

# Personnel Placement

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

**Display (Positions Open, Market Place, and so forth):** \$5.80 per millimeter; \$145 minimum charge, per insertion (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads under 103 millimeters (4 inches). No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

SCIENCE is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and display ads under 5 inches to:

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

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

Scherago Associates, Inc.  
1515 Broadway  
New York, N.Y. 10036  
Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

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

## POSITIONS WANTED

**Biomedical Engineer**, B.S.E.E., M.S. physiology. Experience includes bioinstrumentation research and development; management of physiology department electronics laboratory, biomedical electronics teaching, and cardiovascular research. Several publications on innovative instrumentation designs. Seeking university, clinical, or research institute position. Box 234, SCIENCE. X

**Bioorganic Chemist**, Ph.D. 1966. Extensive experience in active-site-directed enzyme inhibitors (synthesis, in vitro, and in vivo studies), sphingolipids, radiolabeling, affinity supports, peptide synthesis, pharmaceutical research, chemical and biochemical analytical techniques. Seeks research position. Available immediately. Box 237, SCIENCE. X

**Microbiologist**, Ph.D. Strong background in tissue culture, pathogenesis of viral infections, enzyme purification and characterization. Teaching experience. Desires position in government or industry. Box 235, SCIENCE. X

**Peptides/Proteins/Lipids**, Ph.D. 1975. Excellent written and oral communications. Ability to communicate scientific ideas to nontechnical personnel. Three-year postdoctoral experience in isolation and chemistry of proteins and lipids. Publications. Seeks challenging career position. Telephone C. J. Bedord at 509-335-1890. X

**Physiologist**, Ph.D. 1974. Seeks teaching position in small college or university. Published. Teaching and postdoctoral experience. Box 236, SCIENCE. X

**Position in Scientific and Humanistic Community:** Ph.D. 1976 (systems analysis). Wishes to join a creative and nurturing eupsychian scientific community (avoiding the publish-grant anxiety trap) or to create such with others of similar interests. E. Best, 501 West Mariposa, El Segundo, California 90245. X

**Persuasive Speech/Testimony Writer** seeks demanding public affairs post. Medical, financial, corporate public relations background. Box 233, SCIENCE. X

**Wildlife Biologist:** 10 years of African game experience; 4 years of primate farming in Puerto Rico. M.S. with wide biology-mammalogy-wildlife experience. Seeking field biologist or game ranching position. H. J. Herbert, P.O. Box 278, Lajas, P.R. 00667. X

## POSITIONS OPEN

Faculty position available, **DEPARTMENT OF ANATOMY**, School of Medicine, University of North Dakota. Appointment at instructor or assistant professor level to teach gross anatomy to students majoring in health related areas. M.S. or Ph.D. in anatomy or other biological sciences required. Research area is open but preference will be given to candidates with expertise in electron microscopy. Deadline for receipt of applications is 21 July 1978 for possible appointment 1 September 1978. Send curriculum vitae and list of references to:

Dr. Dwayne A. Ollerich, Chairman  
Department of Anatomy  
University of North Dakota  
School of Medicine  
Grand Forks, N.D. 58202

*The University of North Dakota is an Equal Opportunity/Affirmative Action Employer.*

**ANATOMY/HISTOLOGY.** Full-time position available 1 September 1978 at assistant or associate professor level; rank and salary commensurate with education and teaching experience. Requirement: Ph.D. in anatomical sciences, with preference to those who have D.D.S. Responsibilities include teaching in dental education program. Send curriculum vitae to: Dr. Jack Chamberlain, Chairperson, Anatomy Department, School of Dentistry, University of the Pacific, 2155 Webster Street, San Francisco, Calif. 94115. An Equal Opportunity/Affirmative Action Employer.

## ASSISTANT DEAN/DIRECTOR OF MEDICAL EDUCATION

East Tennessee State University College of Medicine is seeking a person to be responsible for coordination of all the Medical School's educational programs in 564-bed affiliated Holston Valley Community Hospital, Kingsport, located in the beautiful mountains of East Tennessee. Candidate should qualify for medical licensure in Tennessee. Previous administrative experience helpful but not mandatory. Part-time practice in the school's Medical Service Plan possible. Consideration of candidates will begin 1 August 1978 and continue until the post is filled. Those interested should apply to:

Dr. Charles L. Votaw  
Associate Dean/Clinical Sciences  
College of Medicine  
Box 19,630A  
East Tennessee State University  
Johnson City, Tenn. 37601

*East Tennessee State University is an Equal Opportunity/Affirmative Action Employer.*

The Center for Environmental Studies at Virginia Polytechnic Institute and State University is seeking applications and nominations for the position of **ASSISTANT DIRECTOR**. The center is a university-wide interdisciplinary research organization reporting to the Research Division with strong ties to the Department of Biology.

Qualifications for this position include a doctorate in biological science and/or environmental science, with strong research and administrative capability. This is a tenure-track faculty position in the Department of Biology. A more complete description of the position and of the Center for Environmental Studies is available on request.

Applications and nominations will be accepted through 15 September 1978. Apply to:

Dr. John Cairns, Director  
Center for Environmental Studies  
Virginia Polytechnic Institute and State University  
Blacksburg, Virginia 24061

*An Affirmative Action/Equal Opportunity Employer*

## ASSISTANT PROFESSOR, TOXICOLOGY

Applications are invited from individuals wishing to make a career commitment to pulmonary toxicology. Formal training should be at the Ph.D. level, preferably in the fields of biochemical pharmacology and/or experimental pathology. The appointment is in the Department of Environmental Health, where there is considerable expertise in aerosol technology and occupational respiratory diseases. At least 2 years of relevant postdoctoral experience is highly desirable. Applicants are asked to submit curriculum vitae and to have three letters of recommendation sent to: Dr. P. B. Hammond, Department of Environmental Health, University of Cincinnati Medical Center, 3223 Eden Avenue, Cincinnati, Ohio 45267. An Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

**DEPARTMENT OF ANATOMY, ASSISTANT PROFESSOR.** Starting salary: \$21,500. Successful applicant must present strong evidence of funding potential, research ability, and productivity. Research area open; excellent facilities available. Teaching experience and lecturing ability in human gross anatomy required. *Women and minority candidates encouraged to apply.* Send curriculum vitae and three letters of recommendation to: Terence H. Williams, M.D., D.Sc., Head, Department of Anatomy, 1-470 BSB, University of Iowa, Iowa City, Iowa 52242. *The University of Iowa is an Equal Opportunity/Affirmative Action Employer.*

## ASSISTANT OR ASSOCIATE PROFESSOR (TWO POSITIONS) IN BIOCHEMISTRY

Two individuals are being sought for positions as assistant or associate professors of biochemistry at the University of Southern California, School of Medicine. One of the positions will be filled by a person whose interest and research accomplishments are in neurochemistry. A second position is available for an individual who has an interest and research experience in the area of chromosome structure, differentiation, control of eukaryotic gene expression, or the molecular bases of human genetic diseases. However, consideration for this position will also be given to investigators with excellent records in other areas of research.

The successful candidates will be expected to develop strong independent research programs, participate in the teaching activities of the department, and develop an advanced course in the area of specialization. Interested individuals should submit complete curriculum vitae and a summary of research plans. Applicants should also arrange to have three letters of recommendation sent to:

Chairman, Faculty Search Committee  
Department of Biochemistry  
University of Southern California  
School of Medicine  
2025 Zonal Avenue  
Los Angeles, California 90033

*Equal Opportunity/Affirmative Action Employer*

**ASSISTANT PROFESSOR OF ENTOMOLOGY** to conduct teaching and research in insect pest management (systems). Applicants must be well versed in theory and practical aspects of pest management and possess expertise in systems approach to insect population manipulation and mathematical modeling. Ph.D. required. Submit curriculum vitae, transcripts, thesis summary, copies of reprints, and have three letters of recommendation sent to: R. W. Thorp, Chairperson, Search Committee, Department of Entomology, University of California, Davis, Calif. 95616 by 1 September 1978. *An Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT PROFESSOR OF GEOLOGICAL OCEANOGRAPHY** for tenure-track position in graduate level research and teaching in evolution of ocean basins. Must have oceanographic and geologic background with Ph.D. and postdoctoral experience. By 30 September 1978 send résumé and names of three references to: Dean, School of Oceanography, Oregon State University, Corvallis, Ore. 97331. *An Affirmative Action/Equal Opportunity Employer, complies with Section 504 of the Rehabilitation Act of 1973.*

## UNIVERSITY OF OKLAHOMA DEPARTMENT OF RADIOLOGY

**ASSISTANT PROFESSOR** to teach radiological sciences to medical students and secondarily to assist in clinical diagnostic radiology service. Certification by American Board of Radiology; proven record in teaching radiological sciences to medical students, supported by student evaluations. Superior performance in clinical radiology. Salary: commensurate with experience. Available 1 December 1978. Deadline for application: 31 August 1978. Apply to: J. J. Vanhoutte, M.D., Department of Radiology, P.O. Box 26901, Oklahoma City, Oklahoma 73190.

*Equal Opportunity/Affirmative Action Employer*

**BIOCHEMISTRY POSTDOCTORAL.** Available immediately for the physicochemical study of structure function relationships in enzyme systems. Emphasis is on spectroscopic approaches. Salary to \$12,000. Send résumé and names of three references to: P. Horowitz, Ph.D., Department of Biochemistry, The University of Texas Health Science Center, San Antonio, Texas 78284. *An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### ASSISTANT RESEARCH BIOPHYSICIST THE DEPARTMENT OF PHYSIOLOGY-ANATOMY UNIVERSITY OF CALIFORNIA BERKELEY

Invites applications to fill a research position at the assistant research level. This position is for a biophysicist doing research on investigating the electrical properties of artificially constructed planar membrane systems into which photosensitive catalysts, especially bacteriorhodopsin and chlorophyll, are incorporated.

