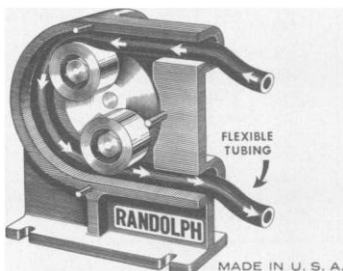


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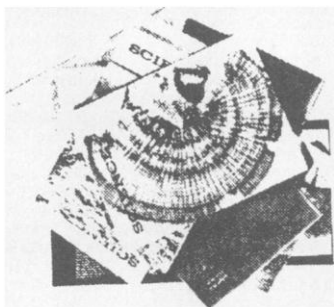
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POSITIONS WANTED

Biochemical Pharmacologist. M.S. protein biochemistry, CNS pharmacology. Experience in neurotransmitter metabolism, enzyme purification, and kinetic analysis. Broad life sciences background. Seeking research, editing, or media-related position. Box 261, SCIENCE. X

Biochemist. Foreign senior scientist; Ph.D., Wisconsin, 1957. Seeks teaching and/or research position, United States. Experience in enzymology, radioimmunoassay, immunology, drug interactions. Forty publications; location unimportant; salary requirements moderate; short or long term; available 1979. Box 262, SCIENCE. 8/11, 18

Biochemist. Ph.D. metabolism, enzymology. Interdisciplinary aptitudes: experimental nutrition, vitamins, immunochemistry, and microbiology. Broad experience, neat worker. Seeking industrial or institutional research position. Will relocate. Box 263, SCIENCE. X

Biologist (Microbiology). B.S. Broad interests and research experience with fungi, bacteria, toxins: pathogenicity, culture, therapy. Seeks position as an assistant in applied/basic research/development program in South or Southwest. Résumé and references upon request. Box 264, SCIENCE. 8/11, 18, 25

Immunologist/Cell Biologist. Ph.D. in microbiology. Experienced researcher in clinical and experimental tumor immunology, animal and human tissue culture cells, and cancer research. Box 252, SCIENCE. X

Neurophysiologist. Ph.D. Experience in mammalian motor function, sensorimotor integration, unit recording in chronic and acute preparations; publications. Desires research position in industry, government, or academic institution. Box 265, SCIENCE.

Rehabilitation Psychologist. M.S. Clinical psychology internship at New England Regional Spinal Cord Unit/University Hospital. Experience in neuropsychological assessment, individual and group psychotherapy with severely disabled and so forth. W. Deckel, 80 Litchfield Street, Number 8, Brighton, Mass. 02135. X

Vertebrate Biologist/Ecologist. Ph.D. Seeks teaching position in small college or university. Three years of experience in liberal arts college teaching comparative anatomy, embryology, ecology, vertebrate zoology, ornithology, and general biology. Box 266, SCIENCE. X

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Harding Laboratory, New York Botanical Garden. Administrator will hold Caspary Research Curatorship. Duties include administration of laboratory, research in one of the following areas: chemotaxonomy, experimental mycology, pathology. Participation in the Garden's graduate program and with systematic botany section is encouraged. To apply, send curriculum vitae and three letters of recommendation before 30 September 1978 to: **Dr. Ghillean T. Prance, New York Botanical Garden, Bronx, N.Y. 10458.** *Equal Opportunity/Affirmative Action Employer.* Salary commensurate with experience.

ANATOMIST

M.D. or Ph.D. with at least 2 years of postdoctoral experience in teaching and in independent research. Should be able to assist in the teaching of any of the branches of anatomy to medical and dental students. Special competence in neuroanatomy is desirable but not mandatory. Appointment will be made at the rank of assistant or associate professor. Apply with curriculum vitae and references before 31 January 1979 to: **Dr. S. M. Friedman, Department of Anatomy, The University of British Columbia, Vancouver, British Columbia, Canada V6T 1W5.**

ASSISTANT PROFESSOR

The Department of Chemistry, University of Delaware, invites applications for a tenure-track faculty position in the field of biophysics or biophysical chemistry. Research interests in macromolecules preferred; doctorate and appropriate postdoctoral experience required. Applicants should send a curriculum vitae including bibliography, a general statement of research interests, and the names and addresses of three referees (do not send letters of recommendation at this time) by 15 September 1978 to: **Faculty Search Committee, 105C Brown Laboratory, University of Delaware, Newark, Del. 19711.** *An Equal Opportunity/Affirmative Action Employer.*

BIOCHEMIST

Full-time senior faculty position in our Department of Biochemistry. Necessary qualifications include experience in teaching and an active research program. Apply to: **Alan Mehler, Chairman, P.O. Box 26509, Milwaukee, Wis. 53226.**

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Position open. **BIOCHEMISTRY INSTRUCTOR OR ASSISTANT PROFESSOR.** Candidates should have Ph.D. in biochemistry/physiological chemistry/molecular biology with active research program and competence in teaching human biochemistry and graduate biochemistry courses. Please send a résumé, names of three references, and a description of research interests before 15 September to: **Dr. Lewis Mokrasch, Department of Biochemistry, Louisiana State University Medical Center, New Orleans, La. 70112.** *Equal Opportunity/Affirmative Action Employer.*

BIOCHEMISTRY POSTDOCTORAL. Available immediately for the study of enzyme active site labeling and analysis of peptides containing active site residues. Salary to \$12,000. Send résumé and names of three references to: **J. S. Nishimura, Ph.D., Department of Biochemistry, The University of Texas Health Science Center at San Antonio, San Antonio, Texas 78284.** *An Affirmative Action/Equal Opportunity Employer.*

BIOMEDICAL ENGINEER for clinical department in major medical center, New York City. Should have experience with cardiorespiratory monitoring. Should also have experience in digital and analog design, computer interfacing, and data acquisition. Research experience preferred. Tuition exemption. Stipend competitive. Academic appointment possible. *An Equal Opportunity Employer.* Send résumé to:

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Columbia University
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New York, N.Y. 10032

POSITIONS OPEN

THE NEW ENGLAND DEACONESS HOSPITAL AND THE HARVARD MEDICAL SCHOOL are soliciting candidates for the position of CHAIRPERSON OF MEDICINE NEW ENGLAND DEACONESS HOSPITAL

Names of candidates with their curriculum vitae and bibliographies should be sent to:

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The New England Deaconess Hospital and the Harvard Medical School are Equal Opportunity Employers.

