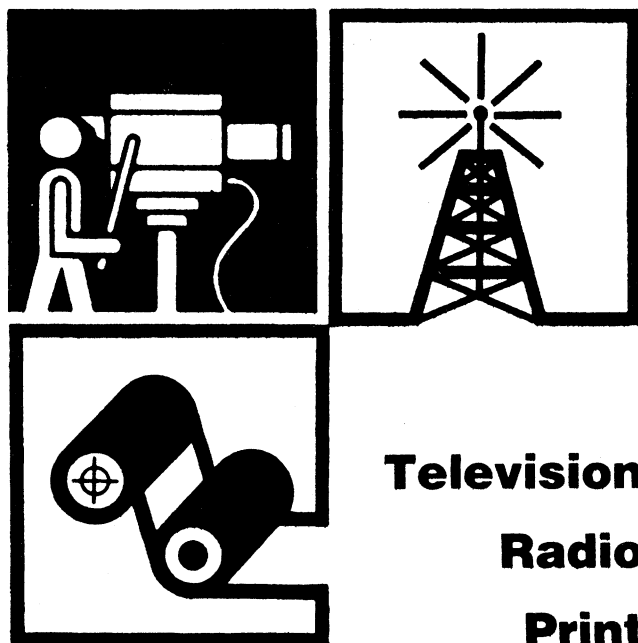


1984 AAAS Westinghouse Science Journalism Awards



**Television
Radio
Print**

Rules

The aim of this competition is to encourage and recognize outstanding reporting on the sciences and their engineering and technological applications in newspapers, general circulation magazines, radio, and television. The following categories are not eligible: items on the field of medicine, items published originally in AAAS publications or produced by AAAS; reports by employees of the AAAS or Westinghouse Electric Corporation.

Print

- An entry for a newspaper competition may be any of the following: a single story; a series of articles; or a group of three unrelated stories, articles, editorials, or columns published during the contest year. A magazine entry may be a single story or series published during the contest year.

- A completed entry blank must be submitted together with seven copies of each entry in the form of tear sheets, clippings, reprints, or syndicate copy (not over 8½" × 11"), showing name and date of the publication. **ENTRIES MUST NOT BE ELABORATE!**

Broadcast

- An entry for the radio or television competition may be an individual news story, feature, or a series, regardless of length, broadcast during the contest year on either public or commercial stations. Entries must be comprised of scripted material. Interviews are not eligible.

- A completed entry blank must be submitted together with a cassette in the case of radio and a copy of the script or a ¾" videocassette in the case of television and a copy of the script.

- Each entrant may submit three entries for any one category.
- Each entry must have been published or produced and broadcast within the United States during the contest year—**1 January 1984 through 31 December 1984**. (In case of a series, more than half of the items comprising it must have been published or broadcast during the contest year.) The date on the issue in which an article appears will be considered as the date of publication. All entries must be postmarked on or before midnight, 15 January 1985.

- Persons other than the author may submit entries in accordance with these rules. Entries will not be returned.

- Winners of the 1983 awards are not eligible for the 1984 awards. Persons winning three times are no longer eligible.

- The Judging Committees, whose decisions are final, will choose the winners. There are five awards of \$1,000: for the winning entry in the over 100,000 daily circulation newspapers competition; for the winning entry in the under 100,000 circulation newspapers competition; for the winning entry in the general circulation magazine competition; for the winning entry in the radio competition; and for the winning entry in the television competition. For award purposes, newspaper circulation will be sworn ABC daily circulation as of 30 September 1983. The Judging Committees may cite other entries for honorable mention.

- The awards will be presented at the dinner meeting of the National Association of Science Writers during the Annual Meeting of the American Association for the Advancement of Science in Los Angeles in May 1985. Travel and hotel expenses of the award winners will be paid. **Entrants agree that, if they win, they will be present to receive their awards, unless prevented by circumstances beyond their control.**

Grayce A. Finger

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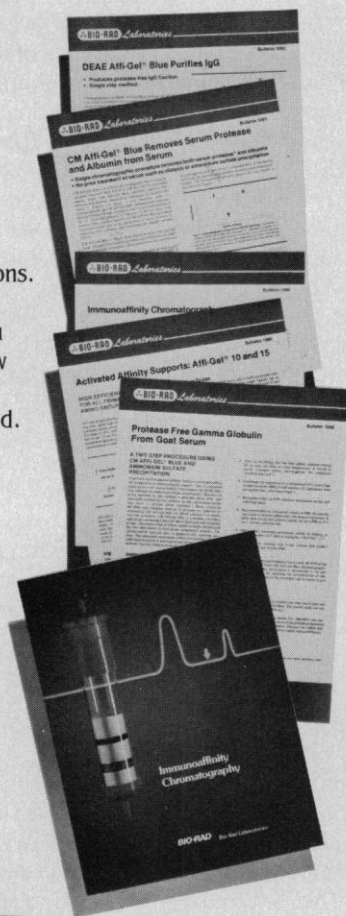
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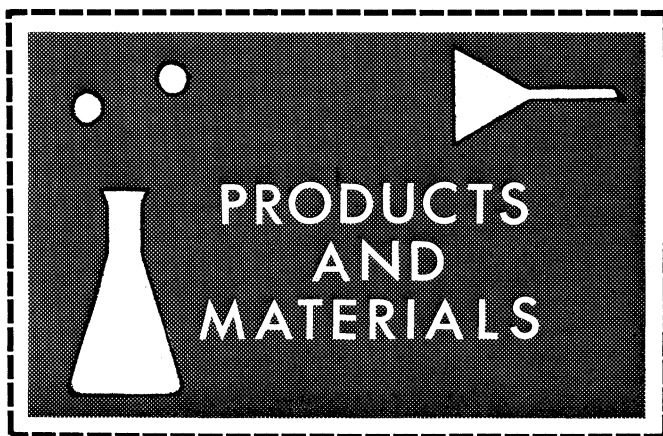
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only transported in an anterograde direction, has a long survival time in tissues, and may be used with other markers in double-label studies. Adjunctive reagents including affinity purified antibody to PHA-L and biotin-avidin detection systems are also available. Vector Laboratories. Circle 557.

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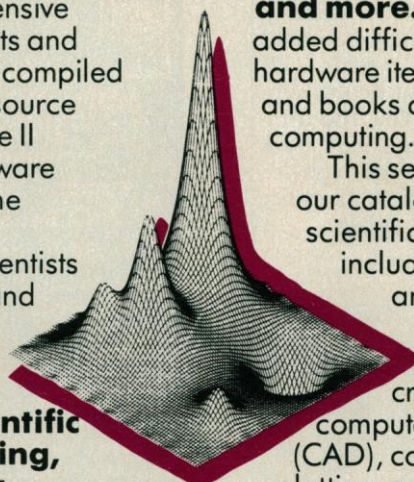
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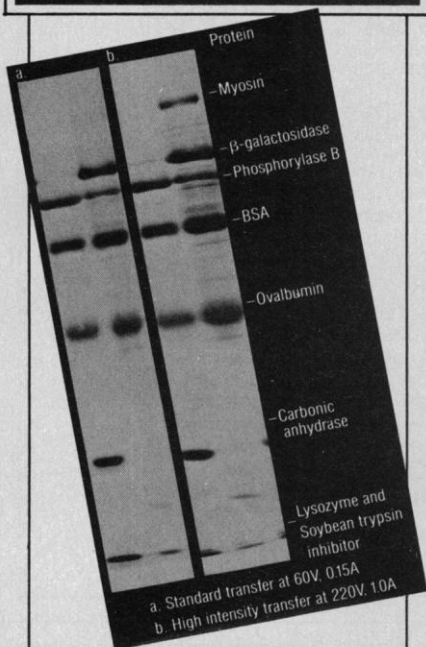
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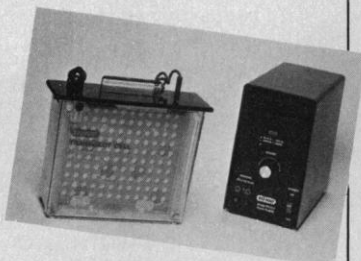
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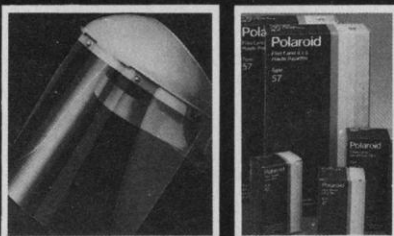
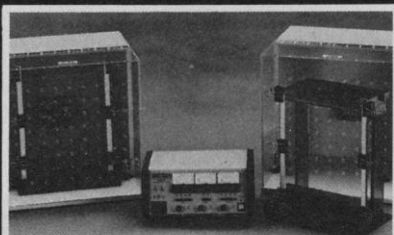
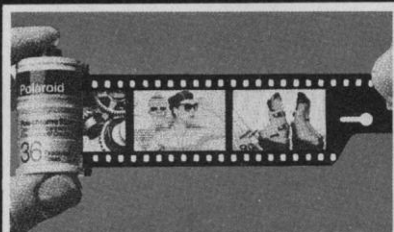
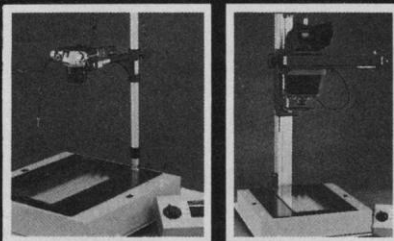


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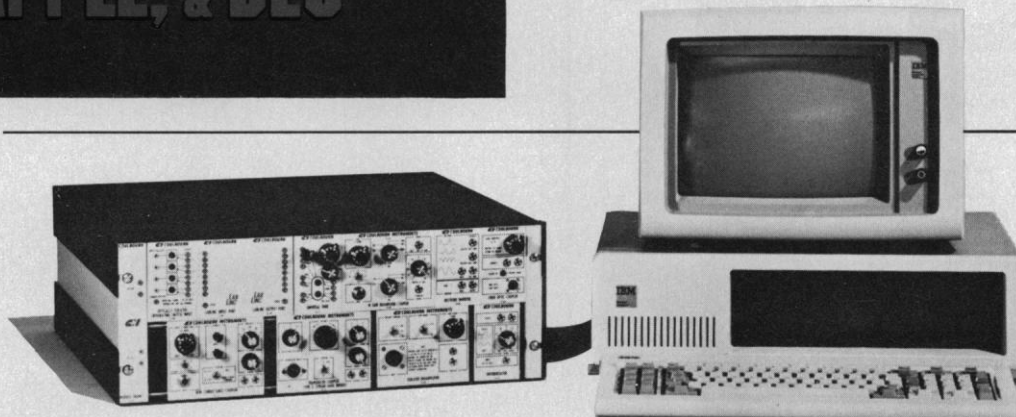
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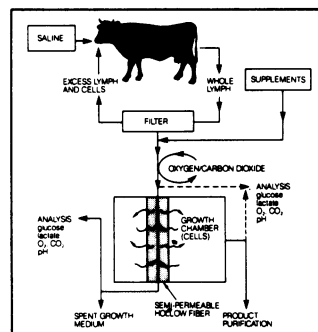


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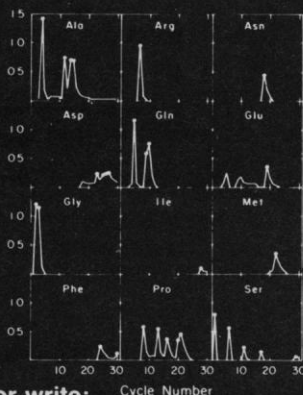
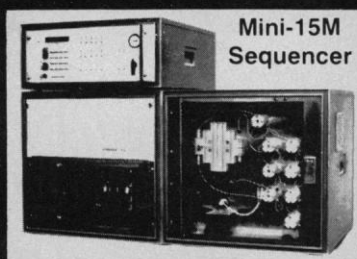
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ROCKEFELLER FOUNDATION BIOTECHNOLOGY CAREER FELLOWSHIPS

The Rockefeller Foundation announces a program of career development fellowships designed to enable scientists from developing countries, trained at outstanding centers for advanced research in biotechnology, to continue to work at those or other institutions for three months each year, over a period of at least three years, conducting advanced research and keeping abreast of new developments in their fields. The program will focus upon the development and application of advances in molecular and cellular biology and immunology relevant to agriculture, health, and reproductive biology.

Funding will be shared between the Foundation and the host laboratory, with the Foundation providing travel and per diem support. It is hoped that the fellowships will encourage the establishment of ongoing working relationships between outstanding younger scientists working at third world institutions, and research teams at advanced laboratories.

Applicants to this program should have at least Ph.D.- or M.D.-level training, a proven record of scientific productivity, and a permanent position at a research or teaching institution in their home country. A written project proposal must be developed and submitted jointly by the candidate and the laboratory sponsor.

Information about application procedures can be obtained by writing to **Biotechnology Career Fellowships, Fellowship Office, Rockefeller Foundation, 1133 Avenue of the Americas, New York, New York 10036, USA.**

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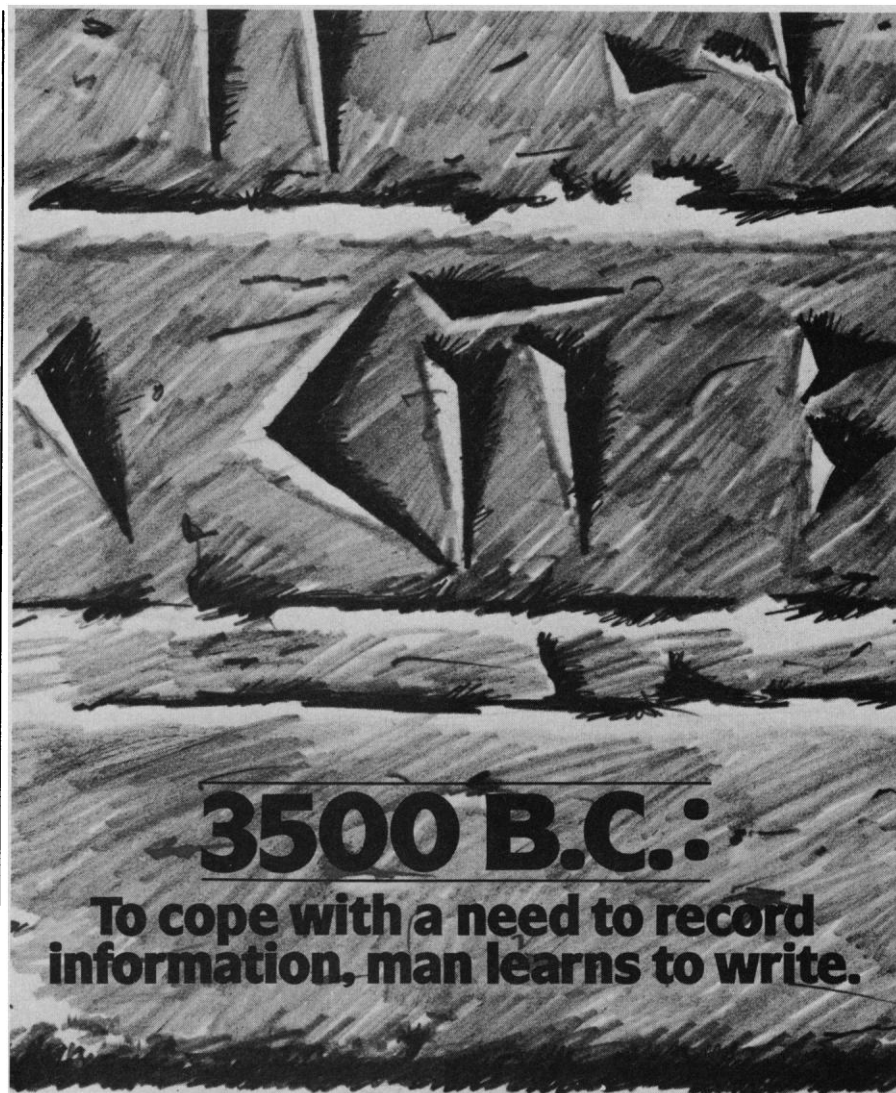
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LINE CLASSIFIED ADVERTISING DEADLINES:

12 October issue (mailed 5 October): **21 September**
19 October issue (mailed 12 October): **28 September**
26 October issue (mailed 19 October): **5 October**
2 November issue (mailed 26 October): **12 October**

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Washington, D.C. 20005

POSITIONS WANTED

Biochemist. Ph.D., 18 years of research/teaching experience. Expertise in glycoprotein biochemistry. Basic and clinical research. Glycoprotein structure and function. Knows cell culture, biosynthetic, immunochemical and modern analytical techniques. Seeks senior position in academia/hospital/industry/government. Box 213, SCIENCE. X