The applicant's background should be in the areas of lipid bilayer membranes and he/she should have a knowledge of bioenergetics. We are seeking a person with a Ph.D. who has 3 or 4 years of experience and a record of publication in the above field. This is a half-time position at present, with a possibility of full-time at \$18,400, contingent on funding.

Interested individuals should write a letter explaining their qualifications for the particular position and enclose a current curriculum vitae and a list of three or more persons who could act as referees to:

Search Committee  
Department of Physiology-Anatomy  
2544 Life Sciences Building  
University of California  
Berkeley, California 94720

Applications must be received by 30 July 1978. The University of California is an Equal Opportunity/Affirmative Action Employer.

**ASSOCIATE CHIEF OF STAFF FOR RESEARCH**—M.D. or M.D./Ph.D. Cincinnati Veterans Administration Hospital/University of Cincinnati Medical Center.

Emphasis on continuing their own area of independent clinical/basic research, helping develop new programs, and assisting in development of other investigators. Limited time available for other clinical interests.

Send curriculum vitae to: Richard J. Kozera, M.D., Chief, Medical Service, Veterans Administration Hospital, Cincinnati, Ohio 45220. An Equal Opportunity/Affirmative Action Employer.

**TEMPORARY BIOCHEMISTRY POSITION** for one full-time or two half-time, to replace faculty member on sabbatical leave from 1 September 1978 to 30 June 1979. Ph.D. and capability of teaching lower division, upper division, and graduate biochemistry courses required. Research interests should coincide or complement ongoing research programs in biochemistry. Send a letter of application, curriculum vitae, and three letters of recommendation, to: Janet Perks, Secretary to the Search Committee, Chemistry Department, Montana State University, Bozeman, Montana 59717 by 15 July 1978. An Equal Opportunity/Affirmative Action Employer.

**BIOCHEMIST.** Faculty position available in research laboratory of Division of Hematology/Oncology, Department of Medicine. Experience required in protein purification, subcellular fractionation, and enzyme kinetics. Previous work in area of folate metabolism is desirable. Salary \$18,000 to \$20,000 per annum. Send curriculum vitae to: Dr. Sheldon Rothenberg, Department of Medicine, New York Medical College, 1249 Fifth Avenue, New York, New York 10029.

**BIOCHEMIST/PHYSIOLOGIST.** Applicants invited for 10-month position at instructor or assistant professor rank to replace colleague on sabbatical leave. A B.D. or Ph.D. required with 1 year of college teaching experience; familiar with instrumentation in sophisticated laboratories. September 1978 appointment. Send résumé by 21 July to: Affirmative Action Office, Ramapo College of New Jersey (RCNJ), 505 Ramapo Valley Road, Mahwah, N.J. 07430. An Affirmative Action/Equal Opportunity/Disabled Employer. RCNJ is barrier-free.

### BIOLOGIST

Position open in Biology Department of small liberal arts college in mid-Hudson Valley. Undergraduate instruction in general physiology, biochemistry, embryology. September 1978. Ph.D. or Ph.D. candidate preferred. Persons with M.S. and experience may apply. Send curriculum vitae and the names of three references to: Dr. P. DeLuca, Mount Saint Mary College, Newburgh, N.Y. 12550. An Equal Opportunity/Affirmative Action Employer.

# Mammalian Cytogeneticist

## San Francisco Bay Area

The Lawrence Livermore Laboratory is an applied science R&D facility operated by the University of California for the U.S. Department of Energy and is located in a rural suburb of San Francisco. We have an immediate requirement in our Biomedical Sciences Division for a Mammalian Cytogeneticist to fill a key position in a multidisciplinary research project involving flow systems analysis of isolated chromosomes.

The individual will be responsible for chromosome isolation and purification procedures (primarily human), conventional and flow karyotype analysis, management of a cytogenetics tissue culture facility and, in addition, will collaborate in a multifaceted program in automated cytogenetics. PhD in Genetics, Cell Biology or related science, and experience in chromosome banding, cell culture or flow systems analysis is preferred. (Refer to position BS-624-TW).

Qualified candidates should send resumes, including salary history and requirements, in strict confidence to: Ted Wilson, LAWRENCE LIVERMORE LABORATORY, P.O. Box 808, Dept. KSC-078, Livermore, CA 94550. An equal opportunity employer. U.S. Citizenship Required.



LAWRENCE LIVERMORE  
LABORATORY

U.S. CITIZENSHIP REQUIRED

AN EQUAL OPPORTUNITY EMPLOYER

## RESEARCH MICROBIOLOGIST

The Industrial Products Group of Miles Laboratories is seeking a top level research scientist in its Biosynthesis Research Laboratory.

The successful candidate must have a Ph.D with post-doctoral experience or several years of research training in Microbial Physiology and Genetics and should be familiar with fungal metabolism. An exceptional record of achievement in other microbial systems will be considered.

This individual will be involved in designing and carrying out microbial strain improvement studies for the fermentation of enzymes and organic acids.

Located in Elkhart, Indiana, a community of 50,000 population, we offer excellent recreational and educational facilities as well as convenient accessibility to the Chicago area. Excellent starting salary commensurate with experience plus a superior benefits program. Relocation expenses paid by the company. Please submit C.V., bibliography and salary requirements in confidence to my attention.

Curtis A. Brown, Senior Placement Representative, Dept. 866



MILES LABORATORIES, INC.  
ELKHART, INDIANA 46514

An Equal Opportunity Employer

## POSITIONS OPEN

### BIOLOGY: HEAD

Applications are being accepted through 31 August 1978 for the position of professor and head of the Department of Biology, College of Science, Texas A & M University. This is a large department having over 1800 undergraduate majors, 135 graduate students, and 40 faculty. The search is for an individual who is a recognized scientist in a biological discipline and who has demonstrated administrative ability. This department has great potential, including the opportunity to fill a number of vacant faculty positions at all ranks, and to develop major thrusts in several areas of biology. Curriculum vitae should be sent to:

**Biology Head Search Committee**  
College of Science  
Texas A & M University  
College Station, Texas 77843  
*Equal Employment Opportunity*  
*through Affirmative Action*

**BIOLOGY TEACHER.** General outdoor zoologist with special competence in one or two of these areas: mammalogy, ornithology, ichthyology. Teaching duties include general biology and courses in vertebrate zoology such as mammalogy and/or ornithology. Nonteaching duties include related functions in support of course and program offerings. Minimum: master's degree in biology. Preferred: doctorate in biology with college teaching experience.

Closing date: 1 August 1978.

Send curriculum vitae, three letters of reference, and complete transcripts to:

**Robert L. Spurr**  
Natural Sciences  
Anchorage Community College  
Anchorage, Alaska 99504

*Anchorage Community College is an Equal Opportunity Employer.*

**CHAIRMAN OF MICROBIOLOGY.** University of Southern California (USC) School of Medicine. Requirements: M.D. or Ph.D. with superior credentials in research and teaching as well as administrative ability. Nominations and applications are invited from all qualified individuals and should be sent to: **Murray B. Gardner, M.D., Chairman, Microbiology Search Committee, University of Southern California School of Medicine, Edmondson Research Building, 1840 North Soto Street, Los Angeles, California 90032.** USC is an Affirmative Action/Equal Opportunity Employer.

### CHAIRMAN DEPARTMENT OF PSYCHIATRY TUFTS-NEW ENGLAND MEDICAL CENTER

Applications are solicited for the position of **chairman** of the Department of Psychiatry, Tufts University School of Medicine, and **psychiatrist-in-chief**, New England Medical Center Hospital. We will seek a candidate with the highest academic credentials who will be able to direct a vigorous, multifaceted department in an expanding university medical center. *We are an Equal Opportunity Employer. Women and minorities are encouraged to apply.* Please send curriculum vitae and supporting information to:

**Theodore L. Munsat, M.D.**  
Department of Neurology  
Tufts-New England Medical Center  
171 Harrison Avenue  
Boston, Mass. 02111

### DEPARTMENT OF ANATOMY WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE CHEMICAL ENGINEER POSITION

Applications are invited from chemical engineers having a biomedical background to participate in an active microvascular research program at the rank of research instructor. Applicants must have a doctoral degree. Persons with experience in the field of microvascular research, especially in measuring and analyzing pressure/flow relationships, tissue oxygenation, and blood flow distribution in organs (particularly liver, spleen, and lung) will be preferred. Closing date for applications is 15 July 1978. Submit curriculum vitae and names of three references to:

**Dr. Robert S. McCuskey, Chairman**  
Department of Anatomy  
West Virginia University Medical Center  
Morgantown, West Virginia 26506  
*West Virginia University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### CHEMIST—BIOCHEMIST POSTDOCTORAL RESEARCH ASSOCIATE

A 2-year postdoctoral position is available immediately for synthesizing transition state analog enzyme inhibitors and characterizing their interaction with the appropriate enzymes using such techniques as  $^{13}\text{C}$  nuclear magnetic resonance. See *J. Biol. Chem.* **249**, 136-142 (1974) for an example of similar work. Starting salary is \$10,000 to \$14,000, depending upon experience. To apply, send curriculum vitae and names of three references to: **Dr. Kim D. Collins, Department of Biochemistry, The Johns Hopkins University, 615 North Wolfe Street, Baltimore, Maryland 21205.**

### CYTOGENETIC TECHNOLOGIST

Geisinger Medical Center needs a B.S.- or M.S.-level technologist with experience in chromosome banding techniques. Please send résumé to:

**Personnel Department**  
Geisinger Medical Center  
Danville, Pa. 17821

*An Equal Opportunity/Affirmative Action Employer*

### DEAN, COLLEGE OF ARTS AND SCIENCES FLORIDA STATE UNIVERSITY

Applications and nominations are invited for the positions of Dean, College of Arts and Sciences.