CHAIRMAN DEPARTMENT OF OBSTETRICS AND GYNECOLOGY GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE

The school is searching for a new chairperson for this important clinical department who will also be chief of the Obstetrical and Gynecologic Service of Georgetown University Hospital and director of the residency program. The department has several affiliated services including the District of Columbia General Hospital. Applicants should be experienced in the clinical specialty, teaching at the undergraduate and postgraduate levels, and in research. *Georgetown University is an Affirmative Action/Equal Opportunity Institution in employment and admissions.* Letters from interested persons or proposals for the position should be addressed to:

**John C. Harvey, M.D.
Chairman, Obstetrics/Gynecology Search Committee
Georgetown University Hospital
Washington, D.C. 20007**

DIRECTOR

Arizona-Sonora Desert Museum

Applications and nominations are invited for this position. The institution is a "living museum" interpreting the Sonoran Desert region, a unique combination of botanical garden, zoological park, and earth sciences center, with a strong commitment to education, conservation, research, public service, and cooperative programs with Mexico. The museum is a private, nonprofit corporation supported by admissions and donations with a staff of nearly 100.

Candidates must have demonstrated exceptional abilities for leadership, public relations, administration and fiscal management, and particularly the ability to work and communicate effectively at all levels, both inside and outside the organization. Major qualifications include: broad knowledge of the natural sciences, preferably including familiarity with deserts and desert ecology, and practical experience in conservation, in education, and interpretation. Advanced degree desirable. Salary commensurate with experience and qualifications. Applicants should submit a résumé, appropriate statement of interests, and names of five references to: **Arizona-Sonora Desert Museum Search Committee, P.O. Box 41447, University Speedway Station, Tucson, Arizona 85733.** *An Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applications are solicited for **FACULTY POSITIONS** in: **BIOCHEMISTRY (#129)—Professor and Head:** Department of Biochemistry. Will lead development of medical, dental, and graduate student education and the creation of strong biomedical research program. Strong background in the area of biochemical research required. **PHYSIOLOGY (#130)—Associate Professor or Professor:** teaching responsibilities and research in cardiovascular, neural, or renal physiology. Ph.D. or M.D. and 2 years or more of postdoctoral training.

Applicants should send curriculum vitae, identifying vacancy number for which they are applying, to: **Dr. Thomas N. Lynn, Dean, College of Medicine, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Oklahoma 73190.** *We are an Equal Opportunity Employer.*

POSITIONS OPEN



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HSC positions are open equally to men and women.

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The Department of Biology, University of Virginia, is seeking candidates in the areas of molecular, cellular, or developmental botany for an assistant professorship for September 1978. Postdoctoral experience is highly desirable. By 1 November 1978, candidates should send curriculum vitae and summary of research plans and have three letters of recommendation sent to: **L. I. Rebhun, Faculty Search Committee, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, Va. 22901.** An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF PATHOLOGY

The candidate should be an academically trained pathologist and must be Board-certified or -eligible in anatomic pathology. Must have had experience in teaching medical students and residents as well as in research. Experience and interest in diagnostics electron microscope is required. Please respond to: **Chairman, Pathology Department, Temple University School of Medicine, Philadelphia, Pa. 19140.** Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOLOGICAL LABORATORY TECHNICIAN (NEUROPHYSIOLOGICAL). Permanent federal Civil Service career position (GS-9, \$15,090) in New Orleans, Louisiana. Persons with experience in experimental and analytic CNS neurophysiology (EEG, evoked potentials) and familiarity with computerized processing of large amounts of scientific data (FORTRAN) are invited to submit a SF-171 (obtainable from your local Job Information Center, consult local telephone directory for toll free number) to: **U.S. Civil Service Commission, New Orleans Area Office, 610 South Street, New Orleans, Louisiana 70130.**

University of California, Los Angeles (UCLA), School of Medicine seeks appropriate candidates for the **DELLA MARTIN CHAIR IN PSYCHIATRY**, newly endowed professorship for distinguished academic psychiatrist (English-speaking, eligible California licensure) committed to research especially on major mental illnesses of adolescents and young adults. *Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae, letter discussing career goals, and five references to:

Arnold B. Scheibel, M.D., Chairman
Della Martin Search Committee
760 Westwood Plaza
Los Angeles, California 90024

CHAIRPERSON. The UNIVERSITY OF CENTRAL ARKANSAS invites applications or nominations for the position of chairperson of the Department of Biology. An applicant should hold the Ph.D. in a biological science, have a distinguished academic background, have a record of effective teaching, and other scientific accomplishments in one or more areas of biological science. The applicant should also have broad experiences and interests in order to provide leadership and coordination for a 12-person department with diverse scientific backgrounds. Correspondence concerning the position should be sent to: **Dr. Richard A. Collins, Search Committee Chairman, Department of Biology, University of Central Arkansas, Conway, Arkansas 72032.** Completed applications should be submitted by 1 December 1978. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

The Uniformed Services University of the Health Sciences invites applications for the **CHAIR** position, Department of Pathology. Candidates should have broad experience in teaching and documented expertise in laboratory or clinical research in pathology. Excellent facilities for support of teaching and research programs plus opportunity to recruit additional faculty members to the department. Salary is competitive with other medical schools in the Washington, D.C., area. Address inquiries with complete curriculum vitae and bibliography by 1 September to: **Dr. Francis Haddy, Chairman, Pathology Search Committee, c/o Personnel Office, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Md. 20014.** *Equal Opportunity/Affirmative Action Employer.*

ENGINEERING MANAGER. Washington, D.C.-based company is seeking an exceptional manager to adapt and develop company capabilities to effectively meet requirements of a significant energy conversion contract plus develop other Department of Energy work opportunities. Starting salary to \$45,000. Send résumé, including salary history, to: **Box 259, SCIENCE.** *Equal Opportunity Employer, M/F.*

CLARK COLLEGE

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DIRECTOR NATIONAL AIR AND SPACE MUSEUM SMITHSONIAN INSTITUTION

Applications are invited for the position of director of the National Air and Space Museum of the Smithsonian Institution, Washington, D.C. The grade for this position within the Federal Civil Service will be GS-17 or GS-18 and the salary will be \$47,500.

Major responsibilities include the formulation and carrying out of basic policy and long-range plans for the growth, care, and exhibition of the museum's collection of objects relating to the history of aeronautical and space flight, including research, education, and publication projects; the formulation and administration of federal and trust fund budgets and employment plans; the recruitment and development of professional and nonprofessional staff; and provision of the strong intellectual leadership, vision, and management necessary for excellence in all aspects of the museum's work. The museum's staff numbers 230 and the annual budget totals over \$6 million.

In carrying out all of these responsibilities, the director must work closely and constructively with the staff of the museum and with the administration of the Smithsonian Institution, and must be able to represent the museum and the institution effectively in dealing with the public, the Congress, government agencies, and professional organizations.