Biochemist/Molecular Biologist. Ph.D. 1978. Experienced with protein synthesis and characterization, mRNA isolation, cloning, hybridization, and related techniques. Seeking industrial or academic position, research or teaching. Box 215, SCIENCE. X

9/21, 28; 10/5

Biochemist. Ph.D. 1978. Extensive experience in research; tissue culture, intact animal studies, organ perfusion, protein purification, enzymology, intermediary metabolism, immunology. Active publications and medical/university teaching record. Seeking university or industry position. Box 223, SCIENCE. X

Biochemist. Ph.D. 1984, **Economist.** B.A. 1974. Moving back to Japan after 10-year stay in United States. Need help researching and managing by bilingual person in branch office in Japan? Two years of business and 6 years of research experience. Box 225, SCIENCE. X

Biologist with experience in **aquatic toxicology, ecology, and field biology.** Ph.D. in biology, 1972. Five years of research experience in aquatic toxicology. Herbarium experience. Experience as plant collector and research experience in avian ecology in United States and New World tropics. Research experience in plant population ecology. Teaching experience in ecology, zoology, and general biology. Seeks employment in environmentally oriented biological research. Available January 1985. Box 216, SCIENCE. X

POSITIONS WANTED

Biochemist. Ph.D. 1979. Extensive experience in isolation of nucleic acids, in vitro transcription using specific cloned eukaryotic genes, DNA sequencing in vitro translation, purification of cytoplasmic and nuclear enzymes, drug, hormone-receptor interaction, cell culture, development of polyclonal antibodies, radioimmunoassay. Teaching experience in Ivy League medical school, 25 publications. Seeks academic faculty/industrial position. Available immediately. Box 221, SCIENCE. X

Biologist/Biochemist. Ph.D. Extensive postdoctoral experience in tissue culture, hybridoma, monoclonal antibodies, recombinant DNA, oncogenes, RNA tumor viruses, and molecular immunology. Needs suitable university or industrial research position. Box 222, SCIENCE. X

Environmentalist. Ph.D. in aerosol science, 1972. Seeks academic or private position in aerosol technology, industrial hygiene, atmospheric, indoor air pollution, combustion, Box 210, SCIENCE. X

Immunologist. Ph.D. 1965. Extensive experience in hybridoma, cell culture, cell surface glycoproteins, ELISA, radioimmunoassay, affinity chromatography, isoelectric focusing, and antigen and antibody fractionation. Interest in flow cytometry and molecular biology. Several publications, teaching experience; seeks position in academia/industry. Box 227, SCIENCE. X

Marine Invertebrate Zoologist/Systematist/Benthic Ecologist. Ph.D. 1972. Numerous journal publications; administrative, organizational, editorial, communicatory, and supervisory skills; extensive research, field, teaching, and consulting experience. Seeks teaching and/or research position in academia, museum, private laboratory, or government. Reply: Box 226, SCIENCE. 9/21, 28; 10/5, 12

Microcomputer Manager/Marine Biologist (Ph.D.) with tenure seeks position at associate professor level for research and teaching with management opportunities and coastal location. Seven years of teaching and computer experience (8/16-bit computer electronics, programming, operating systems, local networks, applications in WP, DBM, CAD), publications, and funded research record in invertebrate environmental physiology, plankton ecology, and hydrocarbon toxicology. Box 224, SCIENCE. X

Nutritional Biochemist. Ph.D. biochemistry, 1979. Excellent publications, supervisory experience. Extensive experience with effects of nutrient depletion on reproductive and developmental performance. Strong interest in human nutritional requirements. Seeking position in industry. Box 219, SCIENCE. X

Pharmacologist. Ph.D. 1971. Former university and now industrial researcher with extensive background in calmodulin, microtubules, and chemotherapeutic agents. Also some experience in endocrine, neuropharmacology, trace metals, enzyme kinetics, and RIA. NIH postdoctorate. Excellent publications and proven high performance thinking ability. Seeks position with university, research institute, or industry. No geographic preference. Box 228, SCIENCE. 9/21, 28; 10/5, 12, 19, 26

POSITIONS OPEN

The Department of Microbiology, University of Minnesota, Minneapolis campus, invites application for **THREE** separate 12-month, tenure-track appointments at the rank of **ASSISTANT PROFESSOR**, one in each of the following areas of interest: (i) molecular basis of immune function; (ii) molecular mechanisms of microbial pathogenesis; and (iii) microbial or cellular developmental microbiology. Candidates must have a doctoral degree, with two or more years of postdoctoral research experience. Successful candidates will be expected to obtain extramural research funding and participate in departmental teaching responsibilities, including supervision of graduate students at the M.S. and Ph.D. levels. Please send a brief description of research interests and plans, curriculum vitae, and three letters of recommendation to the chairman of the appropriate search committee: P. M. Schlievert (immunology); P. P. Cleary (microbial pathogenesis); and M. Dworkin (developmental microbiology). Department of Microbiology, University of Minnesota Medical School, 420 Delaware Street, SE, Box 196 Mayo, Minneapolis, Minn. 55455. Last date for receipt of applications is 31 December 1984. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

POSITIONS OPEN

ACADEMIC HEMATOLOGIST/ONCOLOGIST dedicated to clinical teaching, and bench or clinical investigation, to join a growing program at the new 820-bed McGuire Veterans Administration Medical Center (VAMC), the major affiliate of the Medical College of Virginia, in historic Richmond, Virginia. Must qualify for faculty appointment. Please send curriculum vitae to: Wade K. Smith, M.D. (111K), or Gerasim Tikoff, M.D. (111), McGuire VAMC, Richmond, Va. 23249. An Equal Opportunity/Affirmative Action Employer.

AGING RESEARCH: Multidisciplinary basic research training program in aspects of neural and extracellular matrix chemistry of development and aging has openings for postdoctoral fellows. Research areas are: chemistry of proteoglycans from developing and aging muscle or human skin; laser-light scattering and morphological characterization of proteoglycans; substrate adhesion material from human skin fibroblasts; visco-elastic properties of human skin; model for articular cartilage aging; aging of the nerve-muscle junction; axonal transport and aging; neural filaments chemistry and morphology during aging and Alzheimer's disease. Interested applicants should forward their curriculum vitae, a statement on their professional goals, and supporting documents to: Dr. Arnold I. Caplan, Biology Department, Case Western Reserve University, Cleveland, Ohio 44106.

ANIMAL PARASITOLOGIST—Tenure-track assistant or associate professor to start September 1985. Candidates should have broad training in animal parasitology and be prepared to develop a strong research program using modern approaches that will complement current research in the section. Undergraduate and graduate teaching in parasitology and related areas. Send letter of application, curriculum vitae, and names, addresses, and telephone numbers of three references to: George A. Clark, Jr., Head Systematic and Evolutionary Biology Section, Biological Sciences Group, UNIVERSITY OF CONNECTICUT, Box U-43, Storrs, Connecticut 06268. Application deadline: 15 November 1984. (SEARCH 5A4). Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF CELL BIOLOGY

Assistant professor of cell biology, Harvard University School of Public Health. Expertise in modern cell biology and an interest in respiratory biology and pathology. Competence and publications in some of the following areas: electron microscopy, cell and tissue culture, biochemistry, cell physiology and immunocytochemistry. Responsibilities include independent and collaborative research and teaching. Minimum requirements: Ph.D. or M.D. degree and several years of experience. Applicants should send their curriculum vitae and names of three references to: Dr. Joseph D. Brain, Department of Environmental Science and Physiology, Harvard School of Public Health, 6665 Huntington Avenue, Boston, Mass. 02115.

Expression of interest is particularly invited from qualified women and minority candidates.

ASSISTANT PROFESSOR ELECTROPHYSIOLOGY

Research faculty position available at the University of Arizona College of Medicine. Major responsibilities will be development of a research program in myocardial electrophysiology. Candidate will work closely with clinical electrophysiologists, will have joint appointment in the Department of Medicine and Physiology. Ph.D. degree and postdoctoral training are prerequisite. Send summary of research plans, curriculum vitae, and names of three references to: Dr. Frank I. Marcus, Cardiology Section, University of Arizona Health Sciences Center, Tucson, Ariz. 85724, by 1 November 1984. The University of Arizona is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR/ASSOCIATE PROFESSOR, DEPARTMENT OF GENETICS. Having scientific interest in areas of human genetics (for example, cytogenetics, human biochemical genetics), cellular genetics (particularly chromosome structure and function), or molecular genetics of higher eukaryotes, especially mammalian organisms. Full-time, tenure-track position that involves teaching and independent research. Send curriculum vitae, bibliography, and names of three referees to: Dr. Stanley N. Cohen, Chairman, Department of Genetics, Stanford University Medical Center, Stanford, Calif. 94305. Stanford University is an Affirmative Action Employer and welcomes nominations of women and minority group members and applications from them.

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Lederle Laboratories, a leading pharmaceutical manufacturer, has openings for Ph.D. Scientists in the Vaccine Development area.

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NATIONAL INSTITUTES OF HEALTH STAFF FELLOWSHIP: BIOCHEMIST

Ca++ Mobilization/Membrane Transport

The Clinical Investigations Section of the National Institute of Dental Research is seeking an individual to participate in ongoing studies of events related to changes in membrane permeability of salivary gland cells following neurotransmitter stimulation. The candidate should have strong experience in studying ion transport using vesicular membrane preparations and/or experience studying mechanisms of cellular Ca++ mobilization and regulation of cytosolic Ca++ levels. The initial appointment is for a starting annual salary range of \$24,000—\$30,000, depending on background and experience. The position is available November, 1984. Send curriculum vitae and three references to Dr. Bruce J. Baum, Clinical Investigations Section, National Institute of Dental Research, National Institutes of Health, Building 10, Room 1S217A, Bethesda, MD. 20205.

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Psychologist

Laboratory Director

Bethesda Oak Hospital is opening a new Sleep Disorders Center and is seeking a Laboratory Director to assist the Center Director in the hiring, training, and supervision of the technical staff. The Director also functions as member of the center team, providing psychological assessment and treatment to patients. This position works under the clinical supervision of the Medical Director.

Qualified individual should possess a Ph.D. in psychology with either experimental or physiological emphasis. Ideal position for recent doctoral graduate

Please respond by resume to:

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Personnel Department
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at

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The U.S. Department of Energy (DOE) Energy Technology Centers at Morgantown, WV, and Pittsburgh, PA, offer challenging opportunities to recent postgraduates for training in a broad range of fossil energy research and engineering activities and in technical program administration directed toward the use of fossil fuels. The centers offer unique combinations of specialists, facilities, and programs.

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Applications are invited from individuals who have received the master's or doctoral degree within the past three years in: chemistry, chemical engineering, earth sciences, and other engineering and physical science fields.

Information and application materials may be obtained from
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University Programs Division
Oak Ridge Associated Universities
P.O. Box 117
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Collaborate with leading investigators on molecular biological/biochemical/ultra-structural analysis of mechanisms of host recognition and **Rhizobium**-induced root hair deformation/cortical redifferentiation. NSF grant position available 2 years starting immediately, at **Battelle-C.F. Kettering Research Laboratory, Yellow Springs, Ohio.**

Applicants with appropriate interests and expertise, should send curriculum vitae and list of references to: Richard Shaw, Employment Department 0-3.



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Senior Investigator, Fertility and General Reproductive Toxicology

Smith Kline & French Laboratories, a leader in pharmaceutical research, is seeking an excellent scientist to provide leadership and expertise in reproductive physiology-endocrinology to the overall scientific effort of its Reproductive Toxicology Department located in suburban Philadelphia.

The successful candidate will:

- develop new approaches and methods for evaluating toxic effects on fertility and reproduction.
- act as project representative, preparing study protocols, conducting studies, reviewing data and writing reports.
- provide professional and technical support to the conduct of multi-disciplinary investigations in Reproductive Toxicology.
- act as advisor to the Pathology and Toxicology Operating and Scientific Committees.

Candidates are required to have:

- a Ph.D. in Reproductive Physiology-Endocrinology or Reproductive Toxicology.
- At least 4 to 5 years experience beyond the Ph.D. in Reproductive Physiology/Endocrinology/Toxicology and be at the cutting edge of research in these disciplines.
- a proven record of creative and meritorious research in these disciplines in academia or industry.
- excellent verbal and written communication skills.

Preference will be given to candidates who also have experience in 1) the detection and delineation of gonadal and reproductive dysfunction, 2) the assessment of reproductive toxicity, and 3) *in vitro* fertilization.

We offer excellent compensation and benefits, an attractive relocation policy and a work environment that afford considerable opportunity for personal and professional growth. For confidential consideration, send your CV and names of three references to: Walter B. Flagg, Senior Employment Consultant, **SmithKline Beckman Corporation**, 1590 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

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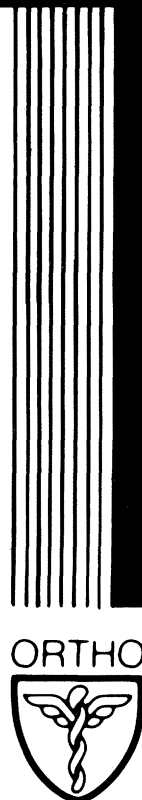
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POSITIONS OPEN

ANIMAL REPRODUCTIVE BIOLOGIST—The Institute of Arctic Biology, University of Alaska, Fairbanks, invites applications for a 9-month, tenure-track position as **assistant/associate professor**. Applicants must have a Ph.D. or D.V.M. and preferably research experience with environmental influences on reproduction in wild animals. The successful applicant will be expected to establish a research (endocrine) laboratory and to collaborate with animal ecologists studying the nutritional ecology of northern animals. Teaching duties include graduate student supervision and opportunities for some undergraduate and graduate courses in the Department of Biology, Fisheries and Wildlife Management. Applicants should submit résumé, statement of research interests, and names of three referees to: **Dr. R. G. White, Chairman, Search Committee, Institute of Arctic Biology, University of Alaska, Fairbanks, Alaska 99701**. Application deadline: 30 November 1984. *The University of Alaska is an Affirmative Action/Equal Opportunity Employer and Educational Institution.* Your application for employment with the University of Alaska may be subject to public disclosure if you are selected as a finalist.

AQUATIC ENVIRONMENTAL CHEMIST

The State University Research Center at Oswego, New York, invites applications/nominations for an environmental chemist to develop research programs on organic/inorganic microcontaminants, impacts of acid precipitation on aquatic organisms, and/or aquatic nutrient cycling. Ph.D. and grants administration required. Initial position is for 2 years; permanent appointment possible. Salary: low \$30,000's; 12 months.

Forward application (nominations) with curriculum vitae and three letters of recommendation by 12 October to:

Dr. R. W. Flint
State University of New York/Oswego
Research Center
King Hall
Oswego, N.Y. 13126

Minority and women applications encouraged.

ASSISTANT PROFESSOR

The Section of Biochemistry, Molecular and Cell Biology, Division of Biological Sciences, Cornell University, seeks applicants for a tenure-track assistant professorship in cell or molecular biology. Candidates who have demonstrated a high potential for research using molecular approaches to problems in the biology of plant or animal cells will be given preference. A Ph.D. degree is required, and the successful candidate probably will have several years of postdoctoral experience. Participation in teaching at the undergraduate and graduate levels is an important part of the position. Send curriculum vitae and statement of research interests to: **Dr. Richard E. McCarty, Chairman, Section of Biochemistry, Molecular and Cell Biology, Wing Hall, Cornell University, Ithaca, N.Y. 14853**. Arrange to have three letters of reference sent to this address as well. The closing date for applications is 1 November 1984. *Cornell University is an Affirmative Action/Equal Opportunity Employer.*

Tenure-track **ASSISTANT PROFESSOR** positions are available in the **Department of Pharmacology**, University of Iowa, College of Medicine. Applications are invited from individuals who possess the Ph.D. and/or M.D. degree, have completed postdoctoral training, and have identified an area suitable for development of a vigorous research program related to molecular and cellular pharmacology or more traditional pharmacological disciplines. *The University of Iowa is an Equal Opportunity/Affirmative Action Employer.* Submit curriculum vitae and names of three referees to:

Search Committee
Department of Pharmacology
Bowen Science Building
University of Iowa
Iowa City, Iowa 52242

ASSISTANT OR ASSOCIATE PROFESSOR OF PHARMACOLOGY, tenure-track appointment. Ph.D. in pharmacology and training in cardiovascular, renal, neuropharmacology, or toxicology. Will participate in teaching medical and graduate students and carry out an independent research program. We will be interviewing at the Society for Neuroscience Meeting. Submit curriculum vitae and three references to: **Dr. S. Ehrenpreis, Chairman, Department of Pharmacology, Chicago Medical School, 3333 Green Bay Road, North Chicago, Ill. 60064**. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

Harvard University ASSISTANT PROFESSOR CELLULAR AND DEVELOPMENTAL BIOLOGY (CDB)

The Department of Cellular and Developmental Biology intends to make an appointment at the assistant professor level effective in summer 1985. We are particularly interested in candidates with research experience and continuing interest in the molecular genetics or molecular developmental biology of plants. Applications should include curriculum vitae, reprints of publications, and a statement of research plans. Complete applications and three letters of recommendation solicited by the applicant should be received no later than 29 October 1984 by:

Chairman, CDB Search Committee
The Biological Laboratories
Harvard University
16 Divinity Avenue
Cambridge, Mass. 02138

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ASSISTANT PROFESSOR IN MICROBIOLOGY

The Department of Bacteriology and Public Health seeks applicants for a tenure-track position at the assistant professor level. Preference will be given to applicants with research interests in the area of microbial pathogenic mechanisms; however, strong applicants in related areas are encouraged to apply. Applicants must have postdoctoral training. The successful candidate will be expected to establish an active research program and participate in graduate and undergraduate teaching. Applicants should submit curriculum vitae, statement of research interests and professional objectives, and names of three references to: **Dr. David J. Hinrichs, Chairman of Search Committee, Bacteriology and Public Health, Washington State University, Pullman, Wash. 99164-4340.** Application deadline: 1 December 1984. *Washington State University is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF MOLECULAR BIOLOGY CASE WESTERN RESERVE UNIVERSITY

The Department of Molecular Biology and Microbiology at Case Western Reserve University invites applications from candidates with strong credentials in molecular biology. We are especially interested in animal virology but will consider well-qualified applicants in areas related to prokaryotic or eukaryotic gene expression. The appointment provides an excellent opportunity to develop a strong, independent research program in the growing research community at Case Western Reserve.