The college consists of 18 departments, 12 in science and 6 in humanities, and several institutes and interdisciplinary programs. The college has 383 faculty members and is the largest among 15 schools and colleges within the university which has a total of 1,050 faculty and a student enrollment of 22,000.

Candidates should have a doctorate in a discipline within the arts and sciences. They must also provide evidence of (i) substantial scholarly achievement, (ii) teaching experience at both the undergraduate and graduate level, and (iii) administrative experience in an academic area. Exceptional leadership talents will be sought, including ability to operate within the consultative tradition of a large complex university and an ability to build effective support for the college at all levels within and outside the university.

Applications and nominations should include curriculum vitae and addresses of references. All correspondence should be sent to: **Professor A. Gib DeBusk, Search Committee, Department of Biological Science, Florida State University, Tallahassee, Florida 32306.**

*The Florida State University is an Affirmative Action/Equal Opportunity Employer.*

All applications will be accepted until 15 July 1978.

### DIRECTOR OF LABORATORY ANIMAL FACILITIES

Requirements: administer veterinary services for research and teaching in a new animal facility serving Health Sciences Center and University Center. Veterinary care includes diagnostic laboratory and pathological services and programs for preventive and therapeutic medicine. Administrative responsibility includes fiscal management, setting charges and billing, purchasing and maintaining animals. Qualifications: D.V.M. from approved school of veterinary medicine or comparable alternative experience. Five to 7 years in laboratory animal facility. Salary competitive. Respond to:

**Dr. Leon Sokoloff**  
Building D, Room 103  
Department of Pathology, HSC  
State University of New York at Stony Brook  
Stony Brook, New York 11794

*Equal Opportunity/Affirmative Action Employer*

### ECOLOGIST

Faculty position available for a population or community ecologist. Appointee must show evidence of academic excellence by publications, research grants, and demonstrated teaching ability. The successful applicant will be expected to continue to sustain a significant research program and participate in both undergraduate and graduate teaching. Candidates who are contributing to ecological theory may be favored. The appointment will be at the assistant professor level. Applications, including curriculum vitae, list of publications, statement of research interests, and the names of at least three referees, should be submitted before 10 July 1978 to: **Professor Struther Arnott, Head, Department of Biological Sciences, Purdue University, West Lafayette, Ind. 47907.** *Purdue University is an Equal Access/Equal Opportunity Employer.*

## POSITIONS OPEN

The Medical School of the University of Oregon Health Sciences Center invites applications and nominations for the position of **DEAN OF THE SCHOOL OF MEDICINE.** The University of Oregon Health Sciences Center is a unit of the Oregon State System of Higher Education and includes the professional Schools of Medicine, Dentistry and Nursing, the University Hospitals and Clinics, the Crippled Children's Division, and other programs in the health sciences.

The search committee is seeking candidates to lead the School of Medicine in the coordinated management of education, research, and service programs for the health sciences in the School of Medicine. The candidate should be able to interact effectively with the Health Sciences Center and with public and private agencies at the community, state, and national levels.

*The University of Oregon Health Sciences Center is an Equal Opportunity/Affirmative Action Employer. The search committee will seek the best qualified person without discrimination of any kind.*

Nominations and applications with supporting material should be submitted by 15 September 1978 to: **Dr. James Shore, Chairman, Dean's Search Committee, University of Oregon Health Sciences Center, Portland, Ore. 97201.**

**DIRECTOR OF ANATOMIC PATHOLOGY.** Applications are invited for the position of director of the very active anatomic service at Cedars-Sinai Medical Center. This position will be available approximately 1 January 1979, and requires Board-certification, broad experience in administration and management, as well as superior teaching ability and research experience. Cedars-Sinai Medical Center is affiliated with the University of California at Los Angeles (UCLA), and applicants should also be qualified for consideration of a faculty appointment at an appropriate level in the Department of Pathology at the University of California, Los Angeles. Please send curriculum vitae and names of referees to: **Julien L. Van Lancker, M.D., Department of Pathology, UCLA School of Medicine, Los Angeles, California 90024.** *Equal Opportunity/Affirmative Action Employers. Minorities and women are encouraged to apply.*

### ENDOCRINOLOGIST— REPRODUCTION PHYSIOLOGIST

The Department of Animal Physiology at the University of California, Davis, invites applications for a faculty position beginning 1 October 1978 in endocrinology-reproduction to complement our existing program. Minimum qualifications include a Ph.D. and a demonstrated ability to conduct high-quality research in endocrinology-reproduction. The position involves team teaching in an undergraduate physiology course, an undergraduate physiology laboratory, and a graduate course. The position is initially a 9-month appointment at the assistant professor level up to Step III with plans to convert it to 11 months within the next year. Applicants should submit curriculum vitae, reprints, three letters of recommendation, and any other supporting material to: **Endocrinology-Reproduction Search Committee, Department of Animal Physiology, University of California, Davis, California 95616.** Closing date for applications is 15 August 1978.

*The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and members of minority groups.*

### FACULTY POSITION: BACTERIOLOGIST

The appointee will assume the teaching responsibility for an 8-week course in pathogenic bacteriology (lecture and laboratory) offered to undergraduate students; assist in the teaching of pathogenic bacteriology, mycology, and protozoology to veterinary students; and assist in the development and teaching of a graduate level course in pathogenic bacteriology. The appointee will be expected to develop a strong research program dealing with pathogenesis of bacterial diseases.

Applicants should hold a D.V.M., M.D., D.D.S. and/or Ph.D. degree with teaching and research experience in pathogenic bacteriology. Salary and rank dependent upon background and experience.

Applicants should send curriculum vitae, personal bibliography, and references to: **Dr. John F. Timoney, Chairman, Search Committee, Department of Microbiology, New York State College of Veterinary Medicine, Cornell University, Ithaca, N.Y. 14853.** *Affirmative Action/Equal Opportunity Employer.*

# Announcing The Minicomputer and Computations in Chemistry

A Workshop Sponsored by the

**NATIONAL RESOURCE FOR COMPUTATION IN CHEMISTRY**

Lawrence Berkeley Laboratory University of California Berkeley, California 94720

**July 19-21, 1978**

The workshop will focus on the role of the minicomputer in relation to both dedicated laboratory data-acquisition computers and general purpose computer centers. Focus will be on practical "how-to" topics, rather than on research results obtained on a minicomputer. Sufficient time will be provided to allow for individual and small group discussions.

Professor Phillip R. Certain of the Theoretical Chemistry Institute at the University of Wisconsin at Madison is the workshop organizer. Prospective participants are urged to communicate directly with him regarding workshop format and content. His telephone number is (608) 262-1511.

Tentative topics to be discussed include:

- Identification & classification of minicomputer functions
- Matching hardware and software to function
- Benchmarking
- Applications software development & program conversion
- Networking
- Survey of commercially available hardware & software
- Trends in computer design
- Systems maintenance

The workshop registration fee is \$22. For registration and housing details, contact NRCC at Lawrence Berkeley Laboratory: (415) 843-2740, Ext. 6722.



## Psychophysicist

The **GENERAL FOODS TECHNICAL CENTER** is seeking to fill a newly created position for a Ph.D. in Experimental Psychology with a strong background in psychophysics. Candidates should have up to 3 years of post-doctoral or similar research experience; food related research preferred.

The successful candidate will be able to design and implement a broad based psychophysical research program using foods as stimuli. Some research emphasis will be directed at the interactions among sensory modalities. The ability to perform as a member of an inter-disciplinary team is a must. This is a stimulating and challenging position in the Nutritional and Clinical Sciences area.

Our location in suburban Westchester County offers a choice of urban or suburban living in an area just north of New York City. Salary commensurate with experience, and the benefits are outstanding. Please send resume (please do not phone) with salary history and requirements in confidence to:

PERSONNEL ASSOCIATE, Dept. SL-PP

**GENERAL FOODS CORPORATION**

Technical Center  
555 South Broadway, Tarrytown, NY 10591

An Equal Opportunity Employer M/F/Hc.



### Jet Propulsion Laboratory California Institute of Technology CHIEF SCIENTIST

The Jet Propulsion Laboratory, California Institute of Technology, invites applications for the position of Chief Scientist.

The Laboratory, operated by the California Institute of Technology under contract with NASA, carries out NASA's planetary exploration program, participates in NASA's Applications program, and is active in the Department of Energy solar energy programs. Scientists at JPL are engaged principally in scientific experimentation from planetary and earth-orbiting spacecraft, and in research related to space science and technology, and energy and information technology.

The Chief Scientist reports to the JPL Director, serving as the Director's principal advisor on the scope and conduct of scientific research at JPL, on policies affecting JPL scientists, on scientific support for JPL programs, and on relationships between JPL and the scientific community. He acts as a focal point for JPL scientists and for outside scientists involved in JPL activities.

Candidates should possess recognized scientific credentials, and be capable of dealing with leadership and policy issues. It is expected that the Chief Scientist will devote a portion of his time to his own research program, either at JPL or at the Caltech campus.