While recognizing that different individuals can bring to this position different combinations of personal qualities, talents, and experience, the search committee will be looking particularly for evidence of scholarly distinction in one of the fields represented in the museum, administrative ability, and familiarity with the special opportunities and problems of museums. A record of distinguished scholarly publication, the successful administration of a large and complex organization, and experience working with collections and exhibitions would constitute such evidence. In any event, applicants should possess a national reputation in their chosen fields of endeavor.

Applications, including a Civil Service Commission Form 171, Personal Qualifications Statement, should be submitted by 29 September 1978, to the following address: **Office of Personnel Administration, Attention: Search Committee, Room 1410, Arts and Industries Building, 900 Jefferson Drive, SW, Washington, D.C. 20560.** A Standard Form 171 may be obtained from any federal government or U.S. Postal Service personnel office.

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BIOCHEMISTRY POSTDOCTORAL. Available immediately for study of structural-functional interrelationships in mitochondrial oxidative phosphorylation. Emphasis on the use of photoaffinity labels and gel electrophoresis. Experience in organic synthesis and radioisotope technology required. Salary: \$10,000. Send résumé and names of three references to: **Juan J. Graña, Administrator, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, Pa. 19104.**

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Available September 1978.

Send résumé and three references by 15 September to: **Dr. Albert Tyler, Department of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon 97331.**

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FOREST OR PLANT ECOLOGIST. One-year, temporary position; starting 4 September 1978, for Ph.D. to teach courses in general biology, botany, dendrology, ecology, and conservation. Send curriculum vitae, transcripts, and letters of reference to: **Preston Somers, Department of Biology, Fort Lewis College, Durango, Colorado 81301. Equal Opportunity/Affirmative Action Employer.**

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IMMUNOLOGIST—Position open for a Ph.D. or M.D. at the Assistant Professor level. Joint appointment available in Department of Medicine for M.D. Candidate should be able to conduct active research program contributing to departmental interests in cellular and molecular biology. Participation in graduate and medical teaching required. Send correspondence to: **Dr. Morton M. Weber, Department of Microbiology, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, Missouri 63104. Equal Opportunity/Affirmative Action Employer, M/F/Handicapped.**

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MICROBIOLOGIST. Assistant professor for research on anaerobic digestion of wastes and environmental and health aspects of waste handling and treatment methods. Some teaching a possibility. Ph.D. in microbiology required. Available 1 September 1978. Deadline for applications: 25 August 1978. Contact: **Dr. Leroy Day, Department of Agricultural Engineering, 100 Agricultural Engineering Building, University of Missouri-Columbia, Columbia, Missouri 65211.**

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Applications are invited for immediate postdoctoral assignments related to the study of the metabolism, binding, and DNA repair capacity of hydrocarbons in vivo. Experience in: organ and cell culture of mammary tissue; molecular biology of gene expression; DNA repair in vivo; quantitative radioautography; immunofluorescence; DNA metabolism and binding desired. All appointments are for a minimum of 1 to 2 years, but may be prolonged for up to 3 years. Salary range is negotiable. *We are an Equal Opportunity Employer.* Applications should be sent as soon as possible to:

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THREE POSITIONS available. **Protein chemist** for investigation of sequence and modification of enzymes; **enzymologist** for investigation of enzyme mechanism; **cell biologist** for investigation of the role of lipids in cultured cells. Positions may be renewed for 2 to 3 years and may lead to academic appointment. Salary negotiable. Applicants submit curriculum vitae and references to: **Dr. S. Wakil, Department of Biochemistry, Baylor College of Medicine, Houston, Texas 77030. Equal Opportunity Employer.**

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**Dr. Chester Karwoski
Psychology Department
University of Georgia
Athens, Ga. 30602**

POSTDOCTORAL ASSOCIATE

Postdoctoral associate in biochemistry available immediately to study mechanisms of biosynthesis of mucin glycoproteins in lung and tumor tissues. Salary dependent on experience, starting at \$12,000. Send curriculum vitae and references to: **Dr. J. Mendicino, Department of Biochemistry, University of Georgia, Athens, Georgia 30602. Equal Opportunity Employer.**

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As an M.D. or D.V.M. with 10-15 years of experience in cell biology, pathology, and pharmacology relative to toxicology, you could become Director of the Warner-Lambert/Parke-Davis Research Institute of Canada. Utilizing your administrative experience in a toxicology unit, you'll have total responsibility for the organization, direction and control of the Institute, which is engaged in toxicology, pathology, and safety studies (new products, pharmaceuticals, consumer goods, devices).

DIRECTOR, GENETIC TOXICOLOGY (Ann Arbor)

In this recently-created position, you'll organize and direct a group for the genetic toxicology testing of new drug candidates and chemical entities. Your Ph.D. and 1-5 years of direct laboratory involvement (academic or industrial) with bacterial and mammalian cell systems will be utilized.

PATHOLOGIST (Ann Arbor)

Reporting directly to the Director of the Pathology Section, as a diagnostic pathologist you'll assess tissue changes in toxicology/pharmacology studies, interpret findings, and correlate experimental results. Your basic background must include an M.D. or D.V.M. degree and 1-5 years of academic or industrial laboratory experience. (Board certification/eligibility, knowledge of electron microscopy, and/or quantitative microscopy would be plusses.)

Take the first step toward these personally and professionally rewarding career positions — send your resume and salary history/requirements in confidence to:

Mr. Dave Misner, Personnel Supervisor
WARNER-LAMBERT/PARKE-DAVIS
RESEARCH LABORATORIES
2800 Plymouth Road, Ann Arbor, Michigan 48106
An Equal Opportunity Employer M/F



Warner-Lambert

DEPUTY ASSISTANT ADMINISTRATOR FOR ENERGY, MINERALS, AND INDUSTRY

The U.S. Environmental Protection Agency (EPA) is seeking a deputy assistant administrator for energy, minerals, and industry within the Office of Research and Development. The deputy assistant administrator is responsible for the research and development policies regarding control and abatement of adverse impact on the human environment related to the development and utilization of energy systems and nonrenewable resources.

Candidates must have a bachelor's or higher degree in physical science, engineering, or mathematics, including 24 semester hours of physical science and/or closely related engineering science as well as broad knowledge of the environmental aspects of energy systems. At least three or more years of professional experience are required, 1 year of which must have been at a level of difficulty comparable to the next lower level in the federal service.