Send curriculum vitae, a statement of research and teaching interests, and the names of four references to: **Dr. Fritz Rottman, Chairman, Department of Molecular Biology and Microbiology, Case Western Reserve University, Cleveland, Ohio 44106.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF PHYSIOLOGY

A tenure-track position at the rank of assistant professor is available in the Department of Physiology and Biophysics of the University of Tennessee Center for the Health Sciences. Candidates should have a Ph.D. or M.D. degree, a minimum of 2 years of postdoctoral training, and a strong research background in organ system or whole animal physiology. Demonstrated ability to initiate a strong independent research program and to engage in teaching activities of the department are expected. Send curriculum vitae, a brief statement of research interests, and the names of three references to: **Dr. Leonard Share, Chairman, Department of Physiology and Biophysics, University of Tennessee Center for the Health Sciences, Memphis, Tennessee 38163.** Closing date for receipt of applications is 1 December 1984. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW

A 2-year position for a postdoctoral fellow is available in the Department of Physiology and Biophysics of the University of Tennessee Center for the Health Sciences. Candidates should have a Ph.D. or M.D. degree and a research interest in central control of vasopressin secretion. Send curriculum vitae, a brief statement of research interests, and the names of three references to: **Dr. Leonard Share, Professor and Chairman, Department of Physiology and Biophysics, University of Tennessee Center for the Health Sciences, Memphis, Tennessee 38163.** Closing date for receipt of applications is 1 December 1984. *An Equal Opportunity/Affirmative Action Employer.*

SENIOR RESEARCH SCIENTIST

Cellular Immunology

Sandoz, Inc., East Hanover, New Jersey, is currently seeking a SENIOR RESEARCH SCIENTIST to join a newly formed team of immunologists investigating the field of monoclonal antibodies of human and/or murine origin. This research will involve the construction of hybridomas, production and testing of the antibodies, preclinical and clinical testing of their therapeutic usefulness.

The ideal candidate should possess a Ph.D., or equivalent experience, in immunology or a related field, with a minimum of 2 years postdoctoral training in a related research program. A background in the immunology and cell biology of human B-cells is preferred.

Positions at Sandoz offer personal satisfaction, professional opportunity/challenge, competitive salaries and an excellent benefits package. Our campus-like facilities are conveniently located in northern New Jersey.

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Available February, 1985 for two years. Research project will involve the use of a panel of monoclonal anti-clathrin antibodies to investigate clathrin biochemistry *in vitro* and *in vivo*.

Laboratory interests include understanding the role of clathrin-mediated processes with respect to immunological receptors, as well as understanding the molecular basis of these processes. Principal investigator Dr. F. Brodsky.

Research interests in the department include immunoglobulin genetics, lymphokines and immune cell function.

Candidates with background in protein chemistry, cell fractionation and electron microscopy are encouraged to apply. Please send a curriculum vitae and names of three references to: **Manager, Employment, Becton Dickinson Immunocytometry Systems, 2375 Garcia Avenue, Mountain View, CA 94043.** An equal opportunity/affirmative action employer.

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GENETIC ENGINEERING CONFERENCE

The NMSU Plant Genetic Engineering Laboratory and the Life Sciences Division of the Los Alamos National Laboratory are soliciting industrial participation in the development and application of novel plant biotechnologies. Included are flow cytometric cell cycle analysis and sorting of plant cell hybrids and chromosomes, NMR spectroscopic analysis of cell wall biosynthesis and salt-tolerance mechanisms, application of monoclonal antibody and DNA restriction fragment genetic markers to plant breeding, genetic engineering of regulatable plant genes, application of multiple light sensor arrays to canopy irradiance analyses, integrated approaches for application of plant cell and tissue culture for stress adaptation, identification and evaluation of potential new crops for production in desert habitats and micro-propagation of desert-adapted ornamentals. These technologies and others will be presented and discussed at a Rio Grande Research Corridor/industry technology transfer conference to be held in Los Alamos, October 15 and 16, 1984. Reservations are required by Sept. 24, 1984. For information contact:

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POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR OF INDUSTRIAL HYGIENE

ASSISTANT/ASSOCIATE PROFESSOR OF INDUSTRIAL HYGIENE. Research and training on problems related to occupational hazards, with emphases on chemical analysis of air samples, exposure-dose relationships and engineering control. Applicants must have a doctorate in industrial hygiene or related environmental science, with a strong background in chemistry and/or chemical engineering. An ability to work closely with other environmental health disciplines, including physiology, toxicology, and medicine, is highly desirable.

Send curriculum vitae, including a list of publications, reprints of several such publications if available, a statement of current and future interests in industrial hygiene, and the names of three individuals who would be willing to respond to requests for evaluation to: **Chairman, Ad Hoc Industrial Hygiene Search Committee, Dean's Office, Harvard School of Public Health, 677 Huntington Avenue, Boston, Mass. 02115.** Expression of interest is particularly invited from qualified women and minority candidates.

ATHEROSCLEROSIS/MOLECULAR BIOLOGY POSTDOCTORAL ASSOCIATES to study the regulation of apolipoprotein E gene expression in liver and peripheral cells. Research will employ recombinant DNA, immunological, and cell culture techniques. Experience in molecular biology and/or lipoprotein biochemistry preferred. Direct inquiries to: **Dr. David Williams, Department of Pharmacological Sciences, Health Sciences Center, State University of New York at Stony Brook, Stony Brook, N.Y. 11794.** SUNY, Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. AK Number 187.

BIOCHEMICAL PHARMACOLOGIST/POSTDOCTORAL—Schering-Plough Corporation has currently available a postdoctoral position in our Pharmacology Department. We are seeking a Ph.D. with zero to 2 years of experience. Candidate must have a strong biochemical background with experience in receptor-binding techniques and enzyme kinetics. Research projects involve studies of dopamine receptors and behavior. For this reason, the preferred candidate will be knowledgeable with neurotransmitter functions in CNS and CNS pharmacology, particularly related to these research projects. Interested individuals should send résumé and two letters of reference to: **Louis DeMartino, Personnel Manager, Schering-Plough Pharmaceutical Research Division, Box 84-5, 60 Orange Street, Bloomfield, New Jersey 07003.** We are an Equal Opportunity Employer, M/F.

MASSACHUSETTS EYE & EAR INFIRMARY

Biochemistry/Tissue Culture Technician. Experiments with retinal pigment epithelium, gel electrophoresis, column chromatography, enzyme assays, mammalian cell cultures. B.S. with 3 years of experience.

Data Manager. Manages data for eye health study. Validates and analyzes data, coordinates programming. Two years of microcomputer experience. B.A./B.S.

Résumés to: **Berman-Gund Laboratory, 243 Charles Street, Boston, Massachusetts 02114.**

CELL MEMBRANE BIOCHEMIST

Our client a major pharmaceutical company, is seeking a cell biologist for their Food Ingredient Applications Division. This individual will work with five other professionals in a research/pilot plant situation developing new applications for food ingredient products. The ideal candidate should possess a Ph.D. in biochemistry and have some research experience in the organization and interaction of lipids and proteins in cell membranes and their relationships to new food materials. This position provides competitive salary, industrial benefits, and paid relocation. Send résumé in confidence to: **Ron Bynum, Cook Associates, 35 East Wacker Drive, Suite 670, Chicago, Ill. 60601.**

MOLECULAR GENETICIST—HARVARD MEDICAL SCHOOL. Position in Berman-Gund Laboratory. To apply recombinant DNA techniques to study hereditary retinal diseases. More than 2000 patients with these diseases are on file. Ph.D. and 2-year postdoctoral fellowship required. Expertise in making cDNA libraries and using expression vectors desirable. Rank commensurate with experience. Send curriculum vitae and names of three references to: **Dr. E. L. Berson, Director, Berman-Gund Laboratory, 243 Charles Street, Boston, Massachusetts 02114.**

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSIOLOGY, 12-month, tenure-track position. Requirements include M.D., Ph.D., or equivalent, a sound background in general physiology, and ability to develop own research program. Will share responsibility for medical student physiology course. Prefer individual working in neuroendocrinology area. Opportunities exist for collaborative research and participation in graduate education. Submit curriculum vitae and names of three references by 15 October 1984 to: **Office of the Provost, Northeastern Ohio Universities College of Medicine, Rootstown, Ohio 44272.** An Equal Opportunity/Affirmative Action Employer.

Princeton University—BIOLOGICAL CHEMISTRY. The Department of Chemistry invites applications for a tenure-track position in biological chemistry beginning September 1985. Applicants with any field of specialization may apply, and we especially encourage candidates with interests in x-ray crystallography or NMR spectroscopy. Applicants should send curriculum vitae and a statement of future research plans, and have three letters of recommendation sent to: **Professor Herschel Rabitz, Chairman of Recruiting Committee, Department of Chemistry, Princeton University, Princeton, N.J. 08544.** Princeton is an Equal Opportunity/Affirmative Action Employer.

CELLULAR IMMUNOLOGIST at instructor level. Must be experienced in immunoregulators and able to work in new areas of human neuroimmunology and immunopsychiatry. Must have proven experience and research track record. Will work directly with the undersigned, one graduate student, one postdoctorate, and two technicians.

If interested, send curriculum vitae, bibliography, and three letters of recommendation to:

**H. Hugh Fudenberg, M.D.
Professor and Chairman
Basic and Clinical Immunology
and Microbiology
Medical University of South Carolina
Charleston, S.C. 29425**

An Equal Opportunity/Affirmative Action Employer, M/F

**CHAIRPERSON, Department of Microbiology,
Downstate Medical Center, State University of
New York.**

The State University of New York (SUNY) Downstate Medical Center is seeking an accomplished scientist to lead a well-funded department with an active research program. The department, which has teaching responsibilities in the College of Medicine and the School of Graduate Studies, provides state funding for salaries of faculty and support staff as well as start-up expenses for new faculty and research labs. It occupies 20,000 square feet with funds for renovation of teaching and research laboratories this year. Candidates should have an outstanding record of accomplishment in research as well as the judgment and administrative skills to develop a leading academic department.

SUNY is an Equal Opportunity/Affirmative Action Employer and especially encourages applications from women and minority candidates.

Nominations or applications should be directed to: **Dr. Thomas C. Detwiler, Chairman, Microbiology/Immunology Search Committee, Box 8, SUNY Downstate Medical Center, Brooklyn, New York 12203 (telephone: 718-270-1270).**

COMPARATIVE PHYSIOLOGIST OR FUNCTIONAL MORPHOLOGIST UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Developmental and Cell Biology is recruiting for a position in comparative physiology at the assistant or beginning associate professor level. Functional morphologists whose research areas are related to physiological problems and approaches are also encouraged to apply. The candidate is expected to establish a productive research program, to participate in an ongoing program of graduate student training in comparative physiology, and to assume undergraduate teaching responsibilities in physiology. The candidate must have a Ph.D. degree and postdoctoral experience is desired. Applicants should submit curriculum vitae and copies of publications and should request that three or four letters of recommendation be sent to: **Chair, Comparative Physiology Search Committee, Department of Development and Cell Biology, University of California, Irvine, Calif. 92717.** Applications should be completed by 15 November 1984. The University of California is an Affirmative Action/Equal Opportunity Employer.

EXECUTIVE DIRECTOR ATMOSPHERIC SCIENCES CENTER

The Desert Research Institute is seeking an Executive Director for its Atmospheric Sciences Center, one of five research centers of the Institute. The Institute is part of the University of Nevada System and is funded partially by the state, but mainly by research grants and contracts.

The Center consists of some 30 scientists and 50 support personnel with interests in the physics and chemistry of the atmosphere. Problems extend from basic studies on the nature of turbulent transport and boundary layer motion, aerosol and precipitation dynamics, to applications in visibility and air pollution, cloud electrification, weather modification and materials processing. A strong association exists with the Physics Department, University of Nevada, Reno, where faculty members can hold joint appointments and students work on Center projects for a Masters/Doctoral degree.

The Institute is seeking a respected and energetic individual to act as scientific leader. Applicants should hold a Doctoral degree, or have equivalent research experience, and have a record of achievement in topics relevant to the Center. Experience should include a minimum of five years of increasing responsibility of leadership and management in academic, industry or government positions. The Executive Director is responsible to the President of the Institute for all aspects of Center operations. He will work with center scientists to enhance existing programs and initiate new ones, as well as interact with private and public organizations to facilitate program sponsorship.

The Center is located near Reno, in a region of considerable environmental interest and potential growth. **Applications will be accepted until November 30, 1984, or thereafter until the position is filled, and should be sent to: Twyla Harrison, Desert Research Institute, University of Nevada System, P.O. Box 60220, Reno, NV 89506.** The DRI is an Affirmative Action/Equal Opportunity Employer.

AAAS Report IX Research & Development FY 1985

Intersociety Working Group

This timely document analyzes major budget and policy issues relating to R&D in the FY 1985 budget, presents data on federal agency and industry support for R&D, and discusses trends in R&D funding in light of current policy issues.

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**American Association for the
Advancement of Science**

NASA/Goddard Space Flight Center Greenbelt, Maryland

Associate Chief Space Data and Computing Division and Head National Space Science Data Center

NASA/Goddard Space Flight Center is seeking a highly qualified individual to head the National Space Science Data Center (NSSDC). The position is for Associate Chief of the Space Data and Computing Division within the Space and Earth Sciences Directorate. The NSSDC is the principal scientific data center for NASA and operates World Data Center A for rockets and satellites. This center serves as the permanent scientific space data archive and dissemination center and is responsible for the development, management, and operation of specialized data base systems for NASA. Particular disciplinary emphasis is in solar-terrestrial physics and astrophysics. The center develops advanced data base management systems using leading technologies such as high speed mass storage retrieval systems, data base machines and expert systems. The staff consists of approximately 30 civil servants and 100 contractor personnel. The NSSDC operates an expanding computing system currently consisting of a VAX 11/780 and a MODCOMP IV/25 and will have high-speed link to an IBM 3081, a Cyber 205, and a cluster of VAX processors. NSSDC responds to world-wide requests for documentation, data services, and digital and photographic data. As Associate Chief, the incumbent will also participate in formulating the research policy and long-term direction of the Division. The position calls for both technical and managerial leadership of the organization. The appointment is at the GM-15 level, which carries a salary range of \$50,495-\$65,642.

Qualifications: Goddard is seeking a respected and visionary scientist willing to play a strong leadership role at a challenging time. Applicants should possess a Ph.D. or the equivalent experience in one of the following: a space or earth science-related discipline, computer science, or mathematics. Experience of at least 10 years, with increasing responsibility and stature, including management of a substantive technical group. Applicant should have been closely involved with advanced research utilizing scientific satellite data including data management and analysis and experienced in modern computer systems, technology, and telecommunications. In addition, applicant should have a broad understanding of the science areas in which NSSDC is involved.

Applicants: Applicants should submit a curriculum vitae, a list of publications, and Office of Personnel and Management Standard Form 171 (Personal Qualifications Statement) to Dr. Franklin D. Martin, Director of Space and Earth Sciences, Code 600, NASA/Goddard Space Flight Center, Greenbelt, Maryland 20771. Selection will be made by the Director of Goddard Space Flight Center, with the aid of a search committee of recognized experts in appropriate disciplines. **Deadline for applications is October 15, 1984.** NASA is an affirmative action/equal opportunity employer.