Please send resume to:  
Dr. C. R. Gates, Chairperson, Search Committee  
Jet Propulsion Laboratory  
California Institute of Technology  
4800 Oak Grove Drive  
Pasadena, California 91103

## POSITIONS OPEN

### ENTOMOLOGIST—ARGENTINA

**TWO-YEAR RESEARCH POSITION** funded by a Medical College of Wisconsin grant is available for an entomologist with Ph.D. training in medical entomology and vector control. The research program involves monitoring insect vectors of Chagas Disease, testing laboratory developed vector control methods in the field and assisting a team of American physicians in an epidemiological study of Chagas Disease. This research position is in Argentina and knowledge of Spanish is desirable but not essential. In addition to an attractive salary, moving expenses and free lodging at the research site are provided. Submit résumé and other credentials to: **Richard D. Stewart, M.D., Chairman, Department of Environmental Medicine, The Medical College of Wisconsin, 8700 West Wisconsin Avenue, Milwaukee, Wisconsin 53226. An Affirmative Action Employer.**

### ENVIRONMENTAL CHEMIST

**Tenure-track assistant or associate professorship.** Beginning January or September 1979 in an A.C.S. accredited department with ten chemists. Duties include teaching undergraduate environmental chemistry, quantitative analysis, and participating in lower division environmental science and chemistry courses. Ph.D. required. Postdoctoral experience desired. Strong commitment to teaching and ability to develop a research program expected. Send application, three letters of recommendation, and transcripts to: **Faculty Search Secretary, College of Arts, Sciences and Letters, The University of Michigan-Dearborn, Dearborn, Mich. 48128. A nondiscriminatory, Affirmative Action/Title IX Employer.**

### ENVIRONMENTAL CHEMISTRY

Three postdoctoral association positions on the environmental chemistry of toxic substances are available at the Massachusetts Institute of Technology starting between July and December of 1978. Projects include: (i) polycyclic aromatic compounds in combustion effluents, ambient air, and marine sediments and (ii) fates of synthetic industrial organic chemicals in rivers. We are seeking people with a background in synthetic organic chemistry, organic geochemistry, analytical chemistry, or environmental chemistry. Those interested should send their résumé to: **Professor Ronald Hites, Massachusetts Institute of Technology, Room 66-505, Cambridge, Mass. 02139**, and should have three letters on their behalf sent to the above address.

### FACULTY POSITIONS IN PHARMACOLOGY

The new faculty positions, at the rank of assistant or associate professor, are now available in the Department of Pharmacology, State University of New York, Upstate Medical Center. Starting dates are open; positions are funded by the State of New York at a competitive salary scale; adequate laboratory space is available; teaching responsibilities are for medical and graduate students. Candidates with a demonstrated research potential in any relevant area are invited to submit curriculum vitae, list of publications, and letters of recommendation to: **Dr. Joseph D. Robinson, Search Committee, Department of Pharmacology, Upstate Medical Center, Syracuse, New York 13210.**

*Equal Opportunity/Affirmative Action Employer*

**INSTRUCTOR IN ANATOMY.** Major duties in histology, neuroanatomy, and embryology; training in human gross anatomy also mandatory. Research area open. Ph.D., M.D., or D.M.D. essential. Send curriculum vitae and references to: **Dr. C. R. Ball, Chairman, Search Committee, Department of Anatomy, University of Mississippi Medical Center, 2500 North State Street, Jackson, Miss. 39216. Equal Opportunity Employer, M/F.**

### MARINE ECOLOGIST

Two-year (possibly longer) postdoctoral research position at the University of Georgia Marine Institute. Applicants should be capable of developing an independent program of investigation of ecosystem processes to complement ongoing studies of primary production, benthic invertebrate ecology, and carbon and nitrogen fluxes in salt marsh estuaries. Send curriculum vitae, reprints and/or statements of research interests, and three letters of reference to: **Dr. Evelyn Haines, Chairperson, Search Committee, University of Georgia Marine Institute, Sapelo Island, Ga. 31327. Deadline: 1 September 1978. An Affirmative Action/Equal Opportunity Institution.**

## POSITIONS OPEN

### MARINE MICROBIOLOGIST

The Osborn Laboratories of Marine Sciences has an immediate opening for a qualified Ph.D. to develop a new program in microbiology. Send curriculum vitae, a statement of objectives, and the names of three references to:

**JAMES WHITE**  
Personnel Supervisor  
N.Y. ZOOLOGICAL SOCIETY  
185th Street and Southern Boulevard  
Bronx, N.Y. 10460  
*An Equal Opportunity Employer, M/F*

Applications are invited from candidates who are qualified to teach introductory MARINE SCIENCE for majors and nonmajors and to develop junior/senior level major courses in a specialty. Specialties under consideration for this position are general oceanography, marine pollution, physical oceanography, and geological oceanography. A strong commitment to undergraduate teaching and faculty/student research is desired. This is a tenure-track position and the salary is competitive.

Send résumé with names of three references to: **Richard Moore, Science Division, Coastal Carolina College, Conway, South Carolina 29526. Equal Opportunity/Affirmative Action Employer.**

### MOLECULAR BIOLOGY SENIOR SCIENTIST, PLANT CELL PHYSIOLOGY SENIOR SCIENTIST

The INTERNATIONAL PLANT RESEARCH INSTITUTE anticipates openings in late 1978 for two innovative senior scientists:

**MOLECULAR BIOLOGIST:** nucleic acid transcription, hybridization, isolation, characterization.  
**PLANT CELL PHYSIOLOGIST:** protoplast culture, differentiation, hybridization, regulators.

Salaries open. Send résumé and record of achievements in confidence to:

**International Plant Research Institute, Inc.**  
255 California Street, Suite 905  
San Francisco, California 94111

**NEUROCHEMIST/ENZYMOLOGIST.** Postdoctoral position, available now. Ph.D. in biochemistry or pharmacology required, background in enzymology preferred. Research involves studies in neural effects on translation and enzyme regulation in developing nervous systems. Send curriculum vitae and three letters of reference to: **Dr. Frank L. Siegel, Neurochemistry Section, Waisman Center, University of Wisconsin, Madison, Wis. 53706. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.**

### OCEANOGRAPHER

A Florida-based marine environmental consulting firm has an opening for an individual with a minimum of a M.S. degree in oceanography or equivalent experience. Previous marketing and proposal writing experience most desirable. Salary commensurate with qualifications. Send résumé and the names of three references by 21 July 1978 to: **Box 231, SCIENCE.**

**OPHTHALMOLOGY**—Applications are invited for chairmanship, **Department of Ophthalmology, University of Arkansas College of Medicine, 4301 West Markham Street, Little Rock, Arkansas 72201.** Direct curriculum vitae and/or inquiries to: **Dr. Thomas A. Bruce, M.D., Dean.**

**PATHOLOGY**—Applications are invited for chairmanship, **Department of Pathology, University of Arkansas College of Medicine, 4301 West Markham Street, Little Rock, Arkansas 72201.** Direct curriculum vitae and/or inquiries to: **Dr. Thomas A. Bruce, M.D., Dean.**

**POSTDOCTORAL REPRODUCTIVE PHYSIOLOGIST-CHEMIST** wanted to work on detection and isolation of the biochemical factors controlling reproduction in marine crustaceans. Résumé and list of three references should be sent to: **The Oceanic Institute, Makapuu Point, Waimanalo, Hawaii 96795.**

*An Equal Opportunity Employer*

## POSITIONS OPEN

**PHARMACOLOGIST/PHYSIOLOGIST.** Postdoctoral teaching position available for 1 year to replace individual on sabbatical. Teaching of upper-level pharmacology and physiology to pharmacy students. B.S. in pharmacy preferred, but not mandatory. Opportunities exist to do collaborative research with pharmacology faculty. Position begins 1 September 1978. Competitive salary. Send résumé and three letters of reference to:

**Dr. Jerry Fineg**  
College of Pharmacy  
The University of Texas at Austin  
Austin, Texas 78712

*Equal Opportunity/Affirmative Action Employer*

### PHYSICIAN MEDICAL RESEARCH POSITION THE SQUIBB INSTITUTE FOR MEDICAL RESEARCH

We have a key opening available for a physician especially interested or experienced in the design, monitoring, and analysis of drug efficacy trials (phases II and III). Our new drug candidates encompass numerous therapeutic and diagnostic situations, with emphasis on cardiovascular, infectious, and inflammatory diseases. The position offers the opportunity to work with other physicians and scientists representing multiple disciplines.

The ideal candidate will be Board-certified (internal medicine preferred, with emphasis on cardiology), and will have 2 to 3 years of experience as a clinical investigator or clinical pharmacologist. Less experienced candidates with special qualifications also will be considered.

Please send curriculum vitae and complete details of your experience, including salary history, to:

**Joseph R. Convery**  
E. R. Squibb & Sons, Inc.  
Department JG  
P.O. Box 4000  
Princeton, New Jersey 08540

*An Equal Opportunity Employer, M/F*

**PHYSIOLOGIST:** Ph.D. or M.D. needed to fill tenable position in active medical school department. Proven research/teaching ability and steady funding record is more important than field of interest. Apply with curriculum vitae and brief outline of future research plans to: **Dr. Martin D. Rayner, Department of Physiology, University of Hawaii, 1960 East West Road, Honolulu, Hawaii 96822. An Equal Opportunity Employer.**

### POSTDOCTORAL—BIOMEMBRANE THEORY

Applicant should have very good background in physical chemistry, including kinetic theory, and in mathematics. Previous experience in membrane physiology helpful, but not essential. Start soon as possible. Send curriculum vitae and names of at least three references to: **Franklin Offner, Technological Institute, Northwestern University, Evanston, Ill. 60201.**

### POSTDOCTORAL FELLOW DEPARTMENT OF BIOCHEMISTRY MEMORIAL UNIVERSITY OF NEWFOUNDLAND

Applications are invited, with two letters of reference, for the position of postdoctoral fellow to work on the control of glycoprotein synthesis and the role of isoprenoids effective 1 October 1978, under the terms of the MRC of Canada. Salary is \$11,600. Write to: **Dr. S. Mookerjee, Professor and Head, Department of Biochemistry, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3X9.**

A **POSTDOCTORAL POSITION** is available immediately to study the genetic and endocrine regulation of oogenesis in *Drosophila melanogaster*. The goal of the project is to help understand the interaction of genes and hormones in a developmental system using the genetic tools available in *Drosophila* as well as the techniques of molecular biology. Applicants are sought with experience in one or more of the following areas and techniques: *Drosophila* genetics, in vitro message translation, tissue culture, insect endocrinology, nucleic acid biochemistry, or DNA cloning. Applicants should have curriculum vitae and three letters of recommendation sent to:

**Dr. John Postlethwait**  
Department of Biology  
University of Oregon  
Eugene, Oregon 97403

Closing date: 31 July 1978.



