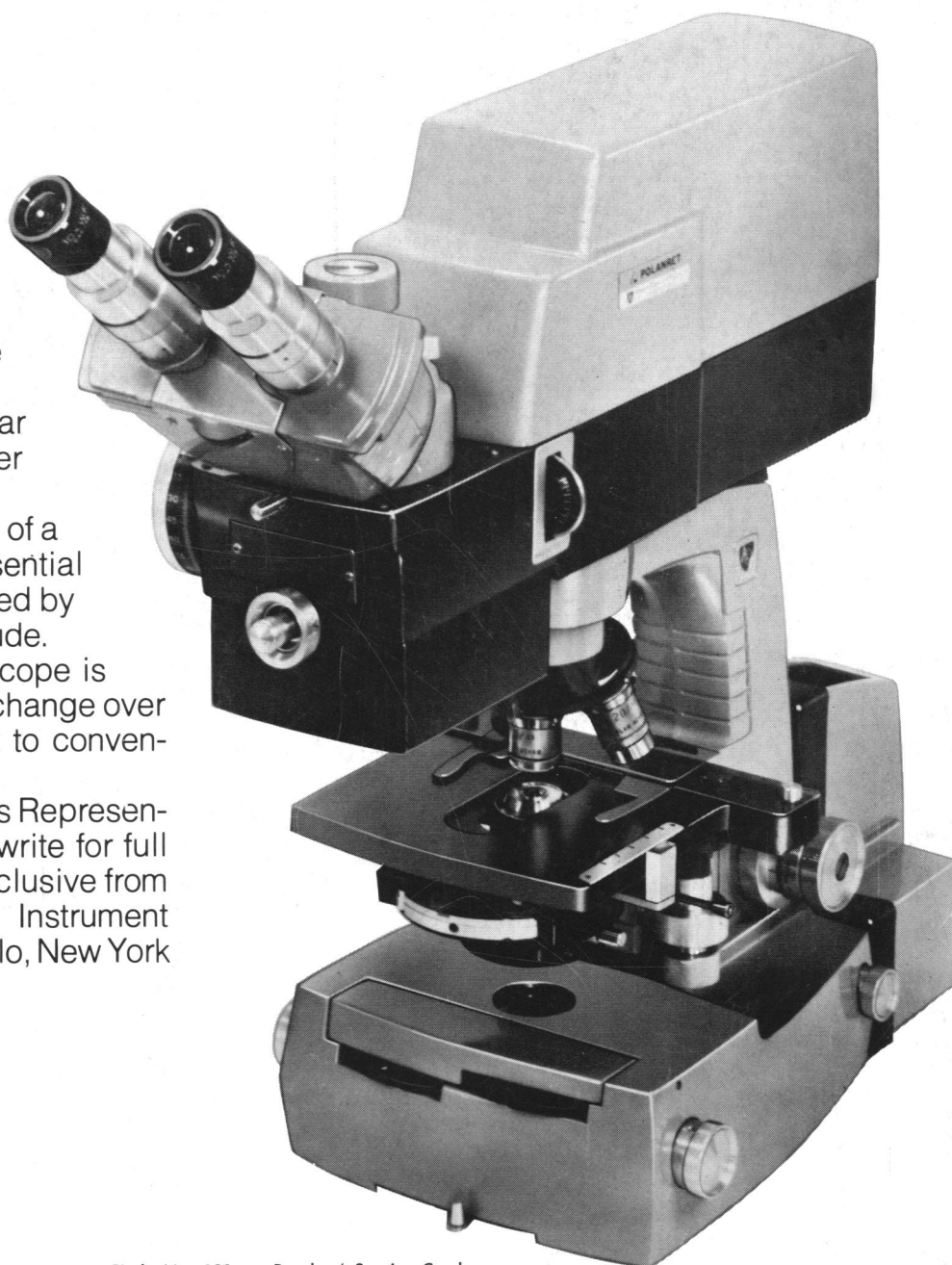
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