Senior Developmental Toxicologist

Smith Kline & French Laboratories, a leader in pharmaceutical research, is seeking an experienced associate level scientist to serve as Senior Development Toxicologist in its Reproductive Toxicology Department located in suburban Philadelphia.

The successful candidate will:

- establish a tissue culture laboratory employing state-of-the-art technology for conducting cell culture, organ culture and postimplantation embryo culture procedures.
- make recommendations for development and validation of novel *in vitro* procedures based upon evaluation of existing procedures, and upon need as determined by outcomes of Segment II teratology studies of SK&F drugs.
- plan and schedule own work and that of subordinates; coordinate efforts with all relevant phases of ongoing Reproductive Toxicology studies.
- keep supervisor informed on status of all projects; oversee equipment and supply purchases; maintain inventory of isotopes and use of hazardous chemicals.
- summarize data, perform statistical analysis, report findings to supervisor. Prepare final drafts of technical reports and write complete manuscripts for publication.

Candidates are required to have:

- an MS in Development Biology/Reproductive Physiology/Cell Biology or other relevant biological science.
- at least 3 to 4 years post-graduation experience in tissue culture.
- a proven record of involvement in creative and meritorious research in the field of *in vitro* Teratology/Developmental Biology/Reproductive Toxicology.
- excellent verbal and written communication skills.

Preference will be given to candidates who also have experience in 1) tissue culture utilizing embryonic organ rudiments and/or intact postimplantation embryos; 2) assessment of *in vivo* and *in vitro* prenatal toxicity, and 3) identifying mechanism of action of teratogens.

We offer excellent compensation and benefits, an attractive relocation policy and a work environment that offers considerable opportunity for personal and professional growth. For confidential consideration, send your CV and names of three references to: Walter B. Flagg, Senior Employment Consultant, **SmithKline Beckman Corporation**, 1592 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
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RPI RENSSELAER POLYTECHNIC INSTITUTE

Dean, School of Engineering

Applications and nominations are invited for the position of Dean of the School of Engineering. Candidates must have the qualifications for being tenured as a Professor of Engineering; academic and administrative experience are highly desirable. Rensselaer is a private, coeducational, technological university with schools of Agriculture, Engineering, Humanities and Social Sciences, Management and Science. About 60% of the 4,500 undergraduates and 70% of the 1,600 graduate students at Rensselaer are in Engineering, and the Engineering School has about 150 faculty members. The Institute is committed to a strong program of growth and research and graduate education and a continued emphasis on undergraduate education. The Dean of Engineering must therefore have experience in research or teaching and qualities of vision and judgement to provide the leadership with this program.

Application and nomination should be received by October 31, 1984. Application and nomination forms and further information can be obtained from Professor Robert H. Doremus, Chairperson, School of Engineering Search Committee, Rensselaer Polytechnic Institute, Troy, NY 12180-3590.

RPI is an equal opportunity/affirmative action employer.

POSITIONS OPEN

CHAIR OF ANESTHESIOLOGY

The College of Medicine of the University of California at Irvine seeks a person of exceptional ability to occupy the chair of the Department of Anesthesiology. Candidates should hold the M.D. degree, be Board-certified in anesthesiology, have an excellent record of research accomplishments, and have demonstrated academic leadership ability. The chair is expected to build a department with strong research programs without sacrificing quality in the clinical service and teaching programs. We hope to fill the position by April 1985. Persons who wish to be considered for the position should send curriculum vitae and the names of three referees to:

Professor Stephen H. White, Chairman
Department of Physiology and Biophysics
University of California
Irvine, California 92717

The University of California, Irvine, is an Affirmative Action/Equal Opportunity Employer.

CHAIRPERSON, DEPARTMENT OF GENETICS

The University of Washington invites applications for the position of chairperson of the Department of Genetics and professor of genetics. Applications, including curriculum vitae, bibliography, and the names of three references, should be sent to: **Search Committee, Department of Genetics SK-50, University of Washington, Seattle, Wash. 98195.** Application deadline: 15 November 1984. *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

CHAIRPERSON DEPARTMENT OF PSYCHIATRY

The University of Nebraska, College of Medicine, is conducting an active search for a chairperson of psychiatry. Applications are sought from Board-certified physicians with established credentials in research and demonstrated leadership in medical education. Interested applicants should submit curriculum vitae by 1 December 1984 to: **Michael F. Sorrell, M.D., Professor of Internal Medicine, Chairman of Advisory Committee, Office of the Dean, University of Nebraska College of Medicine, 42nd Street and Dewey Avenue, Omaha, Nebraska 68105.** *The University of Nebraska is an Equal Opportunity/Affirmative Action Employer.*

CHIEF BACTERIOLOGIST

The City of Milwaukee Health Department seeks a chief bacteriologist in the Bureau of Laboratories to provide immediate supervision of all programs in the Bacteriological Division. Requires Ph.D. or D.P.H. in medical microbiology and 2 years of specialized training or professional experience; **OR** M.S. in medical microbiology and 5 years of experience in a microbiology laboratory, at least 3 years of which shall have been in a supervisory capacity. Starting salary is \$31,390 with further raises to \$38,191. Residence in the city of Milwaukee is required within 6 months of appointment. Application materials and further information may be obtained from: **The Personnel Department, Room 706, City Hall, 200 East Wells Street, Milwaukee, Wis. 53202, or by telephoning: 414-278-3751.**

DEVELOPMENTAL NEUROBIOLOGY postdoctoral position to study the mechanisms of neural crest cell differentiation into neurons. Individuals with expertise in electrophysiology, electron microscopy, or molecular biology preferred. Excellent opportunity for interaction with other laboratories. Contact: **Dr. Gerald Maxwell, Department of Anatomy, University of Connecticut Health Center, Farmington, Conn. 06032.**

An Affirmative Action/Equal Opportunity Employer, M/W/H

DIRECTOR, RESEARCH AND BIOMEDICAL APPLICATIONS OF NUCLEAR MAGNETIC RESONANCE—The School of Medicine of the University of Pennsylvania seeks a distinguished investigator to lead and coordinate the efforts of the biomedical community at the university in the application of nuclear magnetic resonance to basic biomedical research. It is anticipated that the necessary resources will be provided to establish a working laboratory in nuclear magnetic resonance. Candidates should be eligible for a senior faculty position. Applicants should forward curriculum vitae and bibliography to: **Dr. R. E. Forster, Chairman, Search Committee, Department of Physiology, University of Pennsylvania, School of Medicine/G4, Philadelphia, Pa. 19104.** *The University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

DEPUTY DIRECTOR—GS-15

Environmental Monitoring Systems
Laboratory—Las Vegas

U.S. Environmental Protection Agency (EPA)

Provides technical and managerial leadership in the development and application of environmental measurement methods and systems for monitoring hazardous wastes, pesticides, toxic chemicals, radioactive materials, and other pollutants in the environment. Assists the director in directing the activities of a high-level professional work force of 150 employees and developing and managing an annual operating budget exceeding \$25 million.

Qualifications: Advanced degree in science or engineering with preference for an earned doctorate. Demonstrated capability to direct state-of-the-art environmental monitoring activities. Minimum of 3 years of experience in managing a high-level scientific work force with preference for experience in a research and development organization. U.S. citizenship required.

How to apply: Send completed SF-171, Personal Qualification Statement, to: EPA Personnel Office, P.O. Box 18417, Las Vegas, Nev. 89114, attention: Nancy Porter; telephone: 702-798-2412. Application must be received or postmarked on or before 25 October 1984. EPA is an Equal Opportunity Employer.

DEPUTY DIRECTOR: Applications are invited for the deputy director's position in the Environmental Monitoring and Support Laboratory, U.S. Environmental Protection Agency in Cincinnati, Ohio. This is a permanent full-time Federal Civil Service position with a salary range of \$42,928 to \$50,495, depending upon experience.

The successful candidate will be expected to: (i) assist the director in managing a laboratory responsible for methods standardization and quality assurance techniques; (ii) provide authoritative scientific advice to peer groups; and (iii) serve as agency spokesperson on matters related to environmental monitoring.

The candidate should: (i) possess an advanced degree, preferably an earned doctorate, in science or engineering; (ii) have demonstrated research ability through publications in peer-reviewed journals; and (iii) have a minimum of 3 years of experience in managing a high-level technical group, preferably, a research and development organization.

Further information, including detailed qualification requirements, may be obtained from: Joan K. Schuermann, Personnel Management Division, U.S. Environmental Protection Agency, 26 West St. Clair Street, Cincinnati, Ohio 45268. Telephone: 513-684-7804. Applications (SF-171, Personal Qualifications Statement), accompanied by current curriculum vitae and bibliography, must be submitted to Joan K. Schuermann prior to 15 October 1984. An Equal Opportunity Employer.

MICROBIAL ECOLOGIST

The U.S. Environmental Protection Agency (EPA), Environmental Research Laboratory at Corvallis, Oregon, invites applicants for the position of microbiologist to lead a research program and determine the environmental effects of genetically altered organisms. Applicants must be U.S. citizens, and possess a Ph.D. or equivalent in the biological sciences, ecology, or other related fields; experience in microbial ecology and gene splicing techniques is required. Salary range is \$36,327 to \$55,807. Applications (SF-171, Personal Qualifications Statement, available at most federal agencies) should be sent to: Sheron Johnson, EPA Personnel Office, P.O. Box 18417, Las Vegas, Nev. 89114, no later than 5 October 1984. The U.S. Environmental Protection Agency is an Equal Opportunity Employer.

WILDLIFE TOXICOLOGIST

The U.S. Environmental Protection Agency (EPA), Environmental Research Laboratory at Corvallis, Oregon, invites applicants for a 2- to 4-year term appointment as toxicologist in wildlife toxicology programs. Duties include research and research supervision with some administrative responsibilities. Applicants must be U.S. citizens and possess a Ph.D. or equivalent in toxicology or related fields. Experience in animal physiology or wildlife ecology required. Salary range is \$36,327 to \$55,807, depending on qualifications. Applications (SF-171, Personal Qualifications Statement, available at most federal agencies) should be sent to: Sheron Johnson, EPA Personnel Office, P.O. Box 18417, Las Vegas, Nev. 89114, no later than 12 October 1984. The U.S. Environmental Protection Agency is an Equal Opportunity Employer.

The Health Effects Institute

The Health Effects Institute is a research organization in Cambridge, Massachusetts founded in 1980 whose purpose is to evaluate, plan, execute and coordinate the nation's studies of the health effects of exhaust from cars and trucks. The Institute is funded through a unique mechanism, receiving half of its funds from the United States Environmental Protection Agency and half from the domestic and foreign automotive industry. It is an independent non-profit corporation governed by a 3-member Board of Directors: Archibald Cox, Carl M. Loeb Professor, Harvard University; William O. Baker, Chairman Emeritus, Bell Laboratories; and Donald Kennedy, President, Stanford University. The day-to-day affairs of the Institute are managed by the Executive Director. A Health Research Committee is responsible for developing the research program of the Institute and a biennial research budget. The Health Review Committee reviews each study funded by the Institute along with relevant literature and evaluates the contribution of the overall program to the resolution of unsolved scientific questions. The Institute is an important model for developing the scientific information relevant to regulatory decision-making. To that end it is seeking both to develop innovative research approaches and to foster more extensive patterns of consultation and communication among all interested parties.

HEI is now receiving applications for two senior positions required to administer the organization's activities.

Associate Director for Research

This individual will be responsible for developing recommendations and plans for the scientific research program of the Institute for presentation and approval by the Institute's Health Research Committee. This position is also responsible for efficient monitoring and implementation of the research program. Successful applicants should have the following qualifications: Ph.D., M.D., or equivalent degree; an established record of relevant research experience; an interest in science administration and management; a demonstrated capacity to work with experts in diverse scientific fields; and must possess outstanding scientific credentials and interpersonal skills. Salary range is high \$50,000's to high \$60,000's depending upon skills and experience. Special arrangements may be made for outside research and consulting on issues that do not conflict with HEI.

Associate Director for Scientific Review and Evaluation

This individual is responsible for insuring that the review process of the Institute is carried out employing the highest standards of peer review and in such a way as to insure the credibility of the Institute. As an important part of this process, this individual will develop HEI reviews to make certain that all Institute research is reasonably interpreted by the scientific community, sponsors, and the public, including the quality of science itself, gaps in knowledge that remain, the implications and limitations of translation of research results to health policy and/or regulation, and the level of confidence the Institute has in a study. Successful applicants must possess the following qualifications: a Ph.D. or equivalent degree is desirable but not required if applicant can demonstrate the requisite experience in both scientific and public policy processes required for interpretation of HEI sponsored research; exemplary writing skills; experience in working with members of the scientific community in finalizing reports; experience and skill in committee management; and a high degree of interpersonal skills. The salary is negotiable.

Applicants should forward their curriculum vitae and three letters of reference by October 24, 1984 to: Mr. Thomas P. Grumbly, Acting Executive Director, The Health Effects Institute, 215 First Street, Cambridge, MA 02142.

An Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

ENDOCRINOLOGIST—University-affiliated medical center in New York City seeks endocrinologist with clinical and research interest in male reproductive endocrinology/andrology. Selected individuals should qualify for assistant professor, tenure-track appointment at College of Physicians and Surgeons, Columbia University. Excellent salary and benefits package. Please send résumé to: **William Rosner, M.D., Director of Endocrinology, ST. LUKE'S-ROOSEVELT HOSPITAL CENTER, 428 West 59 Street, New York, N.Y. 10019. An Equal Opportunity Employer.**

The University of California, Los Angeles, Environmental Science and Engineering Program, now 12 years old, is an interdisciplinary program in the School of Public Health. We are seeking to fill two tenure-track positions to conduct graduate level interdisciplinary environmental teaching and research. Emphasis is currently given to problem-solving. The priority areas for recruitment are: (i) environmental engineer, (ii) applied environmental biological scientist, (iii) environmental social scientist, and (iv) environmental geochemist. Applicants should have interest in interdisciplinary studies. A doctoral degree is required. The appointments are expected to be at the junior level but will be made commensurate with experience. Closing date for application is 1 November 1984. *The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority groups.* Interested applicants should submit curriculum vitae and the names of three references to: **Dr. John R. Froines, Chair, Search Committee, School of Public Health, University of California, Los Angeles, California 90024.**

DEPARTMENT OF GEOLOGY AND GEOPHYSICS UNIVERSITY OF CALIFORNIA, BERKELEY

Subject to final budgetary approval, the department is authorized to make **TWO FACULTY APPOINTMENTS**, one at the senior level and one at the junior level, and anticipates making two further appointments next year. Applicants with an outstanding record of research in any field of geology and geophysics are encouraged to apply. The ability to carry out leading research, as well as an interest in teaching graduate and undergraduate students, are major factors in the selection. Applications, including the names of at least three references, should be sent by 15 December 1984 to: **The Search Committee, Department of Geology and Geophysics, University of California, Berkeley, California 94720.**

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

FACULTY POSITION IN HEALTH POLICY. Applications are invited for appointment as assistant/associate/full professor of health policy in the School of Public Health, University of California, Berkeley, beginning fall 1985. Responsibilities include teaching and research in health policy and planning and in providing guidance and consultation to the faculty in this important area. Qualifications include a doctoral degree in an appropriate area such as economics, medicine, political science, sociology, public administration, or public health, and relevant experience in either direct conduct of or research in health policy and/or planning. Salary negotiable within the professorial series. Send curriculum vitae and names of references to: **Professor David Starkweather, Search Committee, School of Public Health, University of California, Berkeley, Calif. 94720, by 9 November 1984.**

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

UNIVERSITY OF MARYLAND, COLLEGE PARK

Applicants are invited for a joint **FACULTY POSITION** (tenure-track) in the Department of Chemistry and Institute for Physical Science and Technology. Candidates at all ranks will be considered. The candidate should have demonstrated the ability to establish a strong research program in the area of chemical physics, either theoretical or experimental. The position does involve teaching responsibilities in chemistry; although, because of the joint nature of this appointment and the emphasis on research, the teaching load will be substantially less than normal. A letter of application, along with curriculum vitae, list of publications, and the names and addresses of three references, should be sent to: **Professor Millard Alexander, Department of Chemistry, University of Maryland, College Park, Md. 20742. The University of Maryland is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

Stanford University, Department of Electrical Engineering, solicits outstanding candidates for a regular **FACULTY APPOINTMENT** in the general area of digital signal processing with an emphasis on digital communication, telecommunication, and filtering. Responsibilities of the position include teaching courses in digital filtering and digital communication and developing research programs. The position is with the Information Systems Laboratory, but interaction will be expected with the STAR (Space, Telecommunications, and Radioscience) Laboratory, the Computer Systems Laboratory, and the Center for Integrated Systems. The position is envisioned as a tenure-track, assistant professor beginning in fall quarter 1985, but the appointment will be made at the level appropriate to the best candidate for the position. To apply, send a résumé, transcript, and a list of at least three references to the chairman of the search committee: **Professor Robert M. Gray, 133 Durand, Electrical Engineering Department, Stanford, Calif. 94305. Stanford University is an Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITIONS IN PHYSICS. Portland State University seeks applicants for two non-tenure track, fixed-term positions for a duration of 2 years beginning 1 January 1985. (i) Assistant or associate professor, minimum qualifications: Ph.D. in physics or related field and proven ability to teach at the graduate level and to perform and direct research in support of our master's and Ph.D. programs. Rank and salary commensurate with experience. (ii) Assistant professor, minimum qualifications: Ph.D. in physics and demonstrated capability and interest in quality teaching at primarily the undergraduate level. Salary range: \$17,000 to \$19,000, commensurate with experience. Additional details upon request. Send résumé including relevant reprints, names of three references, and brief statement of research and/or teaching interest to: **R. W. Sommerfeldt, Head, Department of Physics, Portland State University, P.O. Box 751, Portland, Oregon 97207, by 25 October 1984. Portland State University is an Equal Opportunity/Affirmative Action Employer. Qualified minorities, women, and members of other protected groups are encouraged to apply.**

FACULTY POSITION

Senior-level faculty position with tenure at the University of California, Berkeley. School of Optometry, is available for the 1985-1986 academic year, or earlier. Doctoral degree with postdoctoral research experience or equivalent is required. Research interests should include basic and applied problems in corneal physiology. An interest in physiological properties associated with contact lens use is desirable. Preference will be given to candidates with training in biophysics, physiology, or bioengineering. A strong commitment to excellence in teaching, both at the professional and graduate levels, is required.