In addition, the mandatory criteria must be met to be considered minimally qualified for the position. An applicant who receives an unacceptable rating on one or more of the mandatory criteria is rated ineligible and will receive no further consideration. The mandatory criteria require:

- 1) Experience in administering national programs preferably in energy/industrial research or related fields,
- 2) Demonstrated ability to manage a technical staff in the direction of program/investigations related to the environmental aspects of energy systems, and
- 3) Demonstrated ability to communicate effectively both orally and in writing.

Conditions of employment: appointees may be subject to reassignment or relocation and will be required to sign a mobility agreement. Nonstatus or status applicants appointed through the outside search procedure will be subject to a 2-year probationary period.

Location: Washington, D.C. Salary range: GS-17/18: \$47,500, plus Civil Service benefits.

Contact: please send a detailed Standard Form 171 (Personal Qualifications Statement), which is available in Federal Job Information Centers and federal government personnel offices (RESUMES CANNOT BE ACCEPTED EXCEPT IN CONJUNCTION WITH THE SF-171), to reach EPA no later than 7 September 1978, to:

Barbara Perkins (PM-212)
Personnel Management Division
Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460
An Equal Opportunity Employer

Analyst

PhD Level

Exxon Enterprises Inc., the new business development arm of Exxon Corporation, has a unique opportunity for a PhD-level engineer or scientist. The skilled analyst we seek will develop analyses to model the performance of thermodynamic machinery. These analyses, based on both theory and empirical data, will encompass thermodynamics, fluid mechanics, heat transfer and mechanics-dynamics and will constitute a fundamental understanding of the phenomena involved.

The chosen candidate will also be responsible for the conversion of the analyses into computer codes and to interact with and contribute to laboratory efforts to gather empirical data.

Our new project facilities are located in Florham Park, N.J., a suburban area just 50 minutes from New York City. This high visibility-growth position also offers a comprehensive compensation and benefits package. For confidential consideration, please send resume, including salary history, to: Exxon Enterprises Inc., Department MD-56, P.O. Box 192, Florham Park, New Jersey 07932.

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**ASSOCIATE DIRECTOR
FOR ACADEMIC AFFAIRS**
University of Maryland
Center for Environmental and
Estuarine Studies (CEES)

Institution: CEES is a branch of the university engaged in research, public service, and education in terrestrial, freshwater, estuarine, and marine ecology. Director reports to the president of the university system. Primary emphasis is on biological subjects. There are 40 tenure-line faculty out of 160 employees at four laboratories located throughout the state. Administrative headquarters are housed at a former Du Pont estate on the Choptank River near Cambridge, Maryland. Annual expenditures are \$4 million, half from general revenues and half from sponsored programs.

Position: senior staff officer for academic affairs, reporting to CEES director. Eligible for full professorship. Reviews, evaluates, plans, and develops research and educational programs. Represents director on occasion before university, public, and government.

Qualifications: earned terminal degree preferably in ecology or other life science. Established record of scholarly publications. Direct experience with graduate and undergraduate education and with sponsored research. Evidence of potential for program planning and development. Experience in academic administration preferred but not mandatory.

Schedule: available fall 1978. Deadline for applications and nominations: 30 September 1978. Application must include résumé, bibliography, and suggested references.

Contact:

Dr. Joseph A. Chapman
Head and Professor
Appalachian Environmental Laboratory
Center for Environmental and Estuarine Studies
Gunter Hall
Frostburg State College
Frostburg, Maryland 21532

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CHAIRMAN DEPARTMENT OF PEDIATRICS

THE UNIVERSITY OF CHICAGO
PRITZGER SCHOOL OF MEDICINE

Applications are invited for the position of Chairman of the Department of Pediatrics, The University of Chicago—Pritzger School of Medicine. Send letters of application and supporting information to:

ARTHUR L. HERBST, M.D.
Department of Obstetrics
and Gynecology, CLI 255

THE UNIVERSITY OF CHICAGO PRITZGER SCHOOL OF MEDICINE

950 East 59 Street
Chicago, Illinois 60637

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POSITIONS OPEN

POSTDOCTORAL POSITION IN DEVELOPMENTAL: PERINATAL BIOLOGY. Unexpected opening for recent Ph.D. to work with multi-disciplinary group concerned with biochemical differentiation and ontogeny of hormone influences in lung and other tissues. Two to 3 years of biochemical experience desired. Experience in cell and organ culture techniques and energy metabolism desirable but not essential. Opportunities to gain familiarity with human developmental disease and research approaches to them. U.S. citizen or immigrant requirement. Send résumé and three letters of recommendations to:

Dr. Joseph B. Warshaw
Division of Perinatal Medicine
Yale University School of Medicine
New Haven, Conn. 06510

POSTDOCTORAL POSITION available immediately for a recent Ph.D. (biochemistry/immunology) to study homeostatic mechanisms controlling the size both of the total lymphocyte population and of individual lymphocyte clones. Experience of cell culture, complement, and protein purification helpful. Salary: approximately \$12,000 per annum for 2 years. Send curriculum vitae and names of two references to: **Dr. D. R. Forsdyke, Department of Biochemistry, Queen's University, Kingston, Ontario, Canada K7L 3N6.**

POSTDOCTORAL POSITION

Seismologist to participate in investigation of local and regional seismic events, using CEDAR system. Skills in real time processing of large volumes of digital data, and computer-based data management highly desirable. Send curriculum vitae to: **Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, California 91125.** *Caltech is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL/RESEARCH ASSOCIATE. The American Health Foundation is seeking a recent Ph.D. in biochemistry, trained in analytical biochemistry, to participate in studies on the etiology of colon cancer. The applicant should have experience in modern analytical methodology and in organic chemistry, with knowledge of mutagen bioassay. Send résumé in confidence to: **Dr. B. Reddy, American Health Foundation, Naylor Dana Institute for Disease Prevention, Dana Road, Valhalla, N.Y. 10595.** *An Equal Opportunity Employer, M/F.*

POSTDOCTORAL/RESEARCH ASSOCIATE

Protein biochemist/immunochemist. Immediate opening in group interested in membrane changes in transformation proliferation and differentiation, mammalian cells, surface labeling, 2-D gel work, IEP, immunocytochemistry, and EM. Salary open. **Dr. L. T. Furcht, Department of Laboratory Medicine and Pathology, Box 609 Mayo, University of Minnesota, Minneapolis, Minn. 55455.**

PROTEIN CHEMIST—IMMUNOLOGIST

Applications are being reviewed for the position of **scientific director** for a major producer of immunological reagents. Candidates should have several years of post training experience in production and assessment of antisera. Duties include: (i) responsibility for production management, (ii) new product development/research, (iii) education, (iv) interfacing with sister scientific organizations, (v) participation in the company planning process, and (vi) travel as part of a management team. Individual should be comfortable in supervisory role, a self-starter, not afraid of hard work, and enjoy the benefits of northern New England. Send curriculum vitae and names of three references to: **The Foundation for Blood Research, Box 426, Scarborough, Maine 04074.** Telephone: 207-883-4362.