**ASSISTANT PROFESSOR  
OF SURGERY  
UNIVERSITY OF CALIFORNIA  
AT SAN DIEGO**

Qualifications include: M.D. with Ph.D. or equivalent experience in area of auditory-vestibular neurophysiology. Experience with single unit recording, and/or electron microscopy desirable. Eligible for California medical licensure. To work in a team effort of basic research with clinical applications. Salary commensurate with the rank and step of appointment within the established salary schedule of University of California, San Diego, Contact:

**Alan M. Nahum, M.D.  
Head, Division of Otolaryngology  
University Hospital  
225 Dickinson Street  
San Diego, Calif. 92103**

*University of California, San Diego, is an  
Equal Opportunity/Affirmative Action Employer.*

**HEMATOLOGY DIVISION DIRECTOR**

The Bureau of Laboratories, Center for Disease Control, Public Health Service, invites applications for the position of director, Hematology Division. The Hematology Division is a consultative resource and reference center for hematological laboratory methods and determinations for many public health programs, offers bench training in selected procedures, performs research on hematology methodology and quality control, abnormal hemoglobin structure and function, coagulation mechanisms, and cooperates closely with national and international hematology standardizing organizations.

Besides the usual administrative duties, the incumbent will set priorities for and coordinate the division's research activities, represent the Bureau of Laboratories on scientific and standards committees, and be expected to keep abreast of developments in both clinical and laboratory hematology.

The position requires an M.D. degree and adequate experience in clinical laboratory medicine, preferably Board-eligible or Board-certified in hematology. It is desirable that candidates have evidence of substantial scholarly achievement and have demonstrated a capacity for leadership. The position may be filled in either the career Civil Service or the Commissioned Corps of the Public Health Service. Salary to \$47,025 per annum, depending on experience and qualifications and personnel system. Liberal fringe benefits apply. Letters of application with curriculum vitae, SF 171, list of publications, and the names and addresses of references should be forwarded immediately to: **David F. Rogers, Personnel Management Specialist, Center for Disease Control, 1600 Clifton Road, NE, Atlanta, Ga. 30333.**

*An Equal Opportunity Employer*

**SPEND UP TO  
TWO YEARS IN  
AUSTRALIA WORKING  
ON YOUR  
POST-DOCTORAL  
RESEARCH**



Each year the Australian Government awards up to 10 fellowships in the physical or biological sciences to young post-doctoral researchers of exceptional promise and proven capacity for original work. These fellowships allow young scientists a chance to continue their full-time answer seeking endeavors in an Australian university or approved research institution for up to two years, while being supported by a good per annum stipend (this year at least \$16,261). Winners may even delay commencement of fellowship tenure up to nine months after the announcement of the award.

All applicants should have a Ph.D. or equivalent qualifications, in one of the physical or biological sciences (including mathematics and the scientific aspects of statistics, engineering metallurgy, agriculture and medicine). Applications will also be considered from candidates for the Ph.D. degree who have already submitted their thesis for examination.

If you are interested and would like to apply, you can obtain more information and application forms from any one of the addresses below. You must hurry, though, because the closing date for applications is August 25, 1978. All winners will be announced in December 1978.



**FOR MORE INFORMATION, CONTACT:**

Queen Elizabeth Fellowships Committee  
Secretary, Dept. of Science P.O. Box 449,  
Woden ACT 2602  
Australia

Minister (Scientific)  
Canberra House  
10-16 Maltravers Street  
London, W02R 3 EH  
United Kingdom

Australian Embassy  
1601 Massachusetts Ave., N.W.  
Washington, D.C. 20036

## POSITIONS OPEN

**POSTDOCTORAL POSITION.** In environmental biology program. Background in plant biochemistry and/or plant physiology preferred. Project: metabolism of  $\text{SO}_2$  and  $\text{NO}_2$  in plants. Available 1 September at new Boyce Thompson facility at Cornell University, Ithaca, N.Y. Send curriculum vitae and two references to:

**Dr. Leonard H. Weinstein**  
Boyce Thompson Institute  
1086 North Broadway  
Yonkers, N.Y. 10701

*An Equal Opportunity/Affirmative Action Employer*

**POSTDOCTORAL POSITION** (2-year minimum) available September 1978 for studies on invertebrate muscle. Candidate should have familiarity and interest in one or more of the following: immunology and immunohistochemistry, protein chemistry, electron microscopy, and optical diffraction. Prefer recent Ph.D. Facilities of the Pennsylvania Muscle Institute available. Send curriculum vitae, reprints, statement of research interest and goals, and three letters of reference to: **Rhea J. C. Levine, Ph.D., Department of Anatomy, The Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, Pa. 19129.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** in biomechanics involved in day-to-day operation of projects concerned with skeletal mechanics in vivo. Will interact with diverse groups interested in comparative mechanics and energetics of locomotion. Salary: \$10,000 to \$12,000. Send résumé and names of three references by 23 July 1978 to: **Dr. Lance Lanyon, Harvard University, Concord Field Station, Old Causeway Road, Bedford, Mass. 01730.** *Harvard is an Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL POSITION AVAILABLE

A part-time position is available in the Department of Physiology at the University of California, Los Angeles, to study the isolation and identification of membrane peptides in epithelial plasma membranes. The candidate is expected to have a Ph.D. in physiology and several years of postdoctoral experience with the physiology and biochemistry of epithelial cells. Successful experience with isolation of plasma membranes, iodination of specific membrane proteins, and gel electrophoresis would be an advantage. Available 1 July 1978 for 1 year. Send curriculum vitae and three letters of reference to:

**Chairman, Department of Physiology**  
University of California  
School of Medicine  
Los Angeles, Calif. 90024

*Affirmative Action/Equal Opportunity Employer. Minority and woman candidates are encouraged to apply.*

**POSTDOCTORAL POSITION**—Recent Ph.D. to do **EXPERIMENTAL RESEARCH** in thermotropic and amphiphilic liquid crystals, including systems that model biological membranes. Experience in laser or x-ray scattering techniques as well as a background in physics or physical chemistry of organic materials is required. Applications should be sent by 4 August to: **Professor P. S. Pershan, Division of Applied Sciences, Pierce Hall 205c, Harvard University, Cambridge, Mass. 02138.** *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION: Biochemistry.** Rapid kinetics of enzyme reactions. Position involves preparation of a lipid activated enzyme and synthesis of pseudosubstrates for kinetic investigation. Starts September 1978; salary: \$12,000 per year. Send curriculum vitae and arrange for two letters of reference to be sent to: **James T. McFarland, Department of Chemistry, University of Wisconsin-Milwaukee, Milwaukee, Wis. 53201.** *The University of Wisconsin-Milwaukee is an Equal Opportunity/Affirmative Action Employer.*

**PROFESSIONAL TECHNICIAN, MICROBIOLOGY**—M.S. in microbiology or B.S. with further training and experience in identifying human microbial flora and in research. Primary responsibility is to organize, under faculty supervision, the laboratory sections of a microbiology course for medical students, and to help in the planning and teaching of this course. Secondary responsibility is to work as a research technician with a degree of independence related to ability and under the supervision of the departmental chairman. Salary according to qualifications. Send curriculum vitae to: **Professor D. J. Tipper, Department of Microbiology, UNIVERSITY OF MASSACHUSETTS MEDICAL CENTER, 55 Lake Avenue, North, Worcester, Mass. 01605.** *An Equal Opportunity Employer.*

## POSITIONS OPEN

### POSTDOCTORAL/RESEARCH ASSOCIATE

Postdoctoral/research associate position available 1 September for work on ligand binding to hemoglobin. Experience in protein chemistry desired. Résumé and names of references to:

**Dr. Q. H. Gibson**  
Wing Hall  
Cornell University  
Ithaca, N.Y. 14853

*An Equal Opportunity/Affirmative Action Employer*

Available 1 August 1978, **POSTDOCTORAL RESEARCH ASSOCIATE** for studies in renal physiology. Main interest is functional development of the kidney. Micropuncture and microanalysis techniques to be used. Please contact: **Sidney Solomon, Physiology Department, University of New Mexico, Albuquerque, New Mexico 87131.** *University of New Mexico is an Affirmative Action Employer.*

### POSTDOCTORAL RESEARCH ASSOCIATE

Position expected to be available July 1978 for research on structure and function of the serum factors which inhibit cell proliferation, the mechanism and control of lymphocyte proliferation and neoplastic growth. Biochemist or immunologist with some or all of the following background desired: protein separation techniques, protein structure and function, biochemistry of cyclic nucleotides, tumor immunology, and tissue culture. Salary: \$12,000 plus fringe benefits. Excellent modern research laboratories with availability of mouse strains bearing various tumors, protein sequencing and tissue culture facilities, and other required support materials. Newly established medical school located in very pleasant environment. Availability of this position contingent upon adequate funding from pending extramural grant support.