Curriculum vitae, statement of research and teaching interests (and background in each), graduate and undergraduate transcripts, lists and reprints of published works, and names and addresses of at least three references should be sent to:

**Professor Robert Mandell
Chairman, Search Committee
School of Optometry
University of California
Berkeley, California 94720**

Applications will be accepted until 15 October 1984. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

CENTER FOR GENETICS UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

The Center for Genetics is seeking candidates for a **FACULTY POSITION** in the area of molecular genetics. The position, starting on or after 1 July 1985, will be at the level of assistant professor or higher, depending on the candidate's qualifications, and will be either tenure-track or tenured. Candidates must have a Ph.D. or its equivalent plus 2 years of postdoctoral experience in molecular genetics or related areas. Significant research accomplishments and/or evidence of outstanding research potential will be key considerations. Applicants should provide curriculum vitae, names and addresses of four references, and a brief statement of research interests and plans. Send applications to: **Dr. Richard L. Davidson, Director, Center for Genetics, University of Illinois College of Medicine, 808 South Wood Street, Chicago, Illinois 60612.** To receive fullest consideration, applications should be received by 1 November 1984. *The University of Illinois is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION IN MOLECULAR BIOLOGY

The Department of Biological Chemistry at the University of California, Irvine, invites applications for a tenure-track faculty position at the junior or senior level. Candidates whose research interests lie within the general area of gene structure and expression in higher eukaryotes and whose expertise includes the imaginative application of techniques in molecular genetics are especially encouraged to apply. Faculty members are expected to develop a strong and independent research program within their areas of interest. Teaching responsibilities include instructing medical and graduate students in selected areas of molecular biology and biochemistry. Applications for this position will be accepted until 1 December 1984. Applicants should send curriculum vitae, brief summaries of past research experience and of the proposed research program, and the names of four persons who can be contacted for letters of reference to:

**Search Committee
Department of Biological Chemistry
California College of Medicine
University of California, Irvine
Irvine, Calif. 92717**

An Equal Opportunity/Affirmative Action Employer

DEPARTMENT OF ZOOLOGY UNIVERSITY OF WASHINGTON

Applications are invited for **TWO FACULTY POSITIONS** effective September 1985. Physiologists, endocrinologists, and zoologists with a marine orientation are particularly encouraged to apply. Candidates must present evidence of strong research activity and potential for obtaining research funding. Although higher rank is not precluded, appointments will probably be made at the assistant professor level. Send curriculum vitae, copies of three publications, and brief outline of previous and proposed research directions, and have three letters of recommendation sent to: **A. O. D. Willows, Chairman, Department of Zoology, NJ-15, University of Washington, Seattle, Washington 98195, by 1 November 1984. Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION IN MICROBIOLOGY. Applications are invited for a tenure-track position in molecular virology, molecular immunology, or molecular biology of pathogenic microorganisms. While primary recruiting for the level of assistant professor, the department would also welcome applicants at the level of associate and full professor. Applicants should have demonstrated research capabilities in molecular genetics and a serious commitment to establishing an independent research program. Please send curriculum vitae, including names of three references and statement of research interests and goals, before 15 December 1984, to: **David B. Kaback, Ph.D., Chairman of the Search Committee, Department of Microbiology, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103. Equal Opportunity/Affirmative Action Employer, M/F/H/V.**

HEAD OF IMMUNOLOGY: The faculty of the Division of Biological Sciences, The University of Chicago, has reorganized to establish a Section of Immunology within the Department of Pathology. This newly created section will be responsible for research, teaching, graduate training, and clinical services in immunology. The section will occupy renovated, contiguous, well-equipped laboratory space, and will have a separate but new pathogen free mouse facility. The new head will have the opportunity to recruit three faculty immediately with more positions opening in the future. The present faculty in the section are F. W. Fitch, J. Quintans, D. A. Rowley, and H. Schreiber. Inquiries should be directed to: **W. H. Kirsten, M.D., Chairman, Department of Pathology, The University of Chicago Medical Center, 5841 South Maryland Avenue, Chicago, Ill. 60637. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.**

IMMUNOLOGY POSTDOCTORAL FELLOW—Position now available for 1 to 2 years in cellular and immunological aspects of malignancy, Down syndrome and biochemistry of action of interferon and biological response modifiers. Must have Ph.D. or equivalent and postdoctoral experience. Background in biochemistry desired. Send curriculum vitae and three references to: **Dr. Lois Epstein, Cancer Research Institute, University of California, San Francisco, Calif. 94143, by 30 October. Affirmative Action/Equal Opportunity Employer.**

SCIENCE

Posters

The following posters of *Science* covers are available:

30 March 1979, Tropical flowering tree;

23 February 1983, Landsat photo of Detroit, Michigan;

29 July 1983, Cheetah;

2 December 1983, Snowshoe hare;

23 December 1983, Cathedral window/DNA molecule.

Combination of space covers in scroll format: 1 June 1979, 23 November 1979, 10 April 1981.

Price is \$5 each (prepaid).

Write to AAAS, Department POST, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005.

Associate Senior Investigator, Antitumor Drug Research

Smith Kline & French Laboratories, a leader in pharmaceutical research, is seeking an excellent scientist to participate in the research efforts of its Antineoplastic Drug Discovery Group of the Natural Products Pharmacology Department located in suburban Philadelphia, Pa.

The successful candidate will:

- develop and adapt bioassays for the detection of potential antineoplastic agents in fermentation broths.
- investigate drug interactions with macromolecules at the cellular level including studies of expression and repair of DNA damage.
- participate in research directed toward understanding the mechanism of action of antineoplastic lead compounds from synthetic and natural product drug discovery efforts.

Candidates are required to have:

- a Ph.D. in Pharmacology, Biochemistry or related field.
- at least 3 years post-doctoral experience in antitumor drug research.
- expertise in mammalian cell culture methodology and in the evaluation of the biological and biochemical effects of drugs in cell culture.
- demonstrated scientific achievement as evidenced by publication in reputable scientific journals.

Preference will be given to candidates who also have training and experience in microbial genetics and/or DNA damage repair.

We offer excellent compensation and benefits, and attractive relocation policy and a work environment that offers considerable opportunity for personal and professional growth. For confidential consideration, send your CV and names of three references to: Walter B. Flagg, Senior Employment Consultant, SmithKline Beckman Corporation, 1594 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
A SmithKline Beckman Company

Scientists

Outstanding Opportunities For Ph.D's at McNeil

McNeil Pharmaceutical, a Johnson & Johnson company, has for over fifty years been recognized as an innovator and leader in the ethical pharmaceutical field. We currently have two (2) significant career opportunities for individuals to become part of our scientific team. Both positions desire a minimum of a Ph.D plus additional experience.

Sr. Information Scientist

The individual we desire will be a successful biomedical scientist interested in pharmaceutical development. Excellent verbal and written communication skills as well as good interpersonal skills will be required. You will be responsible for gathering and synthesizing data for submission to the FDA plus preparing reports on scientific issues pertinent to the company's ongoing and future projects. A Ph.D in a biomedical discipline and a solid record of research and publication are required.

CNS Electrophysiologist

Senior level Scientist sought for Department of Biological Research. Demonstrable pharmacology training, strong publication background plus 2-4 years post doctoral experience necessary. The individual will contribute experimentally and conceptually to drug discovery programs and research efforts in the areas of mental disease and analgesia plus demonstrate a proficiency in in vivo extra — and intracellular recordings, with experience utilizing in vitro techniques. Supervisor skills helpful.

These positions support our important research endeavors and afford professional growth. We offer competitive salary and the comprehensive benefits of a Johnson & Johnson company as well as a convenient suburban Philadelphia location. For immediate consideration please submit curriculum vitae and salary requirements in confidence to: Ms Joan Foley, McNeil Pharmaceutical, Spring House, PA 19477

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1985 Fossil Energy Research Opportunities

SUMMER RESEARCH

The U.S. Department of Energy (DOE) technology centers in Pittsburgh, PA and Morgantown, WV, invite applications from qualified **faculty members and graduate students**. The unique and advanced facilities and the state-of-the-art research and development programs provide challenging opportunities for participation in fossil energy research for the summer of 1985 and a few sabbatical leaves.

Information and application materials (indicate your academic status) may be obtained from

Fossil Energy Research
Opportunities
University Programs Division
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, Tennessee 37831-0117

This is an equal opportunity program open to qualified persons without regard to race, sex, creed, color, handicap, or national origin. The program is open to U.S. citizens and permanent resident aliens.

U.S. DEPARTMENT OF ENERGY Office of Civilian Radioactive Waste Management 1985 Fellowships

Fellowships are offered by the U.S. Department of Energy (DOE) for graduate study and research in radioactive waste management. The program seeks to encourage qualified undergraduates in engineering, the physical sciences, mathematics, and the life sciences to pursue graduate study at participating university programs in radioactive waste management technologies. Fellowship stipends are \$12,000 for a 12-month appointment. In addition, tuition and other required fees are paid in full.

The program includes a practicum at a participating research center. The practicum is designed to give the fellows on-site experience with DOE radioactive waste management research activities. Applications for fellowships beginning January 1, 1985, must be received in the Oak Ridge Associated Universities' University Programs Division office at the address below by November 19, 1984, 4:30 p.m.

Information and application forms may be requested from
Nuclear Energy Fellowships
University Programs Division
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, Tennessee 37831-0117
Telephone (615) 576-3423

This is an equal opportunity program open to all qualified persons without regard to race, sex, creed, color, age, handicap, or national origin. An applicant must be a U.S. citizen or a permanent resident alien.

POSITIONS OPEN

FACULTY POSITIONS—MOLECULAR BIOLOGY. The Department of Microbiology, University of Texas Health Science Center at San Antonio (UTHSCSA), seeks to hire several tenure-track faculty members (junior-to-senior appointments) with interests in gene regulation at the molecular level. Potential candidates with strong records of research achievement in the molecular biology-genetics of any biological (prokaryotic, eukaryotic, viral, or immunological) system are encouraged to apply. Successful candidates are expected to develop/maintain innovative research programs and to participate in departmental teaching activities. This is an exceptional opportunity to join an expanding department committed to excellence in research and teaching and located in a desirable academic-geographic setting. Applicants should mail curriculum vitae, a statement of current and future research goals and arrange to send three letters of reference by 14 December 1984 to: **Dr. Joel B. Baseman, Chairman, Department of Microbiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284. UTHSCSA is an Equal Opportunity/Affirmative Action Employer.**

FACULTY (tenure-track) AND POSTDOCTORAL POSITIONS. Applications are invited for tenure-track faculty positions, the rank and salary commensurate with qualifications, and for postdoctoral positions. Candidates for faculty positions must have the capacity to establish outstanding research programs and to participate in the education of M.D., Ph.D., M.D.-Ph.D. candidates and postdoctoral fellows; federal training grants and research grants support Ph.D. candidates, M.D.-Ph.D. candidates, and postdoctoral fellows. Please send curriculum vitae, bibliography, and names and addresses of three references to: **Dr. Jack Peter Green, Department of Pharmacology, THE MOUNT SINAI MEDICAL CENTER, One Gustave L. Levy Place, New York, N.Y. 10029. An Equal Opportunity Employer.**

FACULTY POSITION—UROLOGY. An attractive faculty position of key responsibility and professional challenge is available in the Urology Department of this prominent 1200-plus-bed New York City medical center. With primary focus in tumor biology, interests and experience should include biochemistry, tumor cell physiology, and cellular immunology. The successful candidate will be encouraged to maintain independence while interacting strongly with members of an active clinical/academic department, and implementation of research involving clinically relevant cancer problems in urology. We offer an excellent salary and comprehensive benefits package. Please send curriculum vitae including salary history/requirements in confidence, to: **Michael J. Droller, M.D., Professor and Chairman of Urology, THE MOUNT SINAI MEDICAL CENTER OF THE CITY UNIVERSITY OF NEW YORK, One Gustave L. Levy Place, New York, N.Y. 10029. An Equal Opportunity Employer.**

INSTRUCTOR, MICROBIOLOGY Department of Microbiology Southwestern Medical School, Dallas

Full-time research and part-time teaching of medical and graduate students. Applicant must have 3 years of postdoctoral experience in immunology; experience with *in vitro* assays for memory B lymphocyte function, assay and purification of B cell-specific lymphokines, and *in vitro* cloning of B cell lymphomas. Applicants should submit curriculum vitae, description of research interests, and names of three references to: **Dr. J. W. Uhr, Department of Microbiology, Southwestern Medical School, 5323 Harry Hines Boulevard, Dallas, Texas 75235. Equal Opportunity Employer.**

MECHANISMS OF HEPATOTOXICITY. Postdoctoral position in biochemical toxicology. Background in hepatocyte culture, subcellular fractionation, lipid peroxidation and/or protein turnover desired. Available immediately. Submit résumé and two letters of recommendation to: **Dr. Steven Cohen, Toxicology Program, School of Pharmacy, UNIVERSITY OF CONNECTICUT, Box U-92, Storrs, Conn. 06268 (Search S-230.) Affirmative Action/Equal Opportunity Employer.**

OBSTETRICS/GYNECOLOGY. Professor and chairman University of New Mexico (UNM) School of Medicine. Board-certified, with active clinical and research interests, teaching and administrative experience. Position currently available. Inquiries should be addressed to: **Warren A. Heffron, M.D., Chairman, Search Committee, University of New Mexico School of Medicine, Albuquerque, N.M. 87131. UNM is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

GC-MS RESEARCH SCIENTIST. Will provide GC-MS analytical services to clients within and outside the Institute, operating and maintaining equipment, including data systems, developing and applying methods, planning and conducting research projects, evaluating and publishing results, and making presentations at scientific meetings. Requires a Ph.D. and two or more years of experience (or equivalent) with a strong working knowledge of the principles of gas chromatography-mass spectrometry (GC-MS) systems. Priority pollutant experience is preferred. Our location in the Rocky Mountains offers an excellent quality of life for the outdoor recreation, university, small community oriented. Send your résumé, salary requirements, references, and a list of publications/reports/patents to: **Manager of Personnel Services, Western Research Institute (WRI), University of Wyoming Research Corporation, P.O. Box 3395 University Station, Laramie, Wyo. 82071. WRI is an Equal Opportunity Employer.**

DEPARTMENT HEAD. The Department of Chemistry at Auburn University announces an opening for department head. Auburn University is Alabama's largest state university. Chemistry has 27 faculty and offers B.S., M.S., and Ph.D. degrees. The department, striving for excellence in teaching and research, has recently acquired a 400 MHz NMR and will house a new university mass spectrometry facility. Applicants with distinguished records in teaching, research, and extramural funding who can provide strong leadership in the future should send curriculum vitae and the names of three references to: **Dr. J. H. Hargis, Chairman of Search Committee, Department of Chemistry, Auburn University, Auburn, Ala. 36849, by 1 December 1984. Equal Opportunity/Affirmative Action Employer.**