VETERINARIAN—IMMUNOLOGIST

Applications are invited for candidates for **operations director** of a large animal facility involved in the production of immunological reagents. Duties include: (i) responsibility for herd (goats) health management, (ii) involvement in multidisciplinary programs involving sister corporations, and (iii) participation in the general company planning process. An unusual opportunity for investigation into the immune response is available. Individual should be comfortable in a supervisory role, a self-starter, not afraid of hard work, and enjoy the benefits of northern New England. Send curriculum vitae and names of three references to: **The Foundation for Blood Research, Box 426, Scarborough, Maine 04074.** Telephone: 207-883-4362.

POSITIONS OPEN

POSTDOCTORAL POSITION IN ELECTRON MICROSCOPY available immediately, duration 2 to 3 years. Research area: freeze-fracture on cell junctions in cultures of endothelial and other vascular cells. Background: Ph.D. in cell biology; facility with freeze-fracture essential; some postdoctoral experience desirable. Salary commensurate with experience. Send curriculum vitae to: **Dr. Judson D. Sheridan, Genetics and Cell Biology, University of Minnesota, 14 Zoology Building, 318 Church Street, SE, Minneapolis, Minn. 55455.**

The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION—NEUROCHEMISTRY. Position available September 1978, for biochemist/pharmacologist. Salary: \$11,000 per year. Appointment is for 1 year, renewable up to 2½ years. Project deals with cyclic nucleotides and biogenic amine metabolism in relation to animal models of aggressive behavior. Send curriculum vitae, description of current research interest, and names of two references by 1 September to: **Dr. Burr Eichelman, Wisconsin Psychiatric Research Institute, Room 609, 1500 Highland Avenue, Madison, Wisconsin 53706.**

POSTDOCTORAL RESEARCH

A postdoctoral position for training in male reproductive endocrinology is available in the Department of Population Dynamics at The Johns Hopkins University School of Hygiene. Interested individuals should send curriculum vitae and a description of research interests to: **Dr. Larry L. Ewing, Head, Division of Reproductive Biology, Department of Population Dynamics, The Johns Hopkins University School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Md. 21205.**

RESEARCH ASSOCIATE. Immediately available to study the genetic control of the biosynthesis and ontogeny of hemoglobin. A primate model for the stimulation of fetal hemoglobin synthesis in adults is being developed. Must have experience in cell separation and cell culture techniques. Send curriculum vitae and three letters of recommendation to: **Dr. J. DeSimone, Center for Genetics, University of Illinois College of Medicine, Chicago, Ill. 60612.**

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

RESEARCH ASSOCIATE

A position of research fellow available immediately: recent Ph.D. biochemist interested in protein biosynthesis and affinity labeling of ribosomes. Send résumé and three letters of reference to:

Dr. S. Chladek
Michigan Cancer Foundation
110 East Warren Avenue
Detroit, Michigan 48201

RESEARCH ASSOCIATE position available immediately for Ph.D. with training in neurophysiology to conduct research on the limbic system and nociception in primates and rodents using electrophysiological and metabolic mapping (14C-deoxyglucose) techniques. Send curriculum vitae and references to: **Charles E. Poletti, M.D., Assistant Professor of Surgery, Harvard Medical School, Massachusetts General Hospital, Fruit Street, Boston, Mass. 02114.**

RESEARCH ASSOCIATE. A postdoctoral position starting 11 September 1978 or thereafter, is open for a biophysicist or biochemist to study physical properties of chromatin and chromosomal proteins. This work will include the use of fluorescence time decay measurements. Please send curriculum vitae and references to: **Enoch W. Small, Department of Biochemistry and Biophysics, Oregon State University, Corvallis, Oregon 97331.** *Oregon State University is an Affirmative Action/Equal Opportunity Employer which complies with Section 504 of the Rehabilitation Act of 1973.*

SENIOR SCIENTIST—DEPARTMENT OF PARASITOLOGY. Ph.D. degree in parasitology with emphasis on protozoology is required. A minor in biochemistry is desirable. Candidate should have the ability to maintain and innovate changes in *in vitro* tissue culture systems. Our facility is located in a semi-rural community approximately 20 miles east of downtown Indianapolis. Please send résumé to: **Joseph S. Quince, Personnel Representative, Eli Lilly and Company, P.O. Box 708, Greenfield, Indiana 46140.** *An Equal Opportunity Employer.*

The U.S. Army Institute of Surgical Research located at Fort Sam Houston, Texas projects a few openings for internists with sub-specialty training in Nephrology, Cardiology, Gastroenterology, and Infectious Diseases. USAISR also has an opening for a General Surgeon with interests in trauma and burns. Depending upon interest and experience the positions involve both primary patient care in the field of trauma and burn injury and clinical and laboratory research. Applicants must be fully trained or board certified in their respective specialty—sub-specialty and be willing to accept commissioned appointment and active duty in the U.S. Army. Pay and grade depends upon experience and credentials, with initial salary approximately \$35,000.00 a year. For further details contact Colonel Basil A. Pruitt, Jr., Commander/Director, U.S. Army Institute of Surgical Research, Brooke Army Medical Center, Fort Sam Houston, Texas 78234 (512) 221-2720/221-2340.

Sr. Scientist

Ph.D. in Pharmacology, Neurosciences or Psychology required

Our Pharmaceuticals Division has an excellent senior position now open in the Pharmacology Department for a person with 1-3 years postdoctoral CNS research experience. Background in an industrial environment, such as pharmaceutical research or related, would be an added plus.

The candidate selected will supervise laboratory and support staff presently evaluating experimental agents with operant techniques. The appointee will be encouraged to pursue research interests in behavioral and neurological animal models for detection of anti-depressants and anti-anxiety agents.

Successful applicant will be based at our Central New Jersey facilities, and receive a compensation commensurate with education and experience, together with a program of comprehensive company paid benefits.

If your background meets the requirements stipulated, please send Curriculum Vitae indicating salary requirements in confidence to: Mr. C. R. Grupe, The Pharmaceuticals Division of CIBA-GEIGY Corporation, 556 Morris Avenue, Summit, New Jersey 07901. We are an equal opportunity employer/male and female.