Send curriculum vitae and three letters of recommendation to:

**Dr. Peter Koo**  
Microbiology/Immunology Program  
Northeastern Ohio Universities College of Medicine  
Rootstown, Ohio 44272

*Equal Opportunity/Affirmative Action Employer*

### POSTDOCTORAL RESEARCH ASSOCIATE

Study of pulmonary artery intermediate (100A) filaments. Background in protein chemistry and/or amino acid sequencing required. Three-year position, beginning 1 September 1978 at \$12,000 per annum. Send résumé and three letters of reference as soon as possible to: **Dr. P. Johnson, Department of Chemistry, Ohio University, Athens, Ohio 45701.** *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL RESEARCH POSITION** available for Ph.D. or M.D. with expertise in EBV. Interdisciplinary studies focus on host and virus interaction in oncogenesis. Salary range: \$10,000 to \$15,000. Available September 1978. Send inquiries, curriculum vitae, and three letters of reference to: **David Purtle, M.D., University of Massachusetts Medical Center, 55 Lake Avenue, North, Worcester, Mass. 01605.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL RESEARCH POSITION**—Available July 1978. To study molecular aspects of terminal cell differentiation and the control of DNA replication and cell proliferation in cardiac muscle. Please send curriculum vitae and three letters of reference to: **Dr. William C. Claycomb, Department of Biochemistry, Louisiana State University School of Medicine, 1542 Tulane Avenue, New Orleans, La. 70112.** *An Affirmative Action/Equal Opportunity Employer.*

### ALTERNATIVE CAREER PATH

The Office of Technology Assessment, a research arm of the U.S. Congress, has **TWO PROJECT MANAGEMENT POSITIONS** available in an international program which will begin with three studies: (i) an evaluation of the impact of U.S. energy policy on U.S. foreign policy choices; (ii) a study comparing policy opportunities in technology transfer which will examine the relative utility of export-import controls, accelerated support of fundamental and applied research and development, and other approaches; and (iii) a study which will examine the changes in the competitive position of four major U.S. industries. Applicants should have an advanced degree and professional experience in a physical or biological science or in engineering and be able to participate effectively in policy analysis. Applications are invited from faculty members wishing to work on a leave of absence. Box 232, SCIENCE.

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH POSITION** in developmental physiology available immediately. Research will be on ionic controls of early development, particularly as related to questions of intracellular localization, oocyte maturation, and egg activation. Experience in electrophysiology, ion flux measurements or electron microscopy desired, but a genuine intellectual interest in the problem is the major qualification. Send résumé and names of references to: **Dr. Kenneth R. Robinson, Division of Molecular and Cellular Biology, National Jewish Hospital and Research Center, 3800 East Colfax Avenue, Denver, Colorado 80206.**

**POSTDOCTORAL RESEARCH POSITION IN PLANT PHYSIOLOGICAL ECOLOGY.** A postdoctoral position is available to study biophysical aspects of temperature and water relations of desert plants beginning 1 January 1979. Experience with computer programming and/or leaf gas exchange measurements is necessary. Expected duration 1 to 2 years with a current starting salary of approximately \$12,000. Please send curriculum vitae and names of three references to: **Dr. Park S. Nobel, Division of Environmental Biology, Laboratory of Nuclear Medicine and Radiation Biology, University of California, Los Angeles, California 90024.** *An Affirmative Action/Equal Opportunity Employer.*

### HARVARD MEDICAL SCHOOL DEPARTMENT OF PHYSIOLOGY

Applications are sought for a position as professor of physiology and chairman of the Department of Physiology at the Harvard Medical School (HMS). The school wishes to appoint to this chair a person of outstanding accomplishments and creativity in fundamental research, who is also a skilled teacher and an effective administrator.

Applications should include a complete curriculum vitae and bibliography together with the names of three references.

*The Harvard Medical School is an Equal Opportunity Employer with an Affirmative Action Program and HMS welcomes applications from women and minority groups.*

Please send applications before 1 August 1978 to:

**Dr. Eugene P. Kennedy**  
Department of Biological Chemistry  
Harvard Medical School  
25 Shattuck Street  
Boston, Massachusetts 02115

### INTERNATIONAL LABORATORY FOR RESEARCH ON ANIMAL DISEASES (ILRAD) RESEARCH ASSISTANT

A research assistant is required to operate the institution's Fluorescence Activated Cell Sorter (FACS II). Research is being carried out on trypanosomiasis and theileriosis in modern research facilities located in Nairobi, Kenya. The individual will be working with lymphoid cells and trypanosomes so familiarity with handling cells is essential. Experience in the use of a cell sorter is an advantage but provision will be made for training if necessary. Salary will vary, depending upon training and experience. Perquisites include house allowance, commutation allowance, insurance, vacation leave, pension scheme, and others. Candidates should submit current curriculum vitae describing training and research experience and the names of three references who can be contacted on behalf of their candidacy. These should be sent to:

**The Director**  
ILRAD  
P.O. Box 30709  
NAIROBI, KENYA

to reach him not later than 30 August 1978.

**RESEARCH ASSOCIATE II.** Available immediately, involving research on interrelationships of xenobiotics, selenium, and vitamin E. Background in biochemistry, toxicology, or pharmacology. Salary: \$12,600 minimum, negotiable. Send curriculum vitae and two letters of reference to: **Dr. G. F. Combs, Jr., Department of Poultry Science, Cornell University, Ithaca, New York 14853.** *Cornell University is an Equal Opportunity/Affirmative Action Employer. Minorities, women, and handicapped are encouraged to apply.*

**RESEARCH ASSOCIATE** to work on microbial (mycobacterial) membrane biochemistry. Experience in this area required. Salary: \$10,000 to \$14,000 in accordance with NIH guidelines commensurate with postdoctoral experience. Send curriculum vitae to: **M. Meek, Job Service, 550 Washington, St. Louis, Missouri 63104.** *Equal Opportunity/Affirmative Action Employer, M/F/Handicapped.*

**VICE PRESIDENT FOR ACADEMIC AFFAIRS  
UNIVERSITY OF NEW HAMPSHIRE**

The vice president is the second principal administrative officer of the university and is responsible for directing and coordinating the academic program of the university and for identifying and formulating overall education objectives. All deans and directors of academic programs report to the vice president for academic affairs. He/she considers new academic programs and major modifications of existing programs. He/she also has responsibility for the admissions office, the institutional research office, registrar's office, the library, the Division of Continuing Education, and the ROTC programs.

The University of New Hampshire is the land grant institution of the University System of New Hampshire and is located in the town of Durham (population approximately 8000). It has a total undergraduate enrollment of about 9500 and a graduate student body of 1000. The university is composed of five colleges and a graduate school.

**Qualifications:** candidates for the position should have an earned doctorate or other appropriate terminal degree, a record of excellence in teaching and scholarly achievement, appropriate administrative experience, and a demonstrated capacity to provide creative academic leadership.

**Salary:** commensurate with qualifications and experience.

**Starting date:** 1 January 1979.

**Closing date for applications and nominations:** 1 September 1978.

Send letter, résumé, and three references to:

**Professor Herman Gadon  
Chairman, Search Committee  
Grant House—Faculty Center  
University of New Hampshire  
Durham, N.H. 03824**

*The University is an Affirmative Action/Equal Opportunity Employer.*

**AUSTRALIA  
GOVERNMENT OF VICTORIA  
POST-SECONDARY EDUCATION COMMISSION  
APPOINTMENT OF CHAIRMAN**

The Victorian Government will shortly establish a Post-Secondary Education Commission, as authorized by the Post-Secondary Education Act 1978, which was passed by the Victorian Parliament in the recent Parliamentary Session.

The act provides for the appointment of a full-time chairman, a full-time deputy chairman, and six part-time commissioners.

The principal functions of the commission will be to coordinate the planning, organization, and administration of all post-secondary educational institutions in Victoria, in order to provide for the balanced development of post-secondary education throughout the state in the best interests of the whole community.

The commission will have to work closely with all universities, the Victoria Institute of Colleges, the State College of Victoria, and with the appropriate commonwealth government bodies.

Inquiries are invited from men and women who are interested in the appointment of chairman of the commission, or who wish to suggest suitably qualified persons who might be interested. It is envisaged that the chairman will hold an appropriate tertiary qualification and will have worked in one or more fields of post-secondary education. A salary in the vicinity of A\$40,000 per annum will be offered, together with a personal allowance. Initial appointment may be for a period of up to 7 years.

Letters should be addressed to: **Minister of Education, Education Department, No. 2 Treasury Place, Melbourne, 3002, Victoria, Australia,** and marked "Personal and Confidential."

All inquiries and suggestions will be treated as confidential. They should be received no later than 20 August 1978.



Open to both  
men and women

**Public Service Commission  
Canada  
Fonction Publique  
Canada**

**CLINICAL PSYCHOPHARMACOLOGIST**

**Salary: \$32,867 to \$40,928**

**Ref. No: 77-PSTP-18-142 ( S )**

**Health and Welfare Canada  
Ottawa**

The Department of Health and Welfare within the Public Service of Canada has charge of matters relating to the health, social security and social welfare of persons residing in Canada. Within this Department, the Drugs Directorate is responsible for protecting the Canadian public against health hazards and fraud related to drugs and cosmetics.

The Drugs Directorate requires an experienced physician to review and evaluate preclinical and clinical research data on central nervous system drugs for the purposes of determining the optimal conditions for use and the acceptability of new drugs for clinical investigation or marketing.

**Qualifications**

Applicants must have graduated from a recognized school of medicine and be eligible to obtain a licence to practise medicine in one of the provinces of Canada. Psychiatric training and experience in clinical psychopharmacology or a combination of post-graduate training and experience in clinical pharmacology is essential. Knowledge of English is essential.

**Benefits**

Current benefits of employment with the Public Service of Canada include three weeks of annual holiday leave with pay, accumulative sick leave, an excellent superannuation plan and participation in a group health service insurance plan.

**How to Apply**

Send your application form and/or résumé to:

**J. Knox  
Professional, Scientific and Technical Program  
Public Service Commission of Canada  
Ottawa, Ontario K1A 0M7  
Closing Date: July 31, 1978**

*Please quote the applicable reference number at all times.*



## POSITIONS OPEN

**RESEARCH ASSOCIATE—POSTDOCTORAL FELLOW.** Recent Ph.D. graduate preferred. Experience in protein chemistry and some cell and culture techniques desirable. To work on collagen-related problems. Salary negotiable.

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

**Dr. Gerald Mechanic**  
Dental Research Center 210H  
University of North Carolina  
Chapel Hill, N.C. 27514

*The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.*

## RESEARCH PROGRAM PLANNING SCIENTIST

The Upjohn Company's Pharmaceutical R & D Division is seeking an experienced research program planner to assume the following responsibilities: participate in worldwide research program planning for Upjohn by developing, maintaining, and utilizing program planning display systems for purposes of in-company communication, program assessment, executive program management, and strategic planning; devise new planning concepts; assess impact of future technology on biomedical research trends and product development plans; provide primary support for worldwide short and long range R & D planning; publish and give seminars on the activities listed above.

Qualifications: Ph.D. in a physical, biological, or medical science plus a minimum of 5 years of relevant experience beyond Ph.D. Familiarity with the developmental progression of drugs and previous experience in research program planning are essential.

Negotiable salary. Excellent, comprehensive benefits. Kalamazoo is a mid-sized, southwestern Michigan community with local colleges, a very moderate cost of living, an attractive housing market, progressive school systems and easy access to a good mix of cultural-recreational options. Send résumé or direct inquiries to:

Dennis Nevala  
THE UPJOHN COMPANY  
7171 Portage Road  
Kalamazoo, Michigan  
49001  
(616) 323-4238

**Upjohn**

*An Equal Opportunity Employer, M/F*

**RESEARCH SPECIALIST**, position available in Department of Biochemistry and Biophysics, University of Pennsylvania. Must be a Ph.D. in biochemistry or physiology with demonstrated ability to do independent research. Expertise in biochemical physiology; biochemistry of hormone action, cellular energetics. Technical competence in advanced spectrophotometric methods, enzymatic methods of metabolite analysis, perfusion methods, and electronics. Good publication record required. Salary \$13,000 to \$15,000. **Juan J. Graña, Administrator, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, Pa. 19104.**

**SCIENCE WRITER** for a university news service. Must be able to interpret science and research for popular use, and to work effectively with mass media. Proven ability to report and write on biological, natural, and physical sciences is essential. Master's or Ph.D. in science field desirable. Salary: \$16,610 to \$23,260. Contact: **Edward Zabrusky, Department of Information Services, Michigan State University, East Lansing, Mich. 48824.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**RESEARCH ASSOCIATE** to study macromolecular components of cell membranes. Ph.D. degree in biochemistry, cell biology, biophysics, or biology required. Knowledge of glycoproteins or glycosaminoglycans biochemistry, or enzymology, preferable. Annual salary: \$10,000 to \$12,000, depending on qualifications. Send curriculum vitae and two letters of reference to: **Dr. Nicola Di Ferrante, Department of Biochemistry, Baylor College of Medicine, Houston, Texas 77030.** *An Equal Opportunity Employer.*

**RESEARCH FELLOW OR ASSOCIATE—CARDIAC ELECTROPHYSIOLOGY.** Positions available for M.D. or Ph.D. (physiology or pharmacology) to conduct animal experiments. Experience in electrophysiology research desirable. Send curriculum vitae and two references to: **Jaok Han, M.D., Professor of Medicine, Albany Medical College, Albany, N.Y. 12208.**

## SCIENTIST BIOCHEMISTRY/IMMUNOLOGY

Applications are invited for a staff scientist position beginning July 1978. The position involves independent research in a biochemically oriented group studying differentiation of the immune system and leukemia in mice. Desirable areas of interest include enzymatic markers of early T cell differentiation, function of thymic hormones in differentiation and leukemia, and differentiation of immunologically specific lymphocytes in response to RNA sarcoma virus infection. Ph.D. required, with 2 to 3 years of postdoctoral experience in biochemistry and/or immunology.

Send curriculum vitae and names of three references to:

**Dr. James N. Ihle**  
Cancer Biology Program  
Frederick Cancer Research Center  
P.O. Box B  
Frederick, Md. 21701

**SENIOR FACULTY POSITION** at University of California, Davis, campus. To serve as coordinator of state mental health programs and director of continuing education. Establishment of model graduate medical education program in a state hospital on the basis of affiliation with the University of California. *An Affirmative Action/Equal Opportunity Employer.* Write: **Joe P. Tupin, M.D., Division of Mental Health, Sacramento Medical Center, 2315 Stockton Boulevard, Sacramento, California 95817.** Position available after 1 July 1978. Applications accepted to 1 September 1978. Salary negotiable.

## TRAINING PROGRAM

### PREDOCTORAL AND POSTDOCTORAL TRAINING IN REPRODUCTIVE BIOLOGY

Department of Biological Sciences  
Northwestern University

Applications are being accepted for fall 1978. The department offers training in a diverse number of fields related to reproductive biology including neuroendocrinology, behavioral endocrinology, photoperiodism, immunoreproduction, neuroreceptors, and immunocytochemistry. NIH training funds are available for qualified applicants. Send inquiries to: **Neena B. Schwartz, Program Director, Reproductive Biology Training Program, Department of Biological Sciences, Northwestern University, Evanston, Illinois 60201.**

## FELLOWSHIPS

**POSTDOCTORAL FELLOWSHIP** available immediately to conduct regulation studies on membrane differentiation and development. Provides opportunity to learn electron microscopy and develop computer-controlled instrumentation. Knowledge of biochemistry, microbial physiology, and molecular biology recommended. Applicants with additional experience in analytical chemistry, biophysics, and/or computer technology desirable. First-year salary negotiable: \$10,500 to \$12,000 and benefits. Work with **R. L. Uffen (microbiology)** and **J. F. Holland (biochemistry).** Send résumé and names of three references with addresses to: **Robert L. Uffen, Department of Microbiology, Michigan State University, East Lansing, Mich. 48824.** *An Equal Opportunity/Affirmative Action Employer.*

## FELLOWSHIPS

### POSTDOCTORAL FELLOWSHIP AVAILABLE

A 2-year postdoctoral training program in human histocompatibility testing with research on the problem of alloimmunization to HLA induced by blood transfusion. Experimental approaches include in vitro models of alloimmunization and the kinetics of antibody transfusion and appearance of subpopulations to sensitized lymphocytes following transfusion. Candidates should have an M.D. and/or Ph.D. degree with prior training in immunology or a related field. Opportunity for in-depth training in histocompatibility and blood banking science for interested candidates. Send curriculum vitae, bibliography, references, and other information to: **Rene J. Duquesnoy, Ph.D., Director of Research, Milwaukee Blood Center, Inc., P.O. Box 10G, Milwaukee, Wisconsin 53201.** Telephone: 414-933-5000, ext. 214.

### POSTDOCTORAL OR RESEARCH ASSOCIATE.

The Janice Gram Fellowship has been established for the study of motor neuron disease. Position available summer 1978. Neuron-neuron and neuronal relationships in vitro with emphasis on transmitters and trophic factors. Salary: \$15,000. Submit curriculum vitae to: **Dr. L. P. Weiner, Department of Neurology, University of Southern California School of Medicine, Los Angeles, California 90033.** *Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL RESEARCH FELLOWSHIP.

The California Institute of Technology invites applications for a postdoctoral research fellowship currently available in planetary science. Applicants with background in photochemical modeling and spectroscopy are preferred. Interested persons are asked to contact: **Chairman, Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, California 91125.** *An Equal Opportunity Employer, M/F.*

**POSTDOCTORAL FELLOWSHIP.** Naval Arctic Research Laboratory, Barrow, Alaska (University of Alaska). Two positions will be available for work on **environmental mammalian physiology relating acclimatization and adaptation of arctic homeotherms to cold environments.** Experience in comparative metabolism, nutrition, water and electrolyte balance, and/or mechanisms of thermoregulation required. Basic stipend is \$13,500. Outstanding benefits include provision of housing, food, and travel expenses. Send résumé, three references, and research project outline to: **Dr. Gary A. Laursen, Assistant Director for Science, Naval Arctic Research Laboratory, Barrow, Alaska 99723.**

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

## MARKET PLACE

### Laboratory PDP 11/40 Equipment Wanted

Wish to acquire, from one or more sources, setup for neurophysiology laboratory applications under RT-11. Processor must be 11/40, disk must be twin RK05. Also need KE11E, KE11F arithmetic, KW11L clock, 32K-word memory, 4 DL11-B serial lines, and laboratory I/O such as AR11, LPS11, UDC11, DR11C. Major items must be under current DEC maintenance contract. Contact: **Dan Smith, Eye Research Institute, 20 Staniford St., Boston, MA 02114.** Telephone: 617-742-3140, ext. 257 or 260.

### FOR SALE: RCA EMU ELECTRON MICROSCOPE

Excellent operating condition, under continuous service contract. Single condenser. Heated self-cleaning objective aperture. Adapted for 3 1/4" x 4" sheet film. Olympus fully articulating binoculars. New gun and high-voltage cable (December 1976). \$3000. Contact: **Dr. S. Ito, Harvard Medical School, Boston, Mass. 02115.** Telephone: 617-732-1743.

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ELECTRO-NUCLEONICS, INC.  
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# Clinical Pharmacologist

We are a major ethical pharmaceutical company with worldwide research efforts. We currently have a position available for an Assistant Director in the clinical pharmacology section of our medical research department.

We are looking for a candidate with a PhD degree and past clinical pharmacology experience in setting up Phase I and II trials, knowledge of FDA/PMA guidelines in new drug development and a good background in pharmacokinetics and drug metabolism.

You will be responsible for writing protocols for clinical pharmacology, pharmacokinetics, metabolism and bioavailability studies with new drugs in man: initiating and monitoring such studies and evaluating data obtained.

This position is located in our new research facilities on a 100 acre complex in suburban New Jersey. Excellent compensation/benefits program is offered. Send Curriculum Vitae with current earnings to Mr. R. Groben



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All equal opportunity employer M/F

# Wind Energy Program Staff

The California Energy Commission is immediately seeking a number of well-qualified individuals to staff an expanded program in **wind energy**. The program goals are 500 MW of wind-electric capacity in place in California by the middle 1980s and 10,000 MW by the 1995-2000 period. In support of this aggressive goal, the Energy Commission has initiated projects in wind resource assessment, and is soon to initiate technology demonstration and other appropriate areas in cooperation with other agencies, governments, and utilities.

To be considered for these interesting staff positions, applicants must have: (1) at least three (3) years of relevant experience including engineering, electric power, or meteorology. Technical project management experience is also required. Detailed knowledge of wind energy is not required, but a proven sound professional technical background is essential. A Bachelor's degree in engineering, meteorology or a related field is required, and (2) demonstrated ability to learn a new field, to work with people to develop, manage, and complete projects under time and money constraints. This is not a research oriented position.

Salaries are commensurate with experience, minimum salary payable \$1,556 monthly; maximum salary payable \$3,156 monthly.

All positions are located in Sacramento. Please send your resume to: **Ms. Connie Tatlock, California Energy Commission, 1111 Howe Avenue, M.S. 42, Sacramento, CA 95825** by no later than August 15, 1978.

an equal opportunity employer

# Teratologist

Ayerst Laboratories, a major ethical pharmaceutical firm, has an excellent career opportunity for a senior level teratologist/reproductive toxicologist. Working within our Toxicology Section, the individual selected will provide scientific input to the conduct and interpretation of reproductive toxicology studies, and perform final review of general toxicological projects.

Our facility is located in the scenic Adirondack Mountain-Lake Champlain region of N.Y. State, a friendly lower cost of living area, within a short drive to Montreal, Lake Placid Winter Olympic site and Vermont ski centers.

We offer a competitive starting salary with a full line of benefits, including dental and prescription plans and fully paid relocation and interview expenses.

Send resume & salary requirements to  
**Mr. Kerry McDonnell, Asst. Personnel Manager**

**Ayerst**

**Ayerst Laboratories**

Rouses Point, New York 12979

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## DIRECTOR OF SCIENTIFIC AND TECHNICAL INFORMATION SERVICES

Applications and nominations are invited for this position of leadership of a major federal government operating unit. Its function is to provide a variety of information products and services to industry, business, other governmental agencies, and to the general public.

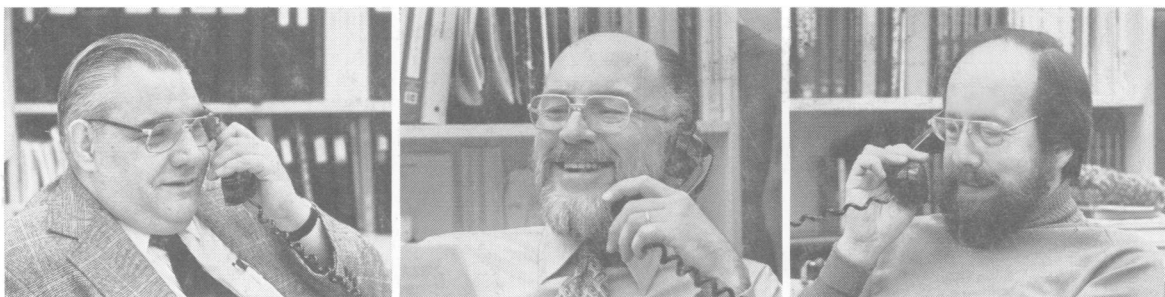
The director will be an experienced and successful manager, well-grounded in the technology, design, and operation of sophisticated, complex information systems. This will be an imaginative person of demonstrated creativity, able to motivate a large organization of professionals, and capable of developing and maintaining productive working relationships at the executive level in industry, government, and the user public.

Nominations and applications should include a résumé which outlines specific experience in policy formulation and program planning and execution.

Letters of interest, curriculum vitae, SF-171, list of publications, and references should be sent by 15 July 1978 to:

**Dr. Jordan J. Baruch**  
Assistant Secretary for Science and Technology  
Department of Commerce  
Washington, D.C. 20230

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ANWYL,

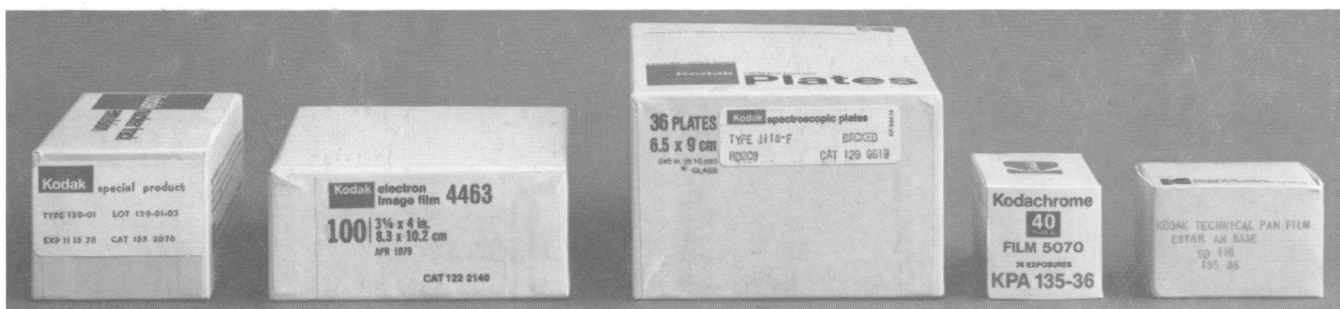
HAHN,

and SCOTT

## Too many words per dollar. Far too many words.

We use thoroughly up-to-date marketing methods. We make products to please the widest possible spectrum of humanity and place them in humanity's hand with an efficiency that only the most modern techniques can achieve. That is our policy. To this we are dedicated. That is the image we wish to present. And those three employees are not helping us do so.

They see themselves as missionaries for photography, a realm with vague boundaries. They market no equipment with nice \$50,000 price tags. They market what an accountant calls "supplies," yet they encourage a heart-to-heart chat before placing an order for products such as the following, announced during the past 12 months.



Kodak special product, type 129-01, for combination of autoradiography with transmission electron microscopy (TEM). 4-oz. bottle containing solidified emulsion shipped on a Monday or Tuesday directly from Rochester to the user. Under proper safelight conditions a few grams in distilled water warmed to liquefy, then allowed to cool. Slide dipped in bearing specimen section on collodion over conducting layer of carbon. Monolayer of silver halide crystals thus laid down, where previous product required centrifuging. Now, with just right dilution, monolayer turns out 85 nm thick with little overlap of crystals. Thickness and uniformity judged by interference color. Slide then left wrapped in refrigerator for up to a month while radioisotope exposes silver halide grains. No inert gas needed anymore because latent image decay is less than with previous product. Then develop, fix, wash, strip off collodion mount for TEM; see over what organelles blackening has occurred. More than twice as sensitive as previous product. Works best with iodine-125 or tritium. Less background blackening. "Special" in product name warns that progress in improving characteristics and quality control has not yet leveled off.

The more electrons used in painting a TEM image on photographic material the less grainy. Possibility of artifacts from broiling of specimen sets limit. Another limit set by need for negative not to approach uniform density all over. There we can help. Kodak electron image plate designed with this in mind. Glass plates don't outgas much to contaminate EM vacuum system, but neither do they bounce when dropped nor store as compactly as film. Estar film base is almost as good as glass for outgassing, but manufacturing problems arise in trying to duplicate photographic characteristics between film and plates. This nearest film equivalent dubbed "SO-163" while working on these problems. Now close enough to drop the "SO" business. Five sheet-film sizes generally in stock at headquarters.

From "Special" status, now Kodak spectroscopic plates, type IIIa-F, have emerged into the bright sunshine of our confidence. Literally, however, must be handled in total darkness. No Kodak commercial product is more sensitive to light. Statement requires qualification two ways: 1) 2- to 4-month delivery time for 36 plates (minimum order) still leaves it "commercial," 2) "sensitive" to weak light for long exposure rather than "fast" in freezing action by short exposure. "Speed" in sense of fewer hours instead of fewer microseconds can be further enhanced by pretreatment with hydrogen gas, in which case user had better take precautions against worse troubles than insufficient emulsion speed. This product not aimed at the impulse buyer. Very high resolving power, rather uniform sensitivity from 250 to 690 nm.

Replaces Kodachrome II professional film (type A) in 135-36 for lecture-grade color slides. One more notch of improvement in granularity, sharpness, and color quality with tungsten (3400 K) illumination—as long as one does not need the higher speeds of Kodak Ektachrome films and likes an elaborately equipped plant to do the processing. Some people simply prefer Kodachrome films to Ektachrome films unless minutes count. (You can process latter yourself in 37 minutes in a small tank if you can't turn to your own photo department or a local photographer who offers E-6 processing. About as complicated as histological staining. Scott claims that benefit of swift access with Ektachrome films exacts no price whatever in quality. Man noted for candor.)

By far our most versatile b&w film because 2 to 4 range of gamma attainable with conventional developers. Therefore several more specialized films we have been making no longer needed. Since more control now in user's hands, not recommended for users who shun darkrooms for fear of either boredom or feelings of inadequacy. Longtime favorites Kodak Panatomic-X film ( $\gamma$  limited to 1, sensitive to  $\lambda 625$  nm) and Kodak high contrast copy film (sensitive to  $\lambda 625$  nm) not discontinued. But now this Kodak technical pan film (Estar-AH base) SO-115 gives reasonably flat response to  $\lambda 680$  nm. Available also in 150-ft length and 4" x 5". Arousing too much customer enthusiasm to be held down long to "SO" status.

If we gave a phone number here, the temptation to phone first would be too strong and chances of getting through to whichever of these three gents can best answer your questions would decline further. It is therefore sparing of phone tolls and patience to see how many of those questions are answered on data sheets you will get by writing Kodak, Scientific and Technical Photography, Rochester, N.Y. 14650. Then phone if you still need answers. One or the other of the above gentlemen will be available in the flesh August 1 through 9 at the International Congress of Electron Microscopy in Toronto.