TEMPLE UNIVERSITY DEPARTMENT OF BIOLOGY MOLECULAR BIOLOGY—GENETICS

The Department of Biology of Temple University invites applications for a tenure-track academic appointment in molecular biology. The candidates particular interests should be in eukaryotic gene expression and regulation. The successful candidate will be a member of a faculty whose research programs are in cell biology, developmental biology, genetics, and molecular biology. The appointee is expected to maintain an independent research program and to contribute to graduate and undergraduate education and training in his/her area of specialization. All candidates are expected to have postdoctoral experience. Applicants should send curriculum vitae, representative publications, a summary of their previous and proposed research, and the names and addresses of three references to:

**Dr. Nina W. Hillman
Department of Biology, 015-00
Temple University
Philadelphia, Pa. 19122**

Closing date: 1 December 1984. Applications will be reviewed upon receipt. *Temple University is an Equal Opportunity/Affirmative Action Employer.*

Princeton University—PHYSICAL CHEMISTRY. The Department of Chemistry invites applications for a tenure-track position in physical chemistry beginning September 1985. Applicants with any field of specialization may apply, and we especially encourage candidates with interest in condensed matter physical chemistry. Applicants should send curriculum vitae, and a statement of future research plans and have three letters of recommendation sent to: **Professor Herschel Rabitz, Chairman of Recruiting Committee, Department of Chemistry, Princeton University, Princeton, N.J. 08544. Princeton is an Equal Opportunity/Affirmative Action Employer.**

PHYSICIAN-GENETICIST to develop a molecular genetic laboratory at Children's Hospital Medical Center in Oakland, California. The successful candidate will join the existing program of the Medical Genetics Unit under the direction of Sanford Sherman, M.D. In addition to pursuing his/her own research interests, there will be opportunity for clinical activity. This position is fully funded. The proximity to the University of California, Berkeley, the already established ties with the University of California, San Francisco, as well as private genetic facilities in the Bay Area, make this a very attractive position. Applicants should have a strong laboratory background with publications of appropriate nature. Send curriculum vitae and references to: **Ruth Robinson, Human Resources, Children's Hospital Medical Center, 51st and Grove Streets, Oakland, Calif. 94609. An Equal Opportunity Employer, M/F.**

POSITIONS OPEN

Ph.D. OR POSTDOCTORAL BIOCHEMISTRY, PHARMACOLOGIST, OR PHYSIOLOGIST, entry level, with strong background in endocrinology and intermediary metabolism. Understanding of endocrine function and hormonal regulation of liver metabolism desired. U.S. citizens or permanent resident holders only. Send résumé and publication list to: **Dr. T. J. Logan, Manager, Ph.D. Recruiting, Procter & Gamble Company, P.O. Box 39175, Cincinnati, Ohio 45247. An Equal Opportunity Employer.**

PHYSICAL SCIENCE: Tenure-track position teaching interdisciplinary physical science courses, which include components of physics, astronomy, earth sciences, and chemistry to nonscience majors. **Requirements:** Ph.D. in one of the physical sciences; evidence of academic breadth. Submit letter of intent, curriculum vitae, all transcripts, and letters of reference by 15 October 1984 to: **Dr. B. MacLaren, Chair, Natural Science Department, Eastern Kentucky University, Richmond, Ky. 40475. Equal Opportunity/Affirmative Action Employer.**

The Department of Biology at Rensselaer Polytechnic Institute (RPI) is seeking a **PLANT MOLECULAR BIOLOGIST**. Postdoctoral experience is desirable and preference will be given to persons working with nuclear genes or plant-bacterial interactions. Development and maintenance of a strong research program is expected. The applicant will teach Ph.D. students and participate in the education of undergraduates in his/her area of expertise. The Biology Department currently has established plant research programs in chloroplast biogenesis, plant development, and photosynthesis. Affiliation with RPI's Biochemistry Program and the Capital District Plant Sciences Group is possible. It is anticipated that this tenure-track appointment will be made beginning September 1985 at the assistant or associate professor level, depending upon experience. Send curriculum vitae, statement of research interests, and goals and a list of three possible references to: **Professor Carl N. McDaniel, Department of Biology, Rensselaer Polytechnic Institute, Troy, N.Y. 12180. RPI is an Equal Opportunity/Affirmative Action Employer.** Closing date: 7 November 1984.

PLANT MOLECULAR BIOLOGISTS

Plant Molecular Biology, Cornell University. Two tenure-track faculty positions, at the assistant or associate professor levels, one in Department of Plant Breeding and Biometry, the other in the Section of Plant Biology. Both are full-time, 12-month positions with research and teaching responsibilities. Applicants should have training and experience in plant molecular biology. The appointee in plant breeding and biometry will be expected to develop a strong program in plant molecular biology to expand our understanding of molecular genetics in important crop plants and will interact with ongoing research in the department. The appointee in plant biology will be expected to develop a strong program of research in basic aspects of plant molecular biology. With these and related positions we are developing a concentration of excellence in molecular biology at Cornell. This effort is enhanced by funds from the state of New York and a consortium of industries.

Inquiry is invited. Submit a letter of application, a résumé of biographical data and professional experience, and names and addresses of four referees and indicate departmental preference, if any. Deadline for applications is 31 October 1984. Send materials to:

**Dr. Vernon Gracen
Department of Plant Breeding and Biometry
Cornell University
Ithaca, New York 14853
Telephone: 607-256-3103**

Cornell University is an Affirmative Action/Equal Opportunity Employer.

RETINOBLASTOMA RESEARCH POSTDOCTORAL POSITIONS AVAILABLE IMMEDIATELY

Research involves studying oncogene expressions and related problems in retinoblastoma. Background in molecular biology desirable. Send curriculum vitae and the names of three references to:

**Dr. Yuen Kai Fung
Clayton Molecular Biology Program
Childrens Hospital of Los Angeles
P.O. Box 54700
Los Angeles, California 90054
Equal Opportunity Employer**

IMMUNOLOGY RESEARCH

The Du Pont Company has openings in the Central Research and Development Department for Scientists wanting to participate in interactive research efforts and to establish an independent program in their own area of expertise.

PRINCIPAL INVESTIGATORS/ RESEARCH LEADER

Permanent research positions are available at the Junior and Senior levels with a minimum requirement of two years postdoctoral experience. Candidates for basic research positions (Research Division) should have proven creativity and productivity in areas of B Cell or Monocyte Differentiation, Cell Surface Receptors, Lymphokines, T Cell Effector Function, or Gene Regulation and Expression in the Immune System. Candidates for applied research positions (Development Division) should have expertise in T Cell Cloning or Autoimmunity.

VISITING SCIENTISTS

Postdoctoral and sabbatical opportunities are available as 1-2 year appointments in the Research Division. Candidates should have expertise in such areas as Protein Purification, Cell and Molecular Biology consequent to Receptor-Ligand Interactions, or Mammalian Expression Vectors. Prior experience in Immunology is preferred but not required.

Du Pont provides excellent compensation plus outstanding research facilities at the Glenolden Laboratory south of Philadelphia. Qualified candidates should send their curriculum vitae, names of three references, and a short statement of research interests to: **Dr. S.T. Toy, Room X40546, Employee Relations Department, Du Pont Company, Wilmington, Delaware 19898.**



An Equal Opportunity Employer M/F

Boehringer Ingelheim Ltd., a highly respected, rapidly growing pharmaceutical / health care company, is expanding its Research and Development operations. As a major developer and marketer of ethical and over-the-counter drugs, we are seeking innovators for the following positions:

SENIOR SCIENTIST/BIOCHEMIST

The candidate we seek will have a Ph.D. in biochemistry, or equivalent, with two or more years postdoctoral experience. Responsibilities will focus on developing *in vitro* receptor models relevant to signal transduction in cells. Expertise in receptor mediated events particularly related to phospholipids, calcium mobilization and protein kinases is desired.

BIOCHEMIST/ IMMUNOPHARMACOLOGIST

This position will assist in studies utilizing animal tissue and cultured cell lines. Experience in the handling of primary and established cell cultures to include the generation of monoclonal antibodies is desirable. A M.S. degree or B.S. plus equivalent experience in biochemistry is required.

Our state-of-the-art environment is combined with a highly competitive compensation / benefits package including generous relocation assistance. Please send resume and salary history to **Michael Leonetti, R & D, Boehringer Ingelheim Ltd., 90 East Ridge, P.O. Box 368, Ridgefield, CT 06877. An Equal Opportunity Employer M/F/H**



**Boehringer
Ingelheim**

POSITIONS OPEN

POSTDOCTORAL—To study the mechanism of gene expression during erythroid cell differentiation and its relationship to oncogenesis. Send résumé, names and addresses of references, and a summary of research interests to: **Dr. William Scher, Medical Oncology, THE MOUNT SINAI SCHOOL OF MEDICINE, One Gustave L. Levy Place, New York, N.Y. 10029.** An Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE, MICROBIAL BIOCHEMISTRY. A position is available to study the biochemical pathways and metabolic regulation of xylose metabolism in yeasts. This research is part of a larger effort to improve the utilization of renewable lignocellulosic resources. This is a 1-year position with the possibility for extension for a second year. Send curriculum vitae plus names and telephone numbers of three references to: **Dr. Glenn Chambliss, Department of Bacteriology, University of Wisconsin, Madison, Wis. 53706.** The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW to work on the question of regulation of opioid peptides biosynthesis and release in a multidisciplinary setting. Laboratory interests range from mRNA regulation to effects on co-translational and post-translational events and interfaces with circuitry, physiology, and behavior. Previous experience in either biochemistry, molecular biology, neuroscience, endocrinology, or immunohistochemistry is acceptable. Techniques and necessary resources (for example, antisera, probes) are already established in the laboratory. Salary is commensurate with number of postdoctoral years and with federal guidelines. Please submit curriculum vitae, three letters of recommendation, and a statement of research interests. Send to: **H. Akil, Mental Health Research Institute, 205 Washtenaw Place, Ann Arbor, Mich. 48109-0010.** A nondiscriminatory, Affirmative Action Employer.

POSTDOCTORAL POSITIONS IN IMMUNOLOGY available for Ph.D., M.D., or holders of equivalent degrees. Areas under study include the role of eosinophils in hypersensitivity reactions and in host defense against helminths with particular emphasis on the biochemistry and molecular genetics of toxic cationic proteins, control of eosinophilopoiesis, T cell-mediated control of IgE antibody production, mechanisms of hypersensitivity reactions due to antigens, and characterization and measurement of allergens. Studies involve the use of monoclonal antibodies and recombinant DNA. Applicants must be U.S. citizens or hold an immigrant visa. Contact: **Dr. Gerald J. Gleich, Chairman, Department of Immunology, Mayo Foundation, Rochester, Minn. 55905.** Telephone: 507-284-2511. An Equal Opportunity/Affirmative Action Institution.

POSTDOCTORAL POSITION IN SYSTEMATIC AND EVOLUTIONARY BIOLOGY

Available to study mammalian phylogeny through DNA sequences. Candidates should be trained in systematic and evolutionary biology or molecular biology and should desire to combine the two fields. Submit curriculum vitae and names of three references to:

**Dr. Morris Goodman
Department of Anatomy
Wayne State University
School of Medicine
540 East Canfield
Detroit, Mich. 48201**

Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION available immediately to study immunosuppression following antigen-priming with components of the organism *Candida albicans*. The research may involve the study of regulatory cell interactions including cell circuits, as well as fractionation and biochemical characterization of various *Candida* yeast cell components. Send curriculum vitae by 10 October 1984 and three letters of reference to: **Dr. Thomas J. Rogers, Associate Professor, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, Pa. 19140.** An Equal Opportunity Employer.

POSTDOCTORAL POSITION available January 1985 to study electrophysiology and contractile properties of isolated smooth muscle cells. Experience with voltage clamp techniques useful. Send curriculum vitae and references to: **Dr. Peter A. V. Anderson, C.V. Whitney Laboratory, University of Florida, St. Augustine, Fla. 32086.**

Equal Employment/Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for candidates having Ph.D. or M.D. degrees to participate in the ongoing research program on regulation of eukaryotic gene expression. Preference will be given to candidates with experience in biochemical and recombinant DNA technology. Send résumé, brief summary of research experience, and three references to: **Secretary, Laboratory of Pharmacology, Harvard School of Dental Medicine, 188 Longwood Avenue, Boston, Mass. 02115.**

POSTDOCTORAL POSITION IN BIOCHEMISTRY is available beginning 1 January 1985 for a 1- to 2-year appointment. Our laboratory is interested in the regulation of lipid metabolism in the ocular lens and in lens epithelial cells in culture. Techniques in cell culture, enzymology, immunochemistry, and lipoprotein chemistry will be utilized. A background in biochemistry is essential and experience or interest in lipid metabolism is important. The position offers training in lipid biochemistry. The stipend is \$18,000 to \$20,000 per year. Please send curriculum vitae, a brief description of your research background, and the names of three references to:

**Richard J. Cenedella, Ph.D.
Chairman, Department of Biochemistry
Kirkville College of Osteopathic Medicine
Kirkville, Mo. 63501**

An Equal Opportunity/Affirmative Action Employer

U.S. Department of Agriculture Human Nutrition Research Center (HNRC) on Aging at Tufts University

POSTDOCTORAL POSITION available 1 October 1984 to study metabolism and gene expression in vascular smooth muscle and endothelial cells in relation to nutrition and growth state. Studies will utilize adult human vascular cell cultures, and serum-free medium and nucleic acid hybridization technology. Send curriculum vitae and names of three references to:

**Thomas D. Sykes
HNRC Personnel (Room 830)
711 Washington Street
Boston, Mass. 02111**

Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITIONS

A position in comparative physiology with specific interest in the uptake and utilization of organic materials by marine organisms; Ph.D. required. Contact: **Dr. Grover C. Stephens.**

A position in cell biology with specific interests in cell division and other motility processes combining laser microbeam irradiation and monoclonal antibodies; Ph.D. required. Contact: **Dr. Michael Berns, Department of Developmental and Cell Biology, School of Biological Sciences, University of California, Irvine, California 92717.** The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION HUMAN MITOCHONDRIAL GENETICS AND MOLECULAR BIOLOGY

Positions are available at Emory Medical School to study the molecular biology and genetics of the human mitochondrion and the role of mitochondrial genes in human evolution, genetic disease, and cancer. Mitochondrial genes located in both the nuclear and mitochondrial DNA's are being examined by approaches including gene cloning, DNA sequencing, restriction site variation, cell fusion, cell fractionation, and gene transfer. Interested individuals should send curriculum vitae and names of three references to:

**Douglas C. Wallace, Ph.D.
Professor of Biochemistry
Woodruff Memorial Building
Emory University School of Medicine
Atlanta, Georgia 30322**

Emory University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study mammalian gene structure, function, regulation, and mutagenesis. Experience in recombinant DNA, DNA sequencing, peptide immunology or somatic cell genetics useful but not requisite. Will consider individuals with varied backgrounds. Salary support available for at least 2 years. Send curriculum vitae and names of three references to: **Dr. Jay A. Tischfield, Department of Anatomy, Medical College of Georgia, Augusta, Ga. 30912.** J2031.

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL POSITIONS in biochemical or molecular genetics. Will study chromosomal alterations, selected genes, and their products as a part of a multidisciplinary program on mammary cancer biology or study lipid peroxidation and the regulation of enzymes in Down syndrome patients. Experience in molecular biology, tissue culture, and biochemistry preferred. Send curriculum vitae and names of two or three references to: **Dr. Burhan Say, Director, Chapman Research Institute, 5300 East Skelly Drive, Tulsa, Okla. 74135,** by 15 October. An Equal Opportunity/Affirmative Action Employer.

SEVERAL POSTDOCTORAL POSITIONS available during 1984 for research into mammalian appendage, organ, and tissue regeneration at: **Developmental Biology Center, University of California, Irvine, Calif. 92717.** Ph.D. required, preferably in cell, molecular, or developmental biology; neurobiology; or genetics. Positions available for work on cell communication, extracellular matrix, growth factors, effects of cyclosporin, limb development. With Susan Bryant, Scott Fraser, Dennis Cunningham, Marianne Bronner-Fraser, or Kirby Black. Submit résumé, brief description of research interests and experience, and names of three individuals qualified to evaluate your work to: **Susan Bryant (address above).** Please indicate the person or area of your interest. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study the activity of thermophilic microorganisms on surfaces. Candidates should have experience working with the microbial ecology of thermophiles. Some postdoctoral experience preferred. Please send curriculum vitae and names of three references to: **Professor Ralph Mitchell, Laboratory of Microbial Ecology, Division of Applied Sciences, Pierce Hall, Harvard University, Cambridge, Mass. 02138.**

POSTDOCTORAL POSITION (Ph.D. or M.D./Ph.D.). Available January 1985 for fellow in reproductive endocrinology, focusing on modulation of gonadotropin action at the cellular level. Background in biochemistry and culture techniques desirable. Send curriculum vitae and names and telephone numbers of two references to: **Dr. Judith L. Vaitukaitis, Section of Endocrinology and Metabolism, Boston University School of Medicine, 818 Harrison Avenue, Boston, Mass. 02118.** An Equal Opportunity Employer, M/F.