CIBA—GEIGY

JOINT APPOINTMENTS IN SATELLITE-RELATED OCEANOGRAPHY

Three positions are available carrying joint appointments at the Jet Propulsion Laboratory (JPL) and the Scripps Institution of Oceanography (SIO) for research in a broad area covering the range from ocean-climate interactions and physical/biological oceanography to the development of ocean remote sensing capabilities. These positions will bring together the remote sensing expertise of JPL with the research expertise in oceanography of SIO. At SIO, the appointments will be at the level of Professor (carrying one-third tenure), Adjunct Professor or Research Associate. At JPL, the positions will be on the research staff with ranks comparable to those of the SIO appointments. Appointees will have responsibilities at both institutions. Applicants must meet the normal requirements for an academic appointment, interact effectively with other JPL and SIO scientists, and advise and assist the management of JPL and NASA Headquarters on the long range planning of ocean related programs. Salaries and compensation are negotiable. Inquiries and resumes should be sent to either of the following:

Dr. M. T. Chahine
Chairman, Oceanography
Search Committee
Jet Propulsion Laboratory
183-301
4800 Oak Grove Drive
Pasadena, California 91103

Telephone: 213-354-2433

Dr. W. Munk
Associate Director of IGPP
Scripps Institution of
Oceanography
Mail Code A-025
La Jolla, California 92093

Telephone: 714-452-2877

AN EQUAL OPPORTUNITY EMPLOYER.

Four postdoctoral fellowships of two years duration available immediately. Qualifications: M.D. with an approved Ophthalmology residency, or Ph.D. with background in physiology, biophysics, immunology, or related areas. All candidates must be permanent residents of the USA and be committed to a career in academic medicine or visual science research for at least two years after completion of training. Stipend range—\$10,000-\$12,000 depending upon P.G. level.

Dr. Albert Potts: 1) the optic nerve, or 2) ophthalmic toxicology, or 3) the VER, or 4) experimental glaucoma surgery.

Dr. Theodore Lawwill: 1) clinical ERG, VER: development of diagnostic techniques, or 2) retinal damages from light, or 3) visual processing in the amblyopic eye.

Dr. Carolyn Kalsow: Autoantigens of the uvea and retina, and their relationship to experimental allergic uveitis (EAU) and human uveitides.

Dr. John Gamel: 1) Application of computer analysis to ophthalmic pathology, or 2) practical experiments in gross and microscopic examination of pathologic ocular specimens. (Minimum qualifications: M.D., with Ophthalmology P.G. Level II, completed or Ophthalmology basic sciences course completed.

Send resume to: Diana Hammond

Academic Business Administrator
University of Louisville
Department of Ophthalmology
301 E. Walnut Street
Louisville, Ky. 40202 USA

The University of Louisville is an equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

SENIOR ENVIRONMENTAL ENGINEER/BIOLOGIST

Progressive engineering firm has a position available in development and application of ecosystem evaluation models. Competitive salary and career growth potential. Responsible experience in quantitative analysis, modeling aquatic ecosystems, and power plant impact assessment is required. Ph.D. preferred. For consideration submit résumé and salary requirements in confidence to: **Dr. Marc Lorenzen, Tetra Tech, Inc., 3700 Mount Diablo Boulevard, Lafayette, Calif. 94549. An Equal Opportunity Employer, M/F.**

URBAN HORTICULTURIST/POMOLOGIST

Assistant or associate extension professor, University of Idaho. Permanent tenure-track position. Ph.D. preferred. M.S. with experience may be considered. Urban horticulture at least 60 percent time, remainder in pomology. Location: headquartered in Boise with additional office at the Southwest Idaho Research and Extension Center, Parma, Idaho. For further information contact:

**Chairman, Search Committee
Urban Horticulturist/Pomologist Position
Department of Plant and Soil Sciences
University of Idaho
Moscow, Idaho 83843**

Position will remain open until an acceptable candidate is selected.

Affirmative Action/Equal Opportunity Employer

COURSES

MARINE BIOLOGICAL LABORATORY Woods Hole, Massachusetts

will conduct a residential laboratory course
**QUANTITATIVE ANALYSIS OF
ELECTRON MICROGRAPHS**
Stereology, Morphometry, Optical Diffraction,
and Three-Dimensional Reconstruction
12 to 17 November 1978

The program will provide both theoretical background and extensive laboratory practice in supplemental image analysis applied to electron microscopy, especially of thin sections. Participants may analyze their own data in tandem with prepared materials. There will be ample opportunity for individual consultation with the faculty.

The instructor in chief is Dr. Lee Peachey from the University of Pennsylvania, who will present this course for the second time at Marine Biological Laboratory (MBL). Other faculty include Dr. Brenda Eisenberg of the Rush College of Health Sciences and Dr. John Haselgrove of the University of Pennsylvania.

Attendance is limited to 20 participants.

Application materials and additional information are available from: **Office of Admissions, MBL, Woods Hole, Mass. 02543. Telephone: 617-548-3705.**

Equal Opportunity/Affirmative Action Institution

COLLOQUIUM

SECOND INTERNATIONAL COLLOQUIUM ON MARS

The Jet Propulsion Laboratory and the California Institute of Technology will host the Second International Colloquium on Mars in Pasadena, California, from 15 January to 18 January 1979. The first such colloquium was held in 1973 after the conclusion of the American and Soviet missions of 1971-1972. With the four Viking spacecraft coming to the end of their operations in the next few months and the volume of published papers resulting from the mission rapidly increasing, this colloquium will provide a timely opportunity for planetary scientists to meet, to explore many of the new questions raised by the Viking findings, and to consider what needs to be done in analyzing the data now available and in carrying on the further exploration of the planet.

Attendance will be limited to approximately 500 American and foreign scientists who are active in the investigation of Mars. The organizing committee is now being formed under the cochairmanship of Professor Thomas A. Mutch of Brown University and Dr. Conway W. Snyder of the Jet Propulsion Laboratory. The agenda of the colloquium will be published about the end of August.

SYMPOSIUM

SYMPOSIUM ON BIOMEDICAL APPLICATIONS OF *LIMULUS POLYPHEMUS* (HORSESHOE CRAB)

The symposium will be held at the Marine Biological Laboratory, Woods Hole, Massachusetts, 7 to 9 October 1978. Topics: biology and ecology; biochemistry of reaction between bacterial endotoxin and amoebocyte lysate; clinical and pharmaceutical applications and specificity of *Limulus* amoebocyte lysate (LAL) test; bacterial agglutinins; identification of mammalian cell receptors, applications biochemistry, biophysics of agglutinins.

For details and registration forms, contact: **Dr. Elias Cohen, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, N.Y. 14263. Telephone: 716-845-5778.**

Limited accommodations, register before 1 September 1978.

PRELIMINARY PROPOSALS

DEADLINES FOR PRELIMINARY PROPOSALS TO THE INTERNATIONAL DECADE OF OCEAN EXPLORATION SECTION NATIONAL SCIENCE FOUNDATION (NSF)

The deadline for preliminary proposals for fiscal year 1980 (the final year of the program) research support from the International Decade of Ocean Exploration Section of NSF's Division of Ocean Sciences is 15 September 1978. Information on the guidelines and procedures for submission and review of these preliminary proposals may be obtained from:

**Division Director
Division of Ocean Sciences
National Science Foundation
Washington, D.C. 20550
Telephone: 202-632-5913**

PROGRAMS

PROFESSIONAL PROGRAM: DOCTOR OF OPTOMETRY (O.D.). Accelerated program of two calendar years specifically designed for the Ph.D. in the sciences to earn the O.D. degree. Excellent opportunities in health-related teaching and research; opportunity for an independent professional career. Program starts June 1979. **Division of Vision Sciences, The New England College of Optometry, 424 Beacon Street, Boston, Mass. 02115. Telephone: 617-261-3430, extension 34.**

TRAINEESHIPS

POSTDOCTORAL TRAINEESHIPS IN NEURAL AND BEHAVIORAL SCIENCES

Traineeships are available in anatomy, pharmacology, physiology and biophysics, psychology, zoology, and related disciplines through an interdisciplinary U.S. PHS-NIMH Neurobehavioral Sciences Program Grant. Applicants should have a strong commitment to research in the neural and behavioral sciences. Applications, consisting of a statement of research interests, curriculum vitae and three references, must be made by 1 September 1978. Apply to: **The Neural and Behavioral Sciences Committee, 201J Gilmore Hall, The University of Iowa, Iowa City, Iowa 52242. The University of Iowa is an Equal Opportunity Employer.**

FELLOWSHIPS

The U.S.-Spanish Joint Committee for Scientific and Technological Cooperation announces that **RESEARCH GRANTS** to American postdoctoral scientists for work in Spain will be available for the period between 1 November 1978 and 31 October 1979. These grants will be available for work in agriculture, natural resources, oceanography, environment, urban and regional planning, industrial technology, energy, biomedical, and basic science. Applicants should be prepared to furnish evidence of acceptance by a Spanish university or research center. Applications must be postmarked before 22 August 1978.

Application forms may be obtained from: **Charles Gorsey, OES/APT, Room 4327A, Department of State, Washington, D.C. 20250. Telephone: 202-632-9042.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP IN NEUROANATOMY

Candidates with an M.D. or Ph.D. degree in anatomy or other related biological science will be considered for postdoctoral training in neuroanatomy. Fellowships for 1 year are renewable. Send curriculum vitae to: **Malcolm B. Carpenter, M.D., c/o Personnel/Manpower, School of Medicine, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Md. 20014. Equal Opportunity/Affirmative Action Employer.**

ENDOCRINOLOGY/METABOLISM

Postdoctoral NIH-supported research fellowships (up to 3 years duration) are available in endocrinology/metabolism at Mayo Foundation. Candidates must have M.D., Ph.D., or equivalent degree, be U.S. citizens or permanent residents, and be committed to academic careers. More than 20 faculty members represent basic and clinical research interests in all areas of endocrinology and metabolism. Clinical training programs can be arranged for M.D. applicants. *Mayo Foundation is an Equal Opportunity/Affirmative Action Institution.*

Stipends begin at \$13,900 and up, depending on experience. Available 1978. Send curriculum vitae and brief statement of research interests and career goals to:

**Dr. Colum Gorman
Endocrinology/Metabolism
Training Program
Mayo Clinic
Rochester, Minn. 55901**

NIH POSTDOCTORAL FELLOWSHIP POSITIONS available for qualified M.D. or Ph.D. candidates. Biochemistry or cell biology background preferred. Five senior faculty concerned with mode of action of steroid and peptide hormones. Send curriculum vitae, bibliography, statement of career goals, and names of three references to: **R. J. Ryan, M.D., Department of Molecular Medicine, Mayo Medical School, Rochester, Minnesota 55901. Mayo Foundation is an Equal Opportunity/Affirmative Action Institution.**

POSTDOCTORAL FELLOWSHIP available immediately for investigations into the mechanism and regulation of bulk membrane transport (micropinocytosis) in capillary endothelium. Background in membrane isolation methods and analysis, fluorescence spectroscopy, and enzymology would be desirable but not required. Annual stipend up to \$12,500, depending upon experience. Send inquiries to: **Dr. Roger C. Wagner, Cell and Molecular Biology Section, School of Life and Health Sciences, University of Delaware, Newark, Delaware 19711.**

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

POSTDOCTORAL RESEARCH FELLOWSHIP IN REPRODUCTIVE BIOLOGY. For research in one or more of the following areas relating to gametogenesis and early development: control mechanisms, nuclear-cytoplasmic interactions, characterization and function of regulatory molecules. Seek individual with strong background in biochemistry, cell biology, and physiology. Available immediately. Send résumé and letters of reference to: **Dr. Allen Schuetz, Johns Hopkins University, School of Hygiene, 615 North Wolfe Street, Baltimore, Md. 21205. An Equal Opportunity/Affirmative Action Employer.**

MARKET PLACE

RESEARCH TELEMETERS

Newly developed, dual-channel (two-temperature), miniature implantable telemeters. Units particularly appropriate for studying tumor and host temperatures in small animals. Suitable for chronic studies. Form-factor, location of sensor and suture points may be varied. Operation lifetime: 6 months or more; weight: ca. 7g; volume: ca. 7cc. Modest cost.

For further information, write or call:

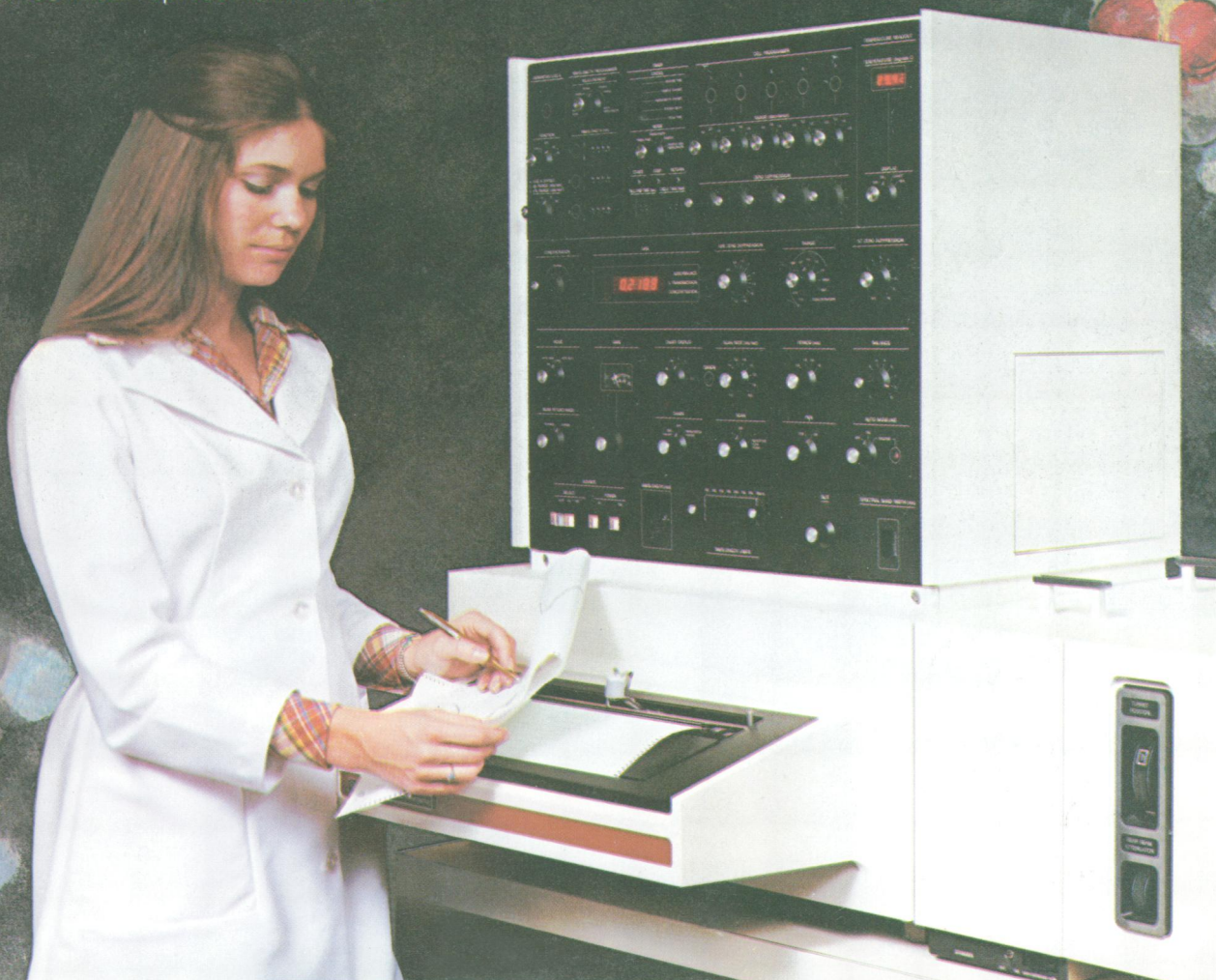
**R. M. Goodman, Principal Scientist
Physical and Life Sciences Department
The Franklin Institute Research Laboratories
20th and Race Streets
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(215/448-1236)**

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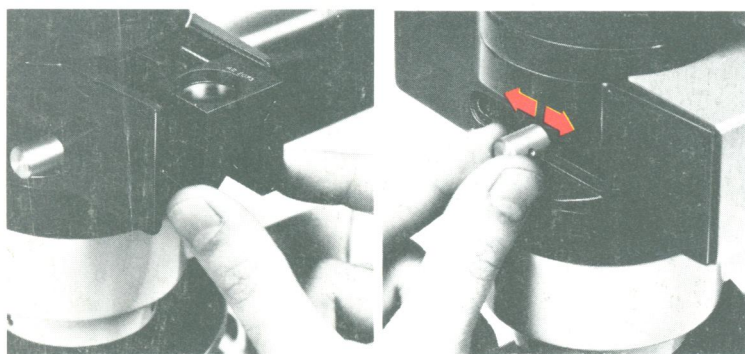
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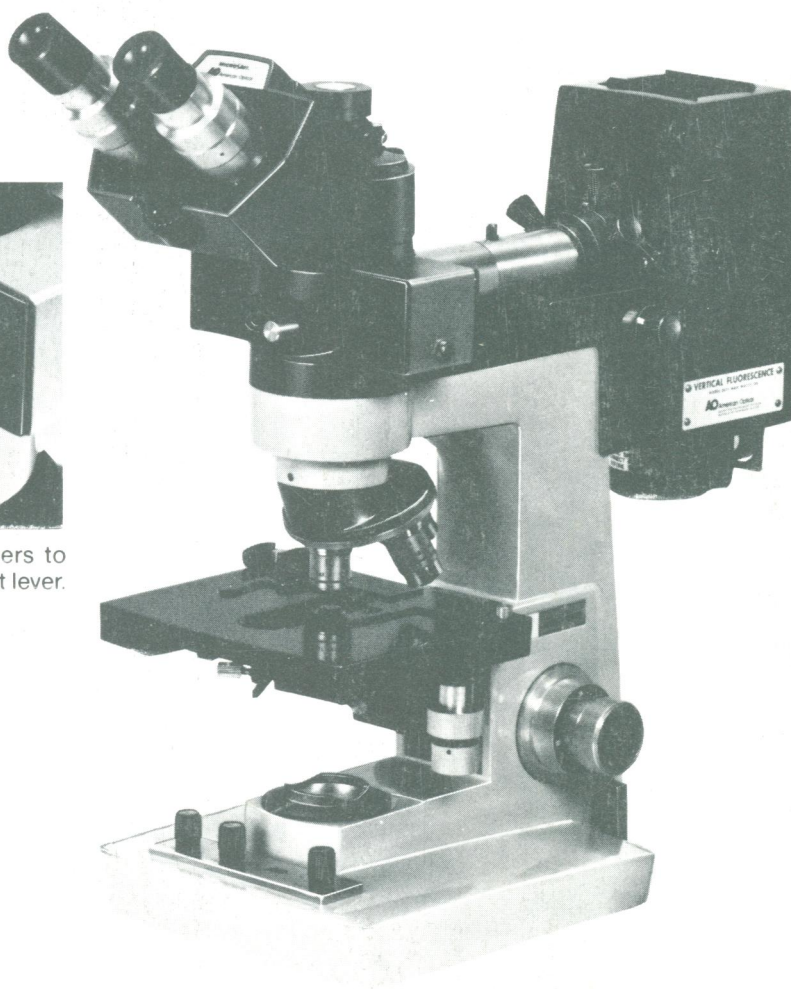
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