

treatment of a number of issues. In its portrayal of the English school as the founders of modern historical geology it both exaggerates their modernity and undervalues the contributions of others.

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## Some Other Books of Interest

**Catastrophes and Earth History.** The New Uniformitarianism. W. A. BERGGREN and JOHN A. VAN COUVERING, Eds. Princeton University Press, Princeton, N.J., 1984. xii, 465 pp., illus. \$65; paper, \$19.50. From symposiums, Woods Hole, Mass., June 1977, and Lawrence, Kansas, Aug. 1977.

The majority of the papers in this volume were presented at a 1977 symposium at Woods Hole, Massachusetts, on the theme of the state of uniformitarianism as a scientific subject. The first section of the book, headed The Concept of Catastrophe as a Natural Agent, consists of papers by S. J. Gould, R. H. Benson, P. E. Gretener, D. V. Ager, and C. R. Denham. The second section is a set of eight papers from the Second North American Paleontological Convention that deal with the Cretaceous-Tertiary boundary event. The authors are N. D. Newell, A. G. Fischer, E. G. Kauffman, A. Boersma, L. J. Hickey, R. H. Tschudy, J. D. Archibald and W. A. Clemens, and D. A. Russell. Part 3, Catastrophic Processes in the Geological Record, contains papers by N.-A. Möerner, S. D. Webb, and R. H. Benson. Part 4, Catastrophes and the Real World, consists of a single paper, "Marine mineral resources and uniformitarianism," by K. O. Emery. Several of the papers cite references as recent as 1980. The volume lacks an index.—K.L.

**Island Ecology.** SVEN-AXEL BENGTON and PEHR H. ENCKELL, Eds. Munksgaard, Copenhagen, 1983 (available from *Oikos* editorial office, Department of Animal Ecology, Ecology Building, 2-223 62 Lund, Sweden). 255 pp., illus. Paper, Sw. Cr. 100. *Oikos*, vol. 41, no. 3.

The editors of this special issue of *Oikos* posed to the contributors the questions "What remains of the theory of island ecology (biogeography) today to distinguish it from other theories formulated to explain the function of mainland communities? Where do we stand and where do we go next?" The contributors were invited to deal with these questions

"by presenting new facts, by refuting established ideas, or by presenting alternatives to accepted dogma." The first "chapter," headed Origins and Composition of Island Faunas, consists of six papers (by Reymont, Diamond and Gilpin, Graves and Gotelli, Haila, Ahlén, and Southwood and Kennedy) that, in the editors' words, "describe and discuss their data at the lowest possible taxonomic level." In the chapter Processes in Island Communities, "species turnover . . . is a central theme." The chapter includes two experimental papers (Rey and Strong; Crowell) and a simulation study (Wright and Hubbell). The authors of the other papers are Schoener, Williamson, Abbott, Jennerston *et al.*, Janzen, Toft and Schoener, Case, Travis and Ricklefs, and Connor and Simberloff. The third and final chapter, Extensions and Alternatives, includes theoretical papers by Rummel and Roughgarden and by Stenseth and papers by Wright, Bengtson and Block, Berry, and Grant and Grant that utilize empirical data. The issue has no index, but the papers include abstracts in both English and Russian. The editors' preface contains a brief assessment of the implications of the work as a whole.—K.L.

## Books Received

**Advances in Transport Processes.** Vol. 3. Arun S. Mujumdar and R. A. Mashelkar, Eds. Halsted (Wiley), New York, 1984. viii, 452 pp., illus. \$44.95.

**Aging and Cell Structure.** Vol. 2. John E. Johnson, Jr., Ed. Plenum, New York, 1984. xvi, 223 pp., illus. \$42.50.

**Airborne and Allergenic Pollen of North America.** Walter H. Lewis, Prathibha Vinay, and Vincent E. Zenger. Johns Hopkins University Press, Baltimore, 1984. xiv, 254 pp., illus., + plates. \$60.