POSTDOCTORAL POSITION available immediately in Research Triangle Park area to study transfection of oncogenes into various cell types. Experience in DNA and RNA isolation, cell transformation systems, and gene expression desirable. Salary: \$20,000 per year. Send curriculum vitae and names of references by 7 October to: **Dr. Bruce Casto, Environmental Health Research and Testing, Inc., P.O. Box 12199, Research Triangle Park, North Carolina 27709.** Starting date desired as soon as possible.

POSTDOCTORAL POSITION available to study ligand binding, kinetics, and magnetic properties of metalloproteins. Experience with rapid kinetics, spectroscopic techniques, and/or protein isolation/purification desirable. NIH funded, available October/November. Send curriculum vitae and names of three references to: **Dr. John Philo, Biochemistry and Biophysics, UNIVERSITY OF CONNECTICUT, Box U-125, Storrs, Conn. 06268.** (Search 4A152.) Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION—Study the pharmacological and electrophysiological properties of phospholipase A2 enzyme on the phrenic nerve-diaphragm junction and the isolated heart muscle. Opportunity to learn biochemical techniques and correlate results with electrophysiologic data. Salary: \$20,000 per year; 2- to 3-year appointment. Submit letter of interest, curriculum vitae, and names of three references to: **Dr. Philip Rosenberg, School of Pharmacy, UNIVERSITY OF CONNECTICUT, Storrs, Conn. 06268.** Telephone: 203-486-2213. (Search S-217.) Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE

Positions available immediately for studies of the regulation of hematopoiesis, immunotherapy of leukemia, and immunodetection of cancer in experimental and clinical systems. Send curriculum vitae and names of three references to: **Dr. Philip Furmanski, AMC Cancer Research Center, 1600 Pierce Street, Lakewood, Colorado 80214.**

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Immunologist/ Biochemist

We are an international company with an expanding R & D program in a large, recently completed research center. Included in our basic program are the study of blood factors, and, the development of viral and bacterial vaccines and various other immunological products.

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Candidates should have a Ph. D. or equivalent degree, at least 2 years post-doctoral research experience dealing with complement, and relevant publications in recognized journals.

Qualified applicants should forward a resume to:

IMMUNO AG Mr. R. Lukschanderl, Recruiting Officer
Industriestraße 72
A-1220 Vienna, Austria



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ATTN: Kathryn E. Lewis
Bldg. 11, Room 2-88
Washington, DC 20307**

Project Manager Preparative Chromatography

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Interested candidates should send their resume in confidence to: **P. Sheehan, Human Resources Department, Waters Chromatography Division, 34 Maple Street, Milford, MA 01757. An equal opportunity employer m/f/v/h.**

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POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE position available October 1984 for the study of ionic and electrical controls of early development, including the measurement of endogenous electrical currents and application of exogenous electrical fields. Equipment available includes the extracellular vibrating probe, conventional intracellular microelectrodes, ion-specific microelectrodes, optical methods for measuring free calcium, and fluorescence microscopy. Send curriculum vitae and names of three references to: **Kenneth Robinson, Department of Biological Sciences, Purdue University, West Lafayette, Ind. 47907. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE to study DNA replication and expression of genes coding for immunoglobulins and histocompatibility antigens. Project also includes identification and isolation of origins of replication in mammalian DNA and effects of oncogene rearrangements on replication. Challenging opportunity for training in recombinant DNA techniques. Send curriculum vitae and have two references sent to: **Dr. Carl Schildkraut, Department of Cell Biology, Albert Einstein College of Medicine, Bronx, N.Y. 10461.**

POSTDOCTORAL RESEARCH ASSOCIATE, available immediately to study the biochemical mechanism of macrophage functions triggered by Fcγ receptors. A recent Ph.D. or equivalent, and experience in cell culture, assays for lymphokines, prostaglandins, and cAMP, affinity purification of receptors is highly desirable. Salary: \$16,000 per year, plus university benefits.

Send curriculum vitae and names of three references before 1 December 1984 to:

Dr. Tsuneo Suzuki
Department of Microbiology
University of Kansas Medical Center
39th at Rainbow
Kansas City, Kans. 66103
Telephone: 913-588-6724

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SIBLEY PROFESSORSHIP OF PLANT MOLECULAR BIOLOGY

The Department of Botany, The University of Texas at Austin, seeks applications for an endowed faculty position. We wish to recruit a senior biologist of international repute who is using techniques in molecular genetics to study important problems in plant science. Applicants should have an active research program in this field, and interest in teaching molecular biology at the graduate and undergraduate levels. Applicants for the professorship, which will be available 1 September 1985, should submit their curriculum vitae, record of publications, three letters of recommendation, and a statement of interests in research and teaching to: **Dr. S. J. Roux, Department of Botany, The University of Texas, Austin, Texas 78713, no later than 1 December 1984. The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.**

PROTEIN CHEMIST: The Department of Biology at the University of Oregon is seeking a person to supervise its protein chemistry facility. The post to be filled is a permanent position at the level of senior research associate. Experience in protein sequencing and some knowledge of protein synthesizing methodology are a necessity. Salary commensurate with background and experience. Send curriculum vitae and names of three references to: **Dr. R. A. Capaldi, Department of Biology, University of Oregon, Eugene, Oregon 97403. Closing date: 22 October 1984. An Equal Opportunity/Affirmative Action Employer.**

QUALITY CONTROL SUPERVISOR

Quality control of raw and pasteurized milk, butter-milk, and other milk by-products, quality control and testing of orange juice, orange drink; troubleshooting problems related to product quality, plant inspection. Testing of farmers' milk samples and helping correct their problems. Sensory evaluation testing, monitoring, fact-finding, and analyzing laboratory results to pinpoint necessary improvement to ensure adherence to product quality standards. Selection, supervision, and training of all laboratory technicians. Compile work schedules and supervise job performance and laboratory work. Must have a B.S. in microbiology and State of Alabama Milk and Cream Testers License; \$16,500 per year. Send résumé to: **Mrs. Armstrong, Alabama State Employment Service, P.O. Box 428, Huntsville, Ala. 35804. Refer to job order number 067160.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE to participate in studies on interaction of isolated cardiac myocytes with components of the extracellular matrix. Biochemical background and experience in cytoskeleton, ECM components, and cell culture desirable. Available 1 November 1984; salary dependent on experience. Send curriculum vitae and names of three references to: **Dr. Thomas K. Borg, Department of Pathology, University of South Carolina, Columbia, S.C. 29208. The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.**

PROFESSOR IN BIOLOGICAL SCIENCES. Applications are invited for the post of professor in biological sciences, tenable from 1 October 1985. Applicants should have research and teaching experience in an area of cell science. Salary on United Kingdom professorial range, current minimum: £17,275 per annum (under review). Further particulars from: **Academic Registrar and Secretary, The University, Exeter, England EX4 4QJ. Closing date for receipt of applications 22 October 1984.**

ANDREW MELLON PROFESSOR UNIVERSITY OF PITTSBURGH Department of Biological Sciences

The retirement of Max Lauffer leaves vacant the Andrew Mellon Professorship in the Department of Biological Sciences. We are seeking a truly outstanding investigator in molecular biology or biophysics to fill the chair. Nominations and applications should be sent to:

Dr. Maurice Sussman, Chairman
The Mellon Professorship Screening Committee
Department of Biological Sciences
University of Pittsburgh
Pittsburgh, Pa. 15260

The University of Pittsburgh is an Equal Opportunity Employer.

RESEARCH ASSOCIATE AND RESEARCH FELLOWSHIP POSITIONS available with research group working on mechanism of action of growth factors, particularly transforming growth factors and the association of oncogene products with growth factor action. Experience with recombinant DNA or protein chemistry techniques is important. Address inquiries to: **Harold L. Moses, M.D., Chairman, Department of Cell Biology, Mayo Clinic/Foundation, Rochester, Minnesota 55905. An Equal Opportunity/Affirmative Action Institution.**

RESEARCH ASSOCIATES

The successful candidates should be highly motivated, imaginative, and independent individuals to elucidate the roles of (i) microheterogeneity in microtubule [PNAS 81, 4041 (1984)], (ii) subunit interactions in the regulation of allosteric enzymes [Biochemistry 22, 5494, (1983); 23, 3813 (1984)], and (iii) protein-nucleic acid interaction. Applicants should send complete curriculum vitae and names of two individuals who can be contacted for letters of recommendation to:

Dr. James C. Lee
Department of Biochemistry
St. Louis University School of Medicine
1402 South Grand Boulevard
St. Louis, Mo. 63104

RESEARCH TECHNOLOGIST position available for an individual with B.S. or M.S. degree in biochemistry, microbiology, or genetics. Full-time permanent position with responsibilities for tissue culture work with mammalian cells, radiation transformation, transfection, isolation and manipulation of nucleic acids, and DNA cloning. Send current résumé and two letters of reference to:

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POSITIONS OPEN

RESEARCH ASSOCIATES (POSTDOCTORAL POSITION)—Position available 1 October 1984 for research in neurochemistry of hypertension. The project will involve studies of using neuroanatomical, immunocytochemical, and morphological techniques in spontaneously hypertensive rats. Candidate should have a strong background in neuroanatomical and immunocytochemical methods. Applicants should send curriculum vitae, along with three references, to: **Madhu Kalla, M.D., Ph.D., Professor of Pharmacology, 329 Jefferson Alumni Hall, Thomas Jefferson University, 11th and Walnut Streets, Philadelphia, Pa. 19107. Equal Opportunity Employer.**

RESEARCH ASSOCIATE OR RESEARCH ASSISTANT PROFESSOR in the Department of Pathology. Research projects in nutritional pathology and chemical carcinogenesis. Ph.D. in biochemistry or molecular biology required. Résumé to: **Dr. H. Sidransky, Department of Pathology, Ross Hall, Room 502, 2300 Eye Street, NW, Washington, D.C. 20037.**



Xytronyx, Inc.

Xytronyx, Inc., a new biotechnology company, has three openings for Ph.D.-level SCIENTISTS:

Virologist/Protein Chemist: We are seeking a scientist with at least 2 years of postdoctoral experience in purification of viral glycoprotein antigens to participate in our vaccine development program.

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Zoologist/Malacologist: We are looking for a malacologist with some experience in protein chemistry.

Organic Chemist/Postdoctoral Fellow: The ideal candidate for this position is a recent Ph.D. with experience in organic synthesis.

Xytronyx offers a very competitive salary and benefit package. Please send résumés and the names of three references to: **Director of Personnel, Xytronyx, Inc., 645 North Michigan Avenue, Suite 645, Chicago, Illinois 60611.**

SENIOR TOXICOLOGIST/ASSOCIATE DIRECTOR

The Primate Research Institute (PRI) of New Mexico State University (NMSU) is seeking a senior level toxicologist to direct the expansion and development of its toxicology program. This group has strong ties to industry and performs both basic research and GLP safety evaluations in several species. The position requires at least 5 years of experience beyond the doctoral degree. Candidates with both academic and industrial experience would be ideal. Administrative experience and a history of successful grant and contract acquisition are essential. The university intends to develop its toxicology effort into one of the leading programs in the country and is only seeking highly qualified, self-motivated applicants. The successful applicant will play a significant role in the future direction and development of PRI. Salary is highly competitive and commensurate with experience. PRI is located near Alamogordo which offers the best of either high desert or mountain living environments. Send a complete résumé by 12 October 1984 to: **Director, Primate Research Institute, New Mexico State University, P.O. Box 1027, Holloman AFB, N.M. 88330. NMSU is an Equal Opportunity/Affirmative Action Employer.**

STAFF SCIENTIST: M.S.-level immunologist or biomedical engineer to operate and maintain a FACS 440 dual laser cell sorter facility. Must have at least one year of experience in operation of fluorescence activated cell sorter. We offer a superior salary and fringe benefit package. Send curriculum vitae and names of three referees in confidence to: **Box 220, SCIENCE.**

TECHNICAL EDITOR to provide comprehensive editing and production supervision for scientific/engineering publications. Needs 10 years of publishing experience, exceptional language skills, and B.S. in mathematics, physical science, or technical writing. For prompt confidential consideration, please send your résumé to: **Rosalie L. Bottino, Box J-EES-22654-55, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Ill. 60439. Affirmative Action/Equal Opportunity Employer.**

The MX Missile and the Strategic Balance of Power

A collection of recent articles from *SCIENCE* on contemporary strategic ideology is now available for use by professionals, teachers, and researchers interested in the nuclear arms race.

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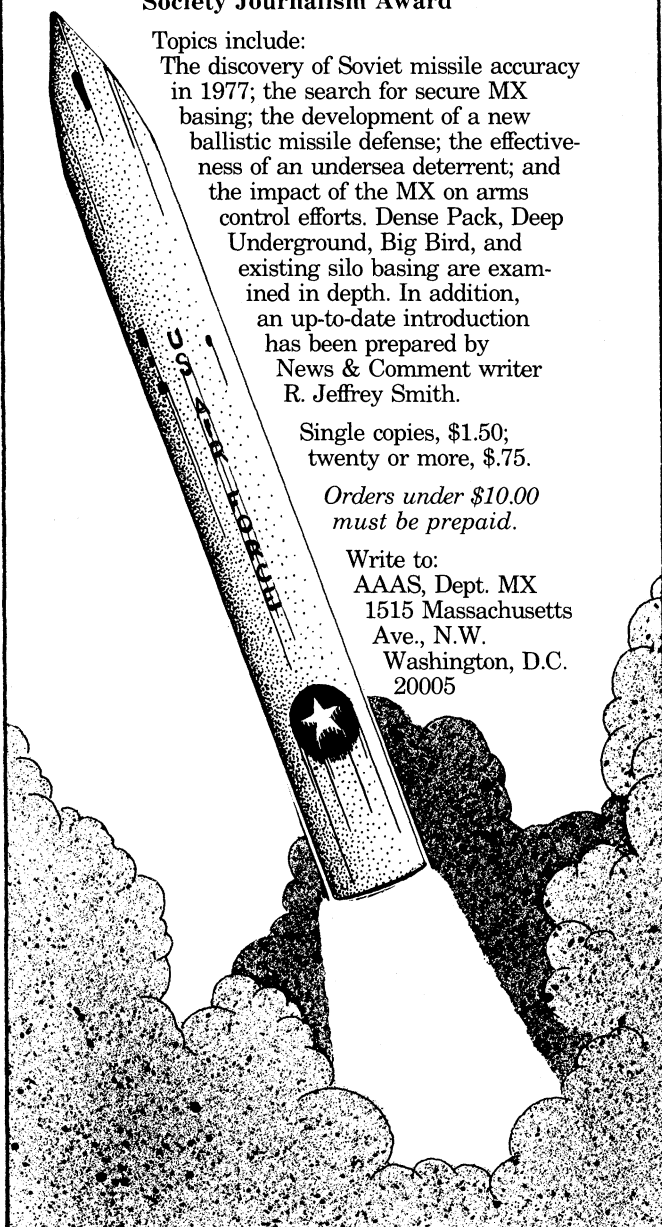
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RESEARCH SCIENTIST

The Biotechnology Group of Pharmacia Inc. is seeking an experienced Chemist to compliment our multi-disciplinary staff. The Scientist's responsibilities will include: peptide synthesis, separation of peptide and proteins and peptide sequencing. The successful candidate should have:

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New position available immediately to study aspects of DNA replication and their role in chemical carcinogenesis. This position requires a Ph.D. or equivalent degree in biochemistry, experimental pathology, molecular biology, or related biomedical research area. Studies to be performed in vivo (rat liver) as well as in tissue culture involve kinetics of DNA replication and cell proliferation, molecular mechanisms of replication and repair, cloning and probing of oncogenes, and quantitation of carcinogen binding by ELISA and electronmicroscopy. Send curriculum vitae and names of three references by 31 October 1984 to: **Dr. David G. Kaufman, Department of Pathology, 515 Brinkerhous-Bullitt Building 228H, University of North Carolina, Chapel Hill, N.C. 27514. An Affirmative Action/Equal Opportunity Employer.**

