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Properties and Function of the Proteins of the Acetylcholine Cycle in Excitable Membranes

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and

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Toward a Molecular Model of Bioelectricity

by EBERHARD NEUMANN

This revised edition contains a reprint of the pioneering 1959 edition, plus two new supplements. In the first one Dr. Nachmansohn outlines the highlights of the many important new developments in the biochemical investigations of nerve activity—particularly the properties and function of the specific proteins and enzymes associated with the action of acetylcholine. Supplement II by Dr. Eberhard Neumann describes in detail an exciting new development, an integral model of nerve excitability. The model integrates many electrophysiological, biochemical and thermodynamic data. One of the great values of the model is the fact that it suggests many experimental tests of the ideas which Neumann proposes. His integral model is an epoch-making contribution to the understanding of bioelectricity. The two supplements include an extensive bibliography.

1975, 416 pp., \$19.50/£9.35

THE SOCIAL PSYCHOLOGY OF BARGAINING AND NEGOTIATION

by JEFFREY Z. RUBIN and BERT R. BROWN

CONTENTS: Introduction. The Bargaining Relationship. An Overview of Social Psychological Approaches to the Study of Bargaining. Social Components of Bargaining Structure. Physical Components of Bargaining Structure. Issue Components of Bargaining Structure. Bargainers as Individuals. Interdependence. Social Influence and Influence Strategies. Afterthoughts.

1975, 364 pp., in preparation

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1974, 248 pp., \$22.50/£10.80

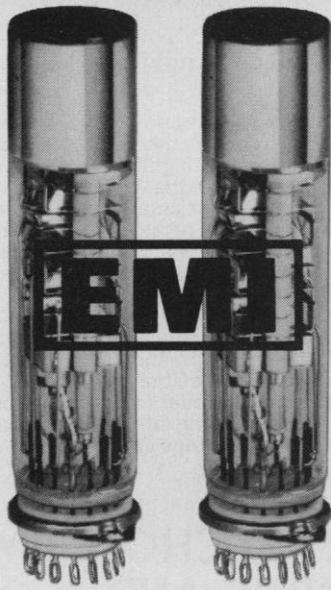
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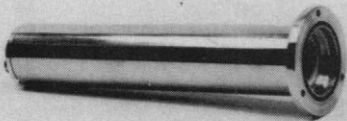
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Plant Physiologist Autoecologist. Seeks temporary position from fall 1975, teaching, research, industry. Twelve years of experience United States, Israel. Thirty-five papers, water relations, stress heat, salinity, altitude, theoretical and applied. Box 262, SCIENCE. X

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Teaching with some research; title: Assistant Professor of Animal Sciences and Assistant Professor of Agriculture (Statistics), Washington State University (*An Equal Opportunity/Affirmative Action Employer*). Those desiring to apply for this position should send complete résumé by 1 July 1975 to: **Dr. R. L. Preston, Chairman, Department of Animal Sciences, Washington State University, Pullman, Washington 99163.**

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AEROSOL SCIENTIST—POSTDOCTORATE: Applications of aerosols to studies in nuclear medicine. Primary work in use of dry radioaerosols for diagnostic studies of lung airway patency following inhalation. One-year appointment (\$10,000) available 1 July 1975. Send résumé and references to: **Dr. G. D. Robinson, Jr., Nuclear Medicine Research Laboratory, 900 Veteran Ave., Los Angeles, California 90024**

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Assistant Professor, starting August 1975 or January 1976. Must have demonstrated abilities in research as evidenced by publications and demonstrated teaching ability. Teaching duties include courses in animal ecology and limnology. Women and minority candidates are urged to apply. Send curriculum vitae, reprints, a full description of research interests and four letters of reference to: **Dr. Victor H. Hutchison, Chairman, Department of Zoology, University of Oklahoma, Norman, Oklahoma 73069, by 1 July 1975.**

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A position is available at the **ASSOCIATE PROFESSOR** rank in the Division of Allergy/Immunology, Department of Pediatrics, State University of New York at Buffalo. The position is open to individuals with the following qualifications. (i) M.D. Degree. (ii) Board certification in Pediatrics and in Allergy/Immunology. (iii) Research capabilities in laboratory immunology, in addition to the ability to supervise laboratory procedures for the evaluation of humoral and cellular immunologic competence, polymorphonuclear leucocyte function and the complement system. (iv) Able to assume clinical and teaching responsibilities. Apply to **Chairman, Department of Pediatrics, Children's Hospital, 219 Bryant Street, Buffalo, N.Y. 14222. Telephone: 716-878-7258. An Equal Opportunity/Affirmative Action Employer.**

On 1 July 1975 there will be a vacancy in the Department of Anatomy for an **ASSISTANT PROFESSOR**. The teaching responsibilities will be in the field of gross anatomy. Independent research will be encouraged in embryology. All applicants should have the M.D. or Ph.D. degree in anatomy.

Candidates should submit their curriculum vitae and bibliography to **Dr. Richard Snell, Professor and Chairman, Department of Anatomy, George Washington University Medical Center, 2300 Eye Street, NW, Washington, D.C. 20037**

Dartmouth College is seeking an **ASSISTANT PROFESSOR IN THE AREA OF DEVELOPMENTAL BIOLOGY**. Specialty is open, postdoctoral experience and evidence of research productivity beyond the doctoral dissertation are considered essential. Send curriculum vitae and arrange for three letters of recommendation to be sent to: **R. D. Allen, Chairman, Department of Biological Sciences, Dartmouth College, Hanover, N.H. 03755. Dartmouth College is An Equal Opportunity/Affirmative Action Employer.**

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ASSISTANT PROFESSOR: CONSERVATION-BIOLOGY

New position fall 1975 for doctorate plus postdoctoral teaching experience. Responsibilities include curriculum development and undergraduate instruction for an impending Department of Conservation and Recreation. Expertise is needed in Range Improvement, Range Inventory and Analysis, Watershed and Soils, Introductory Forestry, Wildlife Management Techniques and possibly related areas such as Conservation of Natural Resources, Dendrology, and Agrostology. Salary \$13,000 for academic year plus potential for summer teaching. Closing date 1 July. Send all transcripts, references, application, and curriculum vitae to **Dr. Karl Holte, Search Committee Chairman, P.O. Box 8007, Idaho State University, Pocatello, Idaho 83209. Telephone: (208) 236-3530.**

ASSISTANT OR ASSOCIATE PROFESSOR—MARINE MICROBIOLOGY. Ph.D. with minimum 2 years postdoctoral experience; preferably with ongoing research program in marine field. Able to teach undergraduate microbial ecology and general microbiology (for non-majors) courses, and graduate marine microbiology. Nine-member department, A&S College, grants B.A., M.S. and Ph.D. degrees, and participates in teaching general biology. Applications accepted until 30 September 1975 for position beginning January 1976. Send curriculum vitae, copies of publications, and names of three references to **M. Herzberg, Chairman, Microbiology Department, University of Hawaii, 2538 The Mall, Snyder 207, Honolulu, Hawaii 96822. An Equal Opportunity Employer. All qualified persons will be considered for position, including handicapped persons, members of minority groups, and women.**

UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE DEPARTMENT OF PATHOLOGY

In accordance with University principles of fair-practice employment, applications are invited for position of **assistant professor or associate professor of pathology.** Applicants must be Board-certified in Pathologic Anatomy with strong interest and experience in Cytology.

Applications, including curriculum vitae and four references, should be sent to:

**Dr. H. T. Enterline, Director
Division of Pathologic Anatomy, Hospital
University of Pennsylvania
34th and Spruce Streets
Philadelphia, Pa. 19104**

ASSISTANT RESEARCH PROFESSOR

For research in the area of lipid metabolism in cultured cells. Available fall 1975. Candidates should display capability for productive and independent research. Applications with research bibliography and names of three references should be addressed to: **Chairman, Committee on Postdoctoral Appointments, Department of Biochemistry, George Washington Medical School, 2300 I St. NW, Washington, D.C. 20037.**

CHAIRMAN, DEPARTMENT OF EPIDEMIOLOGY

Applications are invited for a tenured faculty position to direct a major academic department at the Johns Hopkins University School of Hygiene and Public Health. Qualifications include recognized competence in the field of Epidemiology, experience in teaching and research, and ability to direct a capable and large faculty and staff. Address all inquiries to **Donald A. Cornely, M.D., Johns Hopkins University School of Hygiene and Public Health, 615 N. Wolfe Street, Baltimore, Maryland 21205.**

Applicants will be considered without regard to race, religion, sex, or national origin. *Johns Hopkins University is An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The Physics Department at Illinois Benedictine College expects to have a faculty position as a **VISITING ASSISTANT OR ASSOCIATE PROFESSOR** beginning September 1975. The initial appointment would be for 1 year with the possibility that the appointment could be extended for two additional years. Applications are invited from individuals with a Ph.D. or equivalent who have a strong commitment to teaching physics to undergraduates. Interested persons are invited to submit a statement of their qualifications and a brief description of their teaching interests to **Dr. Ralph D. Meeker, Chairman, Department of Physics, Illinois Benedictine College, Lisle, Illinois 60532. An Equal Opportunity/Affirmative Action Employer.**

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NMR/EPR Instrumentation Specialist. To operate and maintain a broad range of magnetic resonance equipment and accessories including a Varian 220 spectrometer with FT, DA60 spectrometer and Century Line EPR spectrometer. Will also have opportunity for design, development, and construction of accessories to upgrade and expand equipment capabilities. Experience in operation and servicing of magnetic resonance equipment essential. Knowledge of electronic circuitry and mini-computer interfacing a definite plus.

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Postdoctoral Fellowship. For NMR studies (^1H , ^2H , ^{13}C) of membrane constituents and interactions in bilayers. Experience in high-resolution NMR (CW and FT) essential, and some knowledge of membrane biochemistry a definite asset.

Please send résumé in strict confidence to: **Mr. R. A. Johns, Department 100F, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Illinois 60439. An Equal Opportunity Employer, M/F.**

CARDIOLOGIST—The Division of Cardiology in the Department of Medicine at the University of Alabama in Birmingham has available two positions at the **assistant professor or associate professor** level. The positions are open to qualified individuals at a senior level fulfilling three criteria. First, the individual must have expertise in the care and management of patients with cardiovascular disease and in cardiac catheterization. Second, the individual must have a firm commitment to teaching programs oriented to medical students, graduate students, house officers, and fellows. Finally, the individual should have a research background and be able to carry out independent research. Apply to the **Division of Cardiovascular Disease, Department of Medicine, University of Alabama Medical Center, Birmingham, Alabama 35294 (Attention Ms. Norma McSweeney); (205) 934-3285. An Equal Opportunity/Affirmative Action Employer.** Expiration date for receipt of applications: 1 August 1975.

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New research/diagnostic laboratory in attractive downtown location. Will utilize cytogenetic and tissue culture techniques. Competitive salary and benefits. Position available 1 September; date flexible. Replies: **Administrator, Prentice Women's Hospital and Maternity Center, 333 E. Superior, Chicago, Illinois 60611.**

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Wanted: **D.V.M.—Geneticist** to manage Canine Research Colony. Must be familiar with immunogenetics tissue typing and dogs. Reply to **William S. Fletcher, M.D., Department of Surgery, University of Oregon Health Sciences Center, Portland, Oregon 97201.**

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San Francisco Bay Area



Stanford Research Institute's Center for Occupational and Environmental Safety and Health is seeking an Industrial Environmental Toxicologist to participate in its activities in contract research and consulting services for government and commercial clients.

Initial assignments will be associated with the Center's activities in the preparation of NIOSH criteria documents for recommended occupational health standards in SRI's Washington, D.C. office; and in support of a contract with the National Cancer Institute in Environmental Carcinogenesis in SRI's main office at Menlo Park, California. Successful applicants will have a solid background in inhalation toxicology and the toxicological aspects of Industrial Hygiene.

Emphasis will be given in evaluating applicants for their ability to critically review the biomedical literature and develop statements to support proposed standards. Previous experience is desirable but can be substituted by unusually strong academic background.



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The Naval Ship Research and Development Center is seeking a qualified engineer/scientist to direct the R & D program of its Propulsion and Auxiliary Systems Department, located in Annapolis, Maryland.

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We are looking for applicants who have a Doctorate in Marine Engineering or a related field or its equivalent in experience who possess stature and recognition in these fields.

This position carries a salary range from \$36,607 to \$46,336*, dependent upon the qualifications of the person selected. *At present the actual pay rate is limited by Section 5308 of title 5 US Code to the rate of level V of the Executive Schedule which is \$36,000 per annum.

The Center's sites are at Carderock, Maryland (12 miles northwest of Washington, D.C.) and at Annapolis, Maryland (on the north shore of the Severn River opposite the US Naval Academy). The sites are approximately 50 miles apart.

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Special Conditions: An appointment for a specific period will be considered.

Applicants are invited to send full details of experience and qualifications to the **Acting Director of Fisheries, Department of Fisheries, 183 Gawler Place, Box 1191, G.P.O. Adelaide, 5001.**

Applications should reach the above by 5 July 1975.

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EXPERIMENTAL PHYSICIST, Ph.D. preferably with some undergraduate teaching experience, for one (1) academic year (9 months) appointment as a sabbatical replacement beginning 16 September. The candidate will be responsible for undergraduate courses for non-science majors as well as for physics and engineering majors.

Salary is negotiable. Closing date 15 June 1975. Send résumé and the names of three references to **Dr. Paul Stephas, Eastern Oregon State College, La Grande, Ore. 97850.** *An Equal Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF MISSOURI-COLUMBIA has vacancies for faculty positions in the Departments of Anesthesiology, Biochemistry, Child Health, Family Medicine, Obstetrics/Gynecology, Ophthalmology, Pharmacology, Psychiatry, Radiology, Surgery (Chief of Service, Neurological Surgery; Chief of Service, Orthopedic Surgery). Send inquiries to **Department Chairmen, UMC School of Medicine, Columbia, Mo. 65201.** *An Equal Opportunity Employer.*

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FACULTY POSITION IN PSYCHIATRY

The University of Wisconsin-Madison invites applications from psychiatrists interested in a faculty position in Child Psychiatry. The individual must have a special interest in mental retardation and developmental disabilities and be capable of heading a psychiatry section in a regional center on mental retardation and human development. This would include service, research, and teaching functions. Letters of application or nomination should include a curriculum vitae and references. *The University of Wisconsin is An Equal Opportunity Employer.*

Correspondence should be addressed to: **William T. McKinney, Jr., M.D., Chairman, Department of Psychiatry, University of Wisconsin Medical School, Madison, Wisconsin 53706.**

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Assistant or Associate Professorship is available immediately for a Board-certified or Board-eligible veterinary pathologist. Half-time necropsy service limited to horses, half-time research in area of interest, and teaching at graduate level. Applicants should send curriculum vitae, reprints of research papers, and three references to: **Dr. John T. Bryans, Chairman, Department of Veterinary Science, University of Kentucky, Lexington, Ky. 40506.** *The University of Kentucky is An Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION IN PSYCHIATRY

The University of Wisconsin-Madison invites applications from psychiatrists interested in a faculty position in community psychiatry. In addition to being able to develop community-based service delivery programs the person should have had experience teaching community psychiatry to residents, medical students, and psychology trainees. The individual must also be an active and experienced researcher in the area of community psychiatry. Letters of application or nomination should include a curriculum vitae and references. *The University of Wisconsin is an Equal Opportunity Employer.*

Correspondence should be addressed to: **William T. McKinney, Jr., M.D., Chairman, Department of Psychiatry, University of Wisconsin Medical School, Madison, Wisconsin 53706.**

UNIVERSITY OF SOUTH CAROLINA SCHOOL OF MEDICINE FACULTY POSITIONS

The University of South Carolina invites applications from individuals interested in faculty appointments in all academic departments of the Medical School.

Candidates should desire involvement in a growing department, have a commitment to the teaching of medical and graduate students and be open to the possibility of non-traditional teaching methods.

Outstanding applicants will be considered in its newly authorized Medical School which is to be established in affiliation with the Columbia Veterans Administration Hospital under the authority of the Veterans Administration Medical School Assistance and Health Manpower Training Act of 1972. Letters of application or nomination should include a curriculum vitae. Candidates should possess a medical degree and/or doctoral degree in their specialty. *The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.*

Correspondence should be addressed to:

**W. N. Adams-Smith, M.D., D. Phil.
Dean, School of Medicine
University of South Carolina
Columbia, South Carolina 29208**

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The Institute of Oceanography, a graduate department of Dalhousie University, has a vacancy at the assistant or associate professor level. Candidates in a broad area of earth sciences including geophysics, geochemistry, or dynamical sedimentology will be considered. The department is looking for a scientist whose research interests will interact with those of present staff. Present areas of most active study include the physical dynamics, chemistry and productivity of the near-shore, and the dynamics biology, chemistry, geology and geophysics of the continental margin, especially the slope.

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Interested scientists should apply as soon as possible, supplying curriculum vitae, list of publications, letters of reference and a statement of research and teaching interests to:

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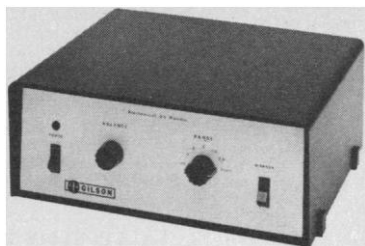
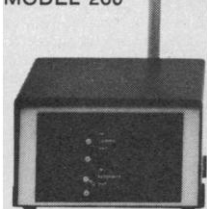
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MAMMALIAN PHYSIOLOGIST (two positions available). Major responsibility, teaching medical and dental physiology. Assistant professor rank; salary negotiable, starting September 1975. Send application and letters of recommendation to:

Dr. Ewald E. Selkurt
Department of Physiology
Indiana University Medical Center
1100 West Michigan Street
Indianapolis, Indiana 46202
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NEUROANATOMIST: Medical school faculty position with responsibility for neuroanatomy course and participation in anatomy program of the medical and graduate school curriculum. Research experience in ultrastructure of the nervous system desirable. Interested individuals should promptly forward a complete résumé and have four letters of recommendation sent to: **Dr. Alvin S. Levine, Director, Indiana University School of Medicine, Terre Haute Center for Medical Education at Indiana State University, Terre Haute, Indiana 47809. Indiana University is an Equal Opportunity/Affirmative Action Employer.**

PHYCOLOGIST

The Department of Botany, Mississippi State University, anticipates a position for a phycologist at the Assistant Professor level to begin 25 August 1975 or 11 January 1976. Ph.D. required, ecological or physiological orientation preferred. Duties include teaching phycology and general botany, the supervision of graduate students and the development of a strong research program in the candidate's specialty. Candidates should send transcripts, curriculum vitae and three letters of recommendation to: **Dr. J. R. Watson, Head, Department of Botany, P.O. Drawer BD, Mississippi State University, Mississippi State, Mississippi 39762, by 1 August 1975. An Equal Opportunity/Affirmative Action Employer.**

POSITION OPEN: Ph.D. to teach microbiology and biochemistry at a small college of liberal arts and sciences near Chicago. Joint appointment to Biology Department and Department of Chemistry-Biochemistry. Teaching and research experience preferred. Contact **Dean of Faculty and Instruction, Illinois Benedictine College, Lisle, Illinois 60532. An Equal Opportunity Employer.**

Ph.D. PATHOLOGIST. To teach general-systemic pathology to second-year medical students. Three lectures and four lab hours weekly during academic year. Emphasis on teaching excellence. Research encouraged but not mandatory. Faculty rank and salary commensurate with qualifications. Modern 426-bed hospital. Excellent suburban living. Send curriculum vitae to **Dr. E. H. Whitten, Associate Dean, College of Osteopathic Medicine, 2105 Independence Blvd., Kansas City, Missouri 64124. Telephone: 816-283-2402.**

Position to begin fall 1975 for one whose specialties are **GENETICS and MICROBIOLOGY** with preparation in molecular genetics, virology, and cell physiology. Earned doctorate required. Teaching of undergraduate and graduate (master's level) lectures and laboratories. Direction of M.S. graduate-student research. Send references and résumé to **Dr. Bruce H. Dinsmore, Chairman, Biology Department, Clarion State College, Clarion, Pa. 16214, by 8 July 1975.**

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Position open September 1975. **POPULATION GENETICISTS-GENERAL BIOLOGISTS.** Faculty positions for teaching general biology and genetics. Apply to: **Chairman, Department of Biology, College of Charleston, Charleston, S.C. 29401.**

POSITIONS OPEN

PHYTOPLANKTON PHYSIOLOGIST RESEARCH ASSOCIATE, Ph.D.

Two-year appointment, to carry out research within a multidisciplinary framework involving a study of stimulation-inhibition aspects of phytoplankton dynamics in coastal and estuarine ecosystems. Must have experience in continuous culture methodology and strong background in quantitative aspects of phytoplankton ecology, nutrient uptake kinetics and cell morphology. Send complete résumé and four letters of reference to **Dr. L. H. Larsen, Chairman of Faculty Recruitment Committee, Department of Oceanography, University of Washington, Seattle, Washington 98195. The University is an Equal Opportunity/Affirmative Action Employer.**

PLANT PHYSIOLOGIST

Assistant professor position in Plant Physiology, September 1975. Teaching introductory plant physiology and research, 50 percent each. Qualifications: Ph.D. in plant science, competence in plant tissue culture and developmental physiology, and ability to work with producer groups. Send curriculum vitae, official transcripts, and three letters of recommendation to: **Page Morgan, Department of Plant Sciences, Texas A&M University, College Station, Texas 77843. Deadline 30 June.**

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POSTDOCTORAL APPOINTEE

Postdoctoral appointment available in the Center for Human Radiobiology as part of an ongoing research program in *in vitro* studies of human immune responses and their relation to oncogenesis.

The applicant should be familiar with tissue culture techniques and some of the more common immunological tests such as cell-mediated immunity, detection of sera antibodies, and antigenic stimulation of lymphocytes.

Position available immediately. Send résumé to **Ronald A. Jons, Professional Placement Department, Argonne National Laboratory, Department 1001D, 9700 South Cass Avenue, Argonne, Illinois 60439. An Equal Opportunity Employer M/F.**

POSTDOCTORAL POSITION: Available July. Collaborative research in enzymatic catalysis, protein structure-function-relationships and thermodynamics of cooperative interactions. Applicant should have experience or interest in transient state kinetics, fluorescence transfer, microcalorimetry, or rapid hydrogen exchange. *Equal Opportunity Employer.* **Professor Harvey F. Fisher, Veterans Administration Hospital, 4801 Linwood Blvd., Kansas City, Missouri 64128.**

POSTDOCTORAL POSITION from July 1975 to study hormonal effects on mitochondria, experience in mitochondrial research, protein and nucleic acid synthesis preferred; salary \$10,000 per year. Send résumé to **Drs. V. T. Maddaiah or P. J. Collipp, Department of Pediatrics, Nassau County Medical Center, State University of New York at Stonybrook, East Meadow, N.Y. 11554.**

POSTDOCTORAL RESEARCH BIOCHEMIST/CHEMIST

Openings available immediately, chemical and physicochemical studies on the combination of allosteric modifiers, tight-binding inhibitors, and substrates with enzymes that are targets of chemotherapeutic drugs. Involves protein structural studies; proteins modification; NMR of proteins. Two- to three-year appointment. Salary commensurate with qualifications and experience. Send résumé and three letters of recommendation to:

Professor Raymond L. Blakley
College of Medicine
University of Iowa
Iowa City, Iowa 52242

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POSTDOCTORAL RESEARCH PHYSIOLOGIST. Available for fall 1975 with the salary of \$11,000 for research on flow regulation in the microcirculation. Candidates should have prior experience and training in the field of peripheral circulation or microcirculation. Send résumé to **Dr. Paul C. Johnson, Physiology Department, Arizona Medical Center, Tucson, Arizona 85724. University of Arizona is an Equal Opportunity and Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE— Available immediately for recent Ph.D. in Biochemistry, Microbiology, or Molecular Biology. Starting salary \$10,000 per year. Research on histone lysine trimethylases in normal and neoplastic tissues. Send curriculum vitae and letters of recommendation to **Dr. John A. Duerre, Microbiology Department, University of North Dakota, Grand Forks, N.D. 58203.**

POSTDOCTORAL RESEARCH POSITION AVAILABLE IMMEDIATELY

For recent Ph.D. in **Biochemistry** for studies of derivatives of adenine nucleotide coenzymes. Emphasis is on enzyme behavior of soluble macromolecular coenzymes (NAD, AIP, and so forth). Good training and practical experience in enzyme kinetics and general enzymology is essential and facility in simple organic synthetic procedures would be highly desirable. Send curriculum vitae and three letters of recommendation to: **Dr. Harold J. Bright, Department of Biochemistry, School of Medicine, University of Pennsylvania, Philadelphia, Pa. 19174. Equal Opportunity Employer.**

VETERINARY CLINICAL PATHOLOGISTS

Two faculty positions are available in clinical pathology at Colorado State University. Duties include responsibility for operation of the clinical pathology laboratory in the veterinary teaching hospital, and undergraduate and graduate instruction in areas of expertise. Research time is available and involvement in continuing education is encouraged. Applicants must possess a D.V.M. (or equivalent) degree, and persons with advanced degrees, membership in ASVCP or clinical pathology diplomate of the ACVP will be given preference. Rank and salary will depend on training, experience, and background. *Colorado State University is an Equal Opportunity Employer.* **Department of Clinical Sciences, Colorado State University, Fort Collins, Colorado 80523.**

VIROLOGISTS. Two positions open, immediately available; postdoctoral, salary range \$10,000 to \$13,500 per annum. Applicants should have experience in tissue culture and contemporary methods of molecular virology. Experimental background in interferon area desirable. Applicants expected to send résumé (including reprints of major publications) and three letters of reference to: **Dr. W. A. Carter, Chairman, Department of Medical Viral Oncology, Roswell Park Memorial Institute, 666 Elm St., Buffalo, N.Y. 14263.**

FELLOWSHIPS

UNIVERSITY OF READING RESEARCH FELLOWSHIP

Dr. Julian Vincent has an SRC grant to support a Postdoctoral Fellow for 2 years. The successful candidate will be separating the proteins of an unusual material (*Proc. R. Soc. B*: 188: 189-201) and investigating their biophysics (aggregation, conformation, and so forth) and sequence. He or she will relate it all to the mechanical properties of biomaterials in general—so the project has medical overtones. Salary £2348 p.a. × £129 p.a. plus U.S.S. superannuation. Apply to **Dr. J. Vincent, Department of Zoology, University of Reading, Whiteknights, Reading, Berks, England. (REF.M.15A).**

A POSTDOCTORAL FELLOWSHIP IN REPRODUCTIVE BIOLOGY

is available. Applicants should be interested in the physiology and biochemistry of mammalian embryos during the preimplantation period. Studies are on the biochemistry of embryo development as well as on micromanipulation of the embryo and embryo cells that alters differentiation. Apply with curriculum vitae to: **R. L. Brinster, Laboratory of Reproductive Physiology, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, Pennsylvania 19174.**

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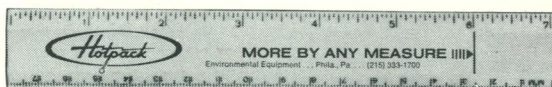
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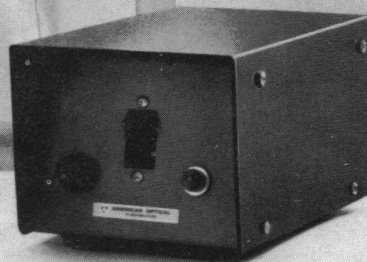
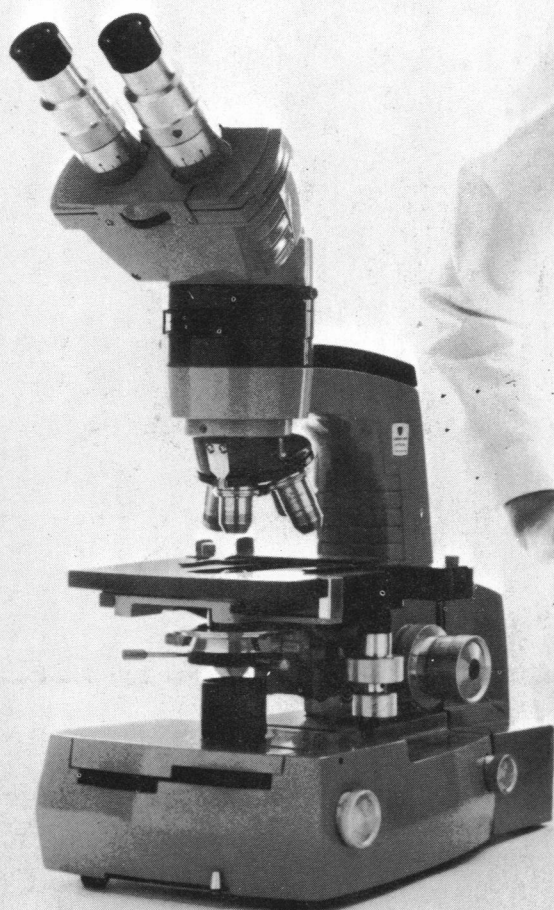


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