**Algebra.** Larry C. Grove. Academic Press, New York, 1983. xiv, 301 pp. \$32. Pure and Applied Mathematics.

**Algeny.** A New Word—A New World. Jeremy Rifkin, with Nicanor Perlas. Penguin, New York, 1984. xii, 298 pp. Paper, \$6.95. Reprint, 1983 ed.

**Ambulatory Medicine.** Barry Stimmel, Ed. Raven, New York, 1984. xii, 332 pp., illus. Paper, \$19.50.

**American Medicine and Statistical Thinking, 1800–1860.** James H. Cassedy. Harvard University Press, Cambridge, Mass., 1984. xiv, 306 pp., illus. \$22.50.

**Animal Thinking.** Donald R. Griffin. Harvard University Press, Cambridge, Mass., 1984. xiv, 237 pp. \$17.50.

**Animals and Why They Matter.** Mary Midgley. University of Georgia Press, Athens, 1984. 158 pp. \$14.

**Annual Review of Physiology.** Vol. 46. Robert M. Berne and Joseph F. Hoffman, Eds. Annual Reviews, Palo Alto, Calif., 1984. xii, 727 pp., illus. \$27.

**Blood Platelet Function and Medicinal Chemistry.** Andrew Lasslo, Ed. Elsevier, New York, 1984. xviii, 324 pp., illus. \$49.50.

**Brain Slices.** Raymond Dingledine, Ed. Plenum, New York, 1984. xviii, 442 pp., illus. \$50.

**The Business of Risk.** Peter G. Moore. Cambridge University Press, New York, 1984. x, 244 pp., illus. \$39.50; paper, \$9.95.

**Calcium in Biology.** Thomas G. Spiro, Ed. Wiley-Interscience, New York, 1984. x, 278 pp., illus. \$75.

**Metal Ions in Biology.** vol. 6.

**Cancer Invasion and Metastasis.** Biologic and Therapeutic Aspects. Garth L. Nicolson and Luka Milas, Eds. Raven, New York, 1984. xx, 481 pp., illus. \$65. From a symposium, Houston, Feb. 1983.

**Catalytic Transition Metal Hydrides.** D. W. Slo-

cum and William R. Moser, Eds. New York Academy of Sciences, New York, 1983. x, 325 pp., illus. Paper, \$65. Annals of the New York Academy of Sciences, vol. 415. From a conference, Nov. 1982.

**Causes and Effects of Changes in Stratospheric Ozone.** Update 1983. National Academy Press, Washington, D.C., 1984. xiv, 254 pp., illus. Paper, \$15.50.

**The Chemical Formulary.** Collection of Commercial Formulas for Making Thousands of Products in Many Fields. Vol. 25. H. Bennett, Ed. Chemical Publishing Company, New York, 1983. x, 435 pp. \$35.

**Dice, Data and Decisions.** Introductory Statistics. K. W. Kemp. Horwood, Chichester, England, and Halsted (Wiley), New York, 1984. 314 pp., illus. \$64.95. Ellis Horwood Series in Mathematics and Its Applications.

**Diffusion of Biomass Energy Technologies in Developing Countries.** 2nd ed. National Academy Press, Washington, D.C., 1984. viii, 120 pp., illus. Paper, \$9.25.

**Direct Nuclear Reactions.** Norman K. Glendenning. Academic Press, New York, 1983. xviii, 378 pp., illus. \$62.

**Engineers and Electrons.** A Century of Electrical Progress. John D. Ryder and Donald G. Fink. IEEE Press, New York, 1984. xx, 251 pp., illus. \$29.95.

**Equilibrium Thermodynamics.** C. J. Adkins. 3rd ed. Cambridge University Press, New York, 1984. xiv, 285 pp., illus. \$39.50; paper, \$14.95.

**Essentials of Psychological Testing.** Lee J. Cronbach. 4th ed. Harper and Row, New York, 1984. xx, 630 pp., illus. \$31.50.

**The Healing and Scarring of Atheroma.** Moshe Wolman, Ed. Plenum, New York, 1984. viii, 156 pp., illus. \$32.50. Advances in Experimental Medicine and Biology, vol. 168. From a congress, Jerusalem, 1981.

**A History of Neurophysiology in the 17th and 18th Centuries.** From Concept to Experiment. Mary A. B. Brazier. Raven, New York, 1984. xiv, 230 pp., illus. \$65.

**Hospital Library Management.** Jana Bradley, Ruth Holst, and Judith Messerle, Eds. Medical Library Association, Chicago, 1983. xvi, 412 pp. \$67.50.

**Human Ecology and Infectious Diseases.** Neil A. Croll and John H. Cross, Eds. Academic Press, New York, 1983. xvi, 364 pp., illus. \$46.

**Humoral Factors in Host Defense.** Yuichi Yamamura *et al.*, Eds. Academic Press, New York, 1983. xviii, 364 pp., illus. \$32. From a symposium, Kyoto, Japan, Oct. 1982.

**Hydrazine and Its Derivatives.** Preparation, Properties, Applications. Eckart W. Schmidt. Wiley-Interscience, New York, 1984. xxviii, 1059 pp., illus. \$85.

**Interferometry.** W. H. Steel. 2nd ed. Cambridge University Press, New York, 1984. xvi, 308 pp., illus. \$69.50. Cambridge Monographs on Physics.

**An Introduction to APL.** S. Pommier. Cambridge University Press, New York, 1984. viii, 136 pp. \$29.95; paper, \$11.95. Cambridge Computer Science Texts, 17. Translated from the French edition (Paris, 1978) by Bronwen A. Rees.

**Introduction to Numerical Computations.** James S. Vandergraft. 2nd ed. Academic Press, New York, 1983. xiv, 374 pp. \$29.50. Computer Science and Applied Mathematics.

**Latent Dyslipoproteinemias and Atherosclerosis.** J. L. de Gennes, J. Polonovski, and R. Paoletti, Eds. Raven, New York, 1984. xviii, 316 pp., illus. \$42.

**Life and Land Use on the Bahrain Islands.** The Geoarchaeology of an Ancient Society. Curtis E. Larsen. University of Chicago Press, Chicago, 1984. xxii, 339 pp., illus. \$20; paper, \$9. Prehistoric Archaeology and Ecology.

**Life in the Chesapeake Bay.** Alice Jane Lippson and Robert L. Lippson. Illustrations by Alice Jane Lippson. Johns Hopkins University Press, Baltimore, 1984. x, 230 pp. Paper, \$12.95.

**Life-Span Developmental Psychology.** Nonnormative Life Events. Edward J. Callahan and Kathleen A. McCluskey, Eds. Academic Press, New York, 1983. xvi, 331 pp. \$29.50. From a conference, Morgantown, W. Va., May 1980.

**Logical and Combinatorial Algorithms for Drug Design.** V. E. Golender and A. B. Rozenblit. Research Studies Press, Letchworth, England, and Wiley, New York, 1984. xiv, 289 pp., illus. \$63.95. Chemometrics Series.

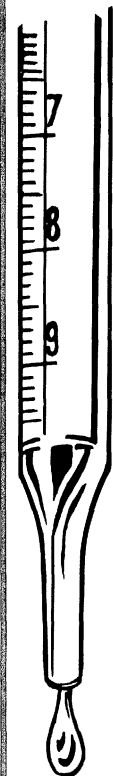
**Magnetic Atoms and Molecules.** William Weltner, Jr. Scientific and Academic Editions (Van Nostrand Reinhold), New York, 1983. xvi, 422 pp., illus. \$42.50.

**Mathematical Models of the Circadian Sleep-Wake Cycle.** Martin C. Moore-Ede and Charles A. Czeisler, Eds. Raven, New York, 1984. viii, 216 pp., illus. \$45. From a symposium.

**Maximum Life Span.** Roy L. Walford. Avon, New York, 1984. xvi, 256 pp., illus. Paper, \$3.95. Reprint, 1983 edition.

(Continued on page 444)

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## BOOKS RECEIVED

(Continued from page 406)

**Measurement in Clinical Respiratory Physiology.** Gabriel Laszlo and Michael F. Sudlow, Eds. Academic Press, New York, 1983. x, 337 pp., illus. \$60. Medical Physics Series.

**Metalinguistic Awareness in Children.** Theory, Research, and Implications. W. E. Tunmer, C. Pratt, and M. L. Herriman, Eds. Springer-Verlag, New York, 1984. xii, 238 pp. \$19.50. Springer Series in Language and Communication, vol. 15.

**MICOS.** A Microprogrammable Computer Simulator. Lubomir Bic. Computer Science Press, Rockville, Md., 1984. xiv, 111 pp., illus. Paper, \$15.95.

**Microbiology for the Health Sciences.** Gwendolyn R. W. Burton. 2nd ed. Lippincott, Philadelphia, 1983. xiv, 238 pp., illus. Paper, \$12.50.

**Microprocessor System Design Concepts.** Nikitas A. Alexandridis. Computer Science Press, Rockville, Md., 1984. xvi, 623 pp., illus. \$32.95.

**Modalités, Rythmes, Mécanismes de l'Évolution Biologique.** Gradualisme Phylétique ou Équilibres Ponctuels? Editions du Centre National de la Recherche Scientifique, Paris, 1983. 337 pp., illus. Paper, 380 F. Colloques Internationaux du Centre National de la Recherche Scientifique, No. 330. From a colloquium, Dijon, France, May 1982.

**Nerve, Organ, and Tissue Regeneration.** Research Perspectives. Fredrick J. Seil, Ed. Academic Press, New York, 1983. xvi, 482 pp., illus. \$37.50. From a symposium, Harpers Ferry, W. Va., Sept. 1982.

**Neural Mechanisms of Pain.** Lawrence Kruger and John C. Liebeskind, Eds. Raven, New York, 1984. xx, 364 pp., illus. \$49. Advances in Pain Research and Therapy, vol. 6. From a symposium, Santa Monica, Calif., Feb. 1983.

**A New Ecology.** Novel Approaches to Interactive Systems. Peter W. Price, C. N. Slobodchikoff, and William S. Gaud, Eds. Wiley-Interscience, New York, 1984. xii, 515 pp., illus. \$59.95. From a conference, Flagstaff, Ariz., Aug. 1982.

**Noble Gas Geochemistry.** Minoru Ozima and Frank A. Podosek. Cambridge University Press, New York, 1984. x, 367 pp., illus. \$79.50.

**Open Tubular Column Gas Chromatography.** Theory and Practice. Milton L. Lee, Frank J. Yang, and Keith D. Bartle. Wiley-Interscience, New York, 1984. xii, 445 pp., illus. \$48.

**Opening Pandora's Box.** A Sociological Analysis of Scientists' Discourse. G. Nigel Gilbert and Michael Mulkey. Cambridge University Press, New York, 1984. viii, 202 pp. \$37.50; paper, \$12.95.

**Optical Color and Simultaneity.** Ellen Marx. Van Nostrand Reinhold, New York, 1984. 152 pp., illus. \$32.50. Translated from the French edition by Geoffrey O'Brien.

**Optical System Design.** Rudolf Kingslake. Academic Press, New York, 1983. x, 323 pp., illus. \$32.

**The Phototrophic Bacteria.** Anaerobic Life in the Light. J. G. Ormerod, Ed. University of California Press, Berkeley, 1984. x, 246 pp., illus. \$40. Studies in Microbiology, vol. 4.

**Superconducting Magnets.** Martin N. Wilson. Clarendon (Oxford University Press), New York, 1983. xvi, 335 pp., illus. \$39. Monographs on Cryogenics, 2.

**Synergetics—From Microscopic to Macroscopic Order.** E. Frehland, Ed. Springer-Verlag, New York, 1984. viii, 259 pp., illus. \$33. Springer Series in Synergetics, vol. 22. From a symposium, Berlin, July 1983.

**Take Care of Your Heart.** The Complete Book of Heart Facts. Ezra A. Amsterdam and Ann M. Holmes. Facts On File, New York, 1983. xii, 343 pp., illus. \$14.95.

**Test Your Understanding of Neurophysiology.** R. W. Murray. Cambridge University Press, New York, 1984. x, 291 pp., illus. \$49.50; paper, \$16.95.