SEDIMENTARY GEOLOGIST

Wesleyan University

The Department of Earth and Environmental Sciences invites applications for a tenure-track faculty position to commence with the 1985-1986 academic year at the assistant professor rank. The successful candidate will be responsible for regularly teaching an accelerated undergraduate course in sedimentology/sedimentary petrology. Applicants should also have research experience and teaching interests in one or more of the following: seismic stratigraphy, mathematical geology, mechanics of sediment transport, marine geology, and coastal processes. All requirements for the Ph.D. should be completed by the time of appointment. *Women and minority candidates are encouraged to apply for this position.* Letters of application should be accompanied by a statement of research/teaching interests, recent curriculum vitae, the names and addresses of at least three referees, and be forwarded to: **Gregory S. Horne, Chairman, Department of Earth and Environmental Sciences, Wesleyan University, Middletown, Conn. 06457. Wesleyan University is an Affirmative Action/Equal Opportunity Employer.**

SENIOR FACULTY, multiyear contract positions available for Ph.D., D.O., or M.D.:

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Interested candidates should send curriculum vitae and all supportive evidence (teaching experience and current grant support information and grant track record) to: **Search Committee, Dr. Arnold L. Nagler, Associate Dean, Preclinical Medical Education, New York College of Osteopathic Medicine, Old Westbury, Long Island, New York 11568.**

SENIOR NEUROBIOLOGIST

Bryn Mawr College, Department of Biology, seeks a neurobiologist for the position of **professor of biology and chairman** of the department. A specialist in neurophysiology is preferred although applicants from other areas of neurobiology will be considered. Applicants must have a proven record of funded research, and currently be at the rank of professor or qualified for promotion to that rank. The position requires establishing an active program of research and participating in the development of an interdepartmental program in neuroscience and behavior. Teaching responsibilities for the academic year normally consist of a one-semester graduate seminar, a one-semester advanced undergraduate course with laboratory, and limited participation in one semester of the introductory course in biology. Send résumé, copies of representative publications, a brief description of research plans, and three letters of recommendation to: **Neurobiology Search Committee, Department of Biology, Bryn Mawr College, Bryn Mawr, Pa. 19010. Closing date: 30 November 1984. Affirmative Action/Equal Opportunity Employer.**

GRANTS

THE GTE LECTURESHIP PROGRAM (formerly the S and H Foundation Program) makes grants of up to \$4000 to accredited colleges and universities for lectures related to the broad topic, **"SCIENCE, TECHNOLOGY, AND HUMAN VALUES."** Application forms may be obtained from: **Professor Richard Schlatter, 4 Huntington Street, Rutgers University, New Brunswick, N.J. 08903; telephone: 201-369-8421. The deadline is 1 March 1985.**

CONFERENCE

FIFTH INTERNATIONAL CONFERENCE ON EXPERIMENTAL ULCER

16 May through 18 May 1985

Boston, Massachusetts

(Immediately following the AGA meeting in New York City)

The International Conference on Experimental Ulcer will be held in the United States for the first time. The main objective of the meeting is to coordinate and synthesize new data pertinent to the pathogenesis, that is, mechanism of development of gastric and duodenal ulcers, as well as to review recently discovered physiologic and pharmacologic factors relevant to ulcer disease. In addition, "hot" topics will be reviewed at round-table discussions. At the end, the major topics will be summarized in the form of "take-home messages" by prominent experts in the field.

The conference will thus differ in organization from numerous, highly specialized symposia concerning various aspects of ulcer disease. Although most of the topics will be related to gastric and duodenal ulcers, new relevant developments in experimental and clinical ulcerative colitis and esophageal lesions will also be covered. For most of the topics, one to three invited lectures will be followed by short presentations selected from submitted abstracts. Additional presentations will be scheduled for poster sessions.

Further information may be obtained from the Scientific Secretariat: **Fifth International Conference on Experimental Ulcer, c/o Dr. Sandor Szabo, Department of Pathology, Brigham and Women's Hospital, 75 Francis Street, Boston, Mass. 02115.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS—The University of Nevada School of Medicine announces the availability of postdoctoral fellowships in Pharmacology, Gastrointestinal Physiology, Biochemistry, and Microbiology. Address inquiries to the above departments: **c/o Postdoctoral Studies, Executive Associate Dean, University of Nevada School of Medicine, Reno, Nev. 89557. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIPS UNIVERSITY OF ROCHESTER DEPARTMENT OF PHYSIOLOGY

Funded position is available for investigations of ionic channels in cardiac cells. Voltage clamp studies are planned in enzymatically dispersed single cells using a patch pipette technique as well as in isolated Purkinje fiber cell bundles using a two microelectrode technique. Investigations will focus upon modulation of Ca^{2+} and K^{+} channels by Ca channel antagonists/agonists as well as by neurohormones. Opportunities will be available to combine biochemical, electrophysiological, and optical experimental procedures. All experiments are interfaced to microprocessor-based data collection and analysis equipment.

Send curriculum vitae to:

**Dr. Robert S. Kass
Department of Physiology, Box 642
University of Rochester
School of Medicine and Dentistry
601 Elmwood Avenue
Rochester, New York 14642**

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FELLOWSHIP

The Department of Surgery, Southwestern Medical School, is seeking applicants for **INSTRUCTOR—M.D.**, accredited general surgery residency, interest in surgical critical care and trauma surgery. Deadline for submission of applications for 1985-1986 is 31 October 1984. Contact: **John A. Weigelt, M.D., Department of Surgery, 5323 Harry Hines Boulevard, Dallas, Texas 75235. Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP available immediately for studies of central and peripheral regulation of endocrine/metabolic adjustments to stress (burn, cold starvation, and so forth). Background experience with animal models preferred. Appointments at the Shriners Burns Institute, Massachusetts General Hospital, and Harvard Medical School. Résumé to: **H. H. Bode, M.D. Shriners Burns Institute, 51 Blossom Street, Boston, Mass. 02114. An Equal Opportunity Employer.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP

Postdoctoral position, available immediately, to study biosynthesis of glycoproteins of the rough endoplasmic reticulum using rotavirus genes as a probe for RER membrane glycoprotein synthesis and processing. This involves an ongoing project in the use of cloned genes and eukaryotic expression vectors to study intracellular transport and processing of glycoproteins. Previous experience with recombinant DNA technology is essential for this position which will involve constructions and manipulation of cloned viral genes which are already available in the eukaryotic expression vectors. Send curriculum vitae and three letters of reference to: **Dr. Paul H. Atkinson, Department of Developmental Biology and Cancer, Albert Einstein College of Medicine, Bronx, New York 10461.**

GRADUATE STUDY

NEUROSCIENCES AT BAYLOR COLLEGE OF MEDICINE

Baylor College of Medicine offers an interdepartmental Neuroscience Program for students interested in advanced study leading to the Ph.D. in neuroscience. Applications must be completed by 1 April 1985, and applicants will be notified regarding admission and financial support by 15 May 1985. Information regarding the program curriculum, faculty, research opportunities, and application procedures may be obtained from:

**Scott F. Basinger, Ph.D., Director
Predoctoral Program in Neuroscience
Cullen Eye Institute, Baylor College of Medicine
Texas Medical Center
Houston, Texas 77030**

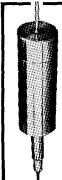
TRAINING GRANT

NIH TRAINING GRANT POSITIONS are now available for postdoctoral studies in the molecular biology of peptide growth factors. Applicants should possess a keen interest in eukaryotic gene regulation and have demonstrated expertise in recombinant DNA methodology. United States citizenship required. Graduate studies are also available for outstanding predoctoral candidates. Please send curriculum vitae and two letters of recommendation to: **Dr. Michael J. Getz, Department of Cell Biology, Mayo Clinic, Rochester, Minn. 55905. An Affirmative Action/Equal Opportunity Institution.**

TRAINING PROGRAM

POSTDOCTORAL AND PREDOCTORAL TRAINING PROGRAM IN BIOANALYTICAL RESEARCH. This NCI-supported training program provides research opportunities aimed at developing innovative and effective analytical methodology for the quantitative determination of therapeutic levels of drugs, particularly agents used in combating cancer, and their biotransformation products in biological fluids. Collaborative research projects with the Center for Bioanalytical Research are available. Applicants must be citizens or permanent residents of the United States. Postdoctoral candidates should send résumé and three references. Predoctoral students should make application to the graduate program in the Department of Pharmaceutical Chemistry. Correspondence should be directed to: **Dr. Ronald T. Borchardt, 3006 Malott Hall, Department of Pharmaceutical Chemistry, The University of Kansas, Lawrence, Kans. 66045. Equal Opportunity/Affirmative Action Employer.**

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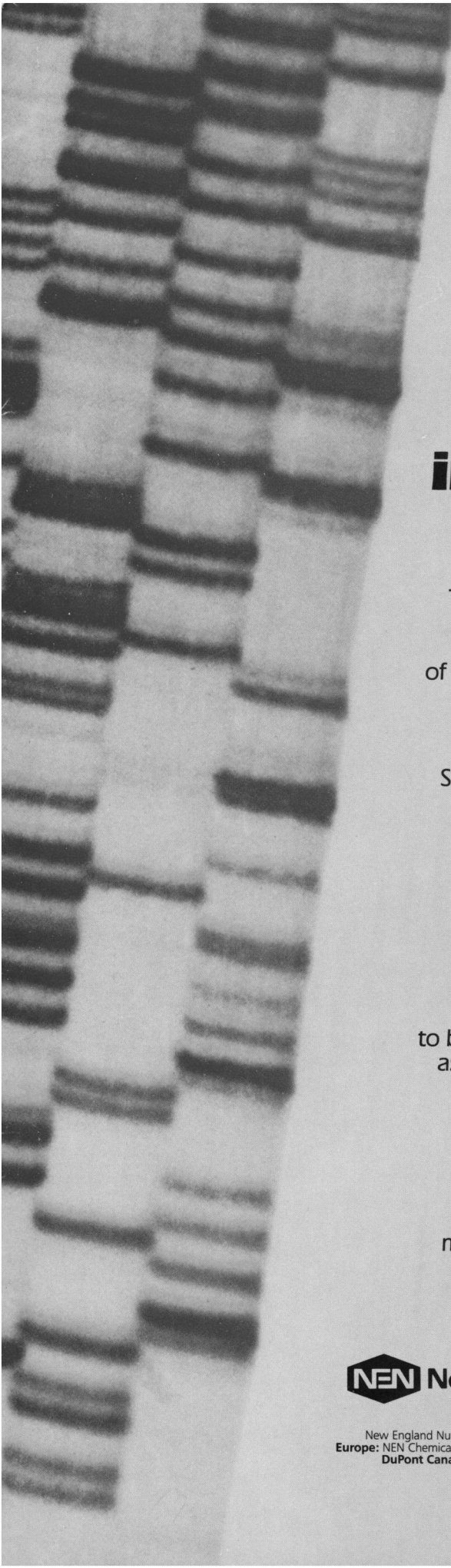


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How to do two days' work in one hour.

Introducing the KODAVUE™ Electrophoresis Visualization Kit. It eliminates the tedious staining-destaining steps that tie up your lab facilities and people for days. It's the new, fast and sensitive way to visualize proteins and polypeptides separated on polyacrylamide gels without silver.

The simple fix-sensitize-develop procedure of the KODAVUE Kit for visualization of fixed protein takes just one hour. *Conservatively rated 50 to 100 times more sensitive than COOMASSIE Brilliant Blue R250,*

it gives reproducible results with high (1-2 ng) sensitivity. A single procedure applies to all gel thicknesses—up to 1.5 mm. And economy. Kits contain more than enough reagents to visualize 24 gels.

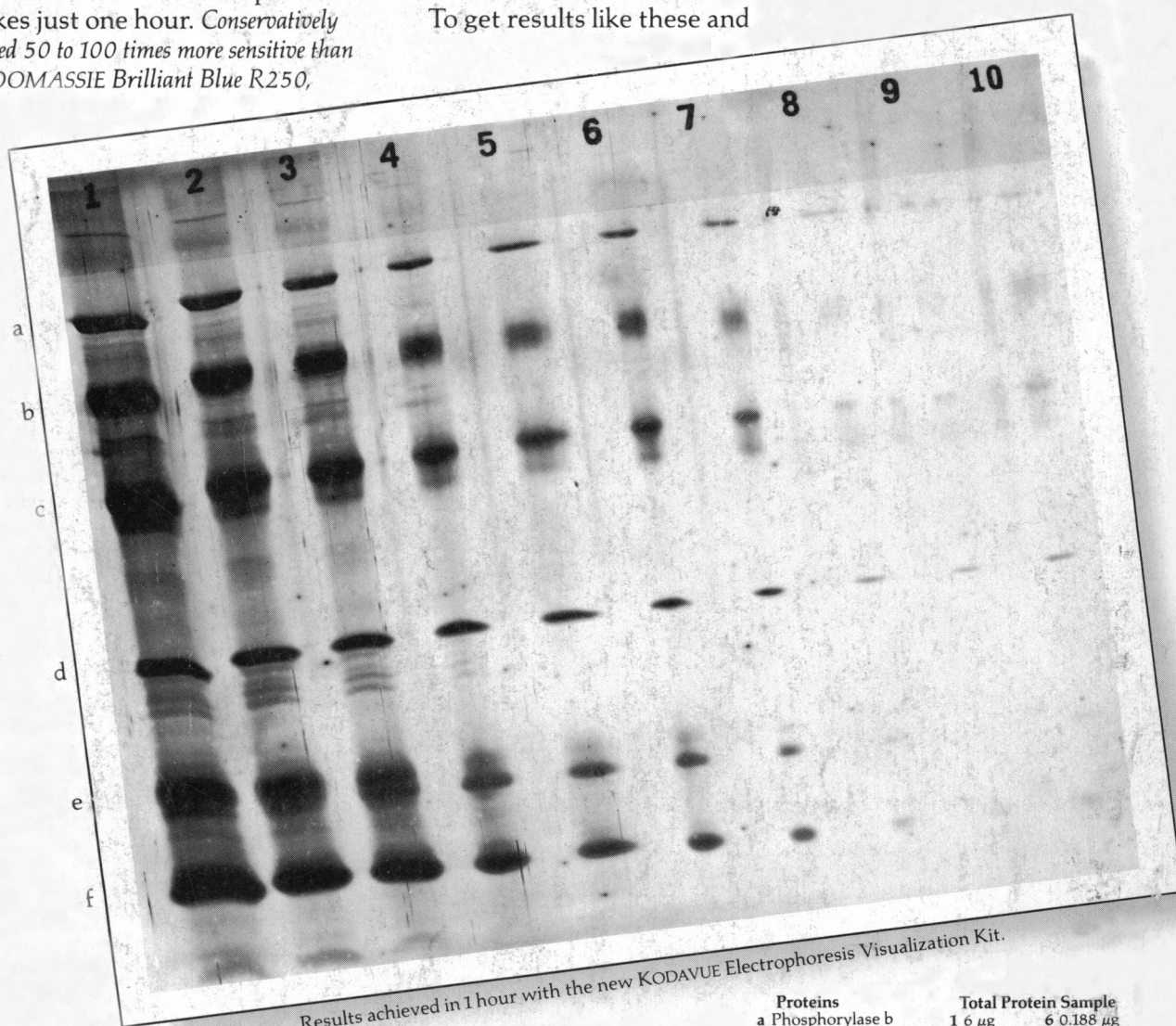
The kits have an indefinite shelf life. In use, the reagent working solutions are stable and can be stored at room temperature for months.

To get results like these and

save time and money, contact one of the dealers in Kodak laboratory chemicals listed below. Or, for a free brochure explaining this economical new procedure, write: KODAK LABORATORY & SPECIALTY CHEMICALS, Dept. 412L-S, Rochester, NY 14650.



**KODAK
LABORATORY AND
SPECIALTY CHEMICALS**



Results achieved in 1 hour with the new KODAVUE Electrophoresis Visualization Kit.

Proteins	Total Protein Sample
a Phosphorylase b	1 6 µg 6 0.188 µg
b Albumin	2 3 µg 7 0.094 µg
c Ovalbumin	3 1.5 µg 8 0.047 µg
d Carbonic anhydrase	4 0.75 µg 9 0.023 µg
e Trypsin inhibitor	5 0.375 µg 10 0.01 µg
f a-Lactalbumin	

KODAVUE Electrophoresis Visualization Kits are available through these dealers: American Scientific & Chemical; American Scientific Products; B.C. Chemicals Division; Bioclinical Laboratories NJ; Brand-Nu Laboratories, Inc.; Bryant Laboratory, Inc.; CAMX Scientific; Captree Chemical Corp.; Doe & Ingalls, Inc.; Fisher Scientific; Mays Chemical; Midland Scientific, Inc.; North-Strong Division; Preiser Scientific; Sargent-Welch Scientific; Scientific & Industrial Sales & Service, Inc.; Specialty Chemicals, Inc.; Spectrum Chemicals Mfg. Corp.; VWR Scientific Inc.; Ward's Natural Science Establishment, Inc.

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