**Textbook of Contraceptive Practice.** Malcolm Potts and Peter Diggory. Illustrations by Jayne Diggory. 2nd ed. Cambridge University Press, New York, 1984. xiv, 467 pp. \$59.50; paper, \$24.95.

**Trees and Networks in Biological Models.** N. MacDonald. Wiley-Interscience, New York, 1984. x, 215 pp., illus. \$39.95.

**Understanding Relativity.** Origin and Impact of a Scientific Revolution. Stanley Goldberg. Birkhäuser, Boston, 1984. xviii, 494 pp., illus. \$24.95.

**Vagal Nerve Function.** Behavioral and Methodological Considerations. J. G. Kral, T. L. Powley, and C. McC. Brooks, Eds. Elsevier, New York, 1983. xii, 345 pp., illus. \$40. Also published as vol. 9, No. 1, of *Journal of the Autonomic Nervous System*. From a conference, Santa Ynez Valley, Calif., Jan. 1983.

**Very Hot Astrophysical Plasmas.** Lydie Koch-Miramond and Thierry Montmerle, Eds. Royal Swedish Academy of Sciences, Stockholm, 1984. 239 pp., illus. Paper, \$69. *Physica Scripta*, vol. T7, 1984. From a workshop, Nice, France, Nov. 1982.

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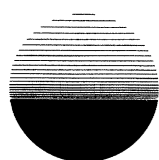
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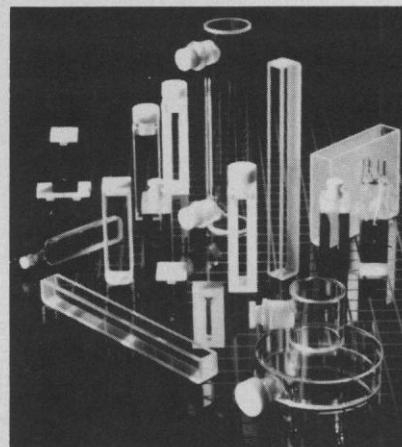


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**Dr. Mustafa Kh. Dabbous  
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**ASSISTANT OR ASSOCIATE PROFESSOR IN MICROBIOLOGY AND IMMUNOLOGY.** Medical school full-time faculty to participate in the existing medical microbiology course and in advanced courses for graduate students. An active research program, preferably in immunology or virology, is highly desired. Salary negotiable depending on qualifications and experience. Starting date: 1 January 1985. Send curriculum vitae and three letters of recommendation to: **Dr. P. G. Iatridis, Assistant Dean and Director, Northwest Center for Medical Education, 3400 Broadway, Gary, Ind. 46408.** *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT OR ASSOCIATE PROFESSOR IN PHYSIOLOGY.** Medical School full-time faculty to participate in the human physiology course for freshman medical students and advanced courses for graduate students. An active research program, preferably in cardiovascular, neuro- or membrane physiology is highly desired. Rank and salary negotiable depending on qualifications and experience. Starting date: 1 January 1985. Send curriculum vitae and three letters of recommendation as soon as possible to: **Dr. P. G. Iatridis, Assistant Dean and Director, Northwest Center for Medical Education, 3400 Broadway, Gary, Ind. 46408.** *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

Position as **ASSISTANT PROFESSOR** in the Division of Orthopaedic Surgery available 1 September 1984. Applicant must have a Ph.D. or M.D. with at least 3 years of postdoctoral experience in connective tissue research, preferably with osseous tissue. Duties will include lectures in basic science to and guidance in research projects by residents in orthopaedic surgery. Candidate must be experienced with gel electrophoresis, quantitative analytical techniques, tissue culture, and knowledgeable in protein chemistry. Current research involves purification of an osteogenic cell stimulator and studies on its mechanism of action in vitro and in vivo. Initially, there will be financial support for the laboratory, but the successful candidate will be expected to obtain external research funding thereafter.

Send curriculum vitae and names of three references to: **Dr. Irwin Clark, University of Medicine and Dentistry of New Jersey—Rutgers Medical School, Room S-225, Box 101, Piscataway, N.J. 08854.** *An Affirmative Action/Equal Opportunity Employer.*

**CELL BIOLOGIST.** Doctoral level instructor, limited term appointment in Department of Microbiology, to assist in teaching medical students. Subjects include topics in biology of prokaryotic and eukaryotic cells, immunology, virology, medical terminology. Send curriculum vitae and names of three references to: **Dr. Harriet Rouse, Acting Chairman, Department of Microbiology, UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY—Rutgers Medical School, P.O. Box 101, Piscataway, New Jersey 08854.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available as of 1 July 1984 for an individual with an interest in conducting HRP-tracing studies of the peripheral and central neural substrates of dental sensation. Previous experience in electron microscopy desirable but not essential. Send curriculum vitae and three letters of reference to: **Dr. Carl F. Marfurt, Assistant Professor of Anatomy, Indiana University School of Medicine, Northwest Center for Medical Education, 3400 Broadway, Gary, Indiana 46408.** For more information, telephone: 219-980-6550.

## POSITIONS OPEN

**ASSISTANT/ASSOCIATE PROFESSOR: PLANT STRESS PHYSIOLOGY.** West Lafayette, Indiana. Appointee to this 12-month-per-year, tenure-track position will be responsible for developing a research program (80 percent) in stress physiology, emphasizing areas limiting horticultural crop productivity such as water, temperature, light, or salt. Applicants will be expected to contribute to the departmental teaching program (20 percent). Qualifications include a Ph.D. degree, demonstrated interest and ability to conduct research in stress physiology, a strong background in biochemistry and plant physiology, and an ability to communicate effectively and to direct graduate students. Experience beyond the Ph.D. such as a postdoctorate or previous research appointment is highly desirable. Salary will be competitive and commensurate with training and experience. Applications will be accepted through 15 August 1984 or thereafter until position is filled. Biographical information, a statement of professional goals, reprints of pertinent publications, transcripts, and names of four references should be sent to: **Professor Joe H. Cherry, Chairman, Search Committee, Department of Horticulture, Purdue University, West Lafayette, Ind. 47907.** *Purdue University is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT/ASSOCIATE PROFESSOR: WOODY PLANT PHYSIOLOGY.** West Lafayette, Indiana. Appointee to this 12-month-per-year, tenure-track position will be responsible for teaching (40 percent) and research (60 percent) in the area of woody plant physiology. Teaching responsibilities include undergraduate courses in plant propagation and nursery management. The appointee is expected to conduct a cross commodity-oriented research program on the physiology of woody plants. Areas of emphasis should be related to problems common to landscape horticulture, pomology, and/or urban forestry. The research program is expected to encompass both applied and fundamental approaches. Ph.D. required with a strong background in either horticulture, botany, forestry, and/or plant physiology. Applications will be accepted through 17 September 1984 or until a suitable candidate is identified. Applicants should submit a letter of application stating career objectives, complete résumé, transcripts, and names and addresses of four references to: **Bruno Moser, Head, Horticulture Department, Purdue University, West Lafayette, Ind. 47907; telephone: 317-494-1306.** *Purdue University is an Equal Opportunity/Affirmative Action Employer.*

## BIOCHEMICAL PHARMACOLOGIST

Position requires: A BS or MS in Biochemistry or Pharmacology with a minimum of 1-2 years of experience in arachidonic acid metabolism research. A strong background in radiochemical enzyme assay, lipid biochemistry, radioimmuno-assay and HPLC of eicosanoids is required. Experience in handling small laboratory animals would be an advantage. Good report writing and oral communication skills is a must. We offer professional growth oriented work environment with excellent compensation and benefits. Qualified candidate must submit resume to:



P. J. Peters  
Employee Relations

## STUART PHARMACEUTICALS

Division of ICI Americas Inc.  
Wilmington, DE 19897 *An Equal Opportunity Employer M/F*

**CLINICAL ASSISTANT PROFESSOR** position available in the University of Oklahoma, Department of Pediatrics. Research biochemist. Nontenure position. Applicant must have Ph.D. and 4 to 5 years of postdoctoral experience in membrane biochemistry, isolation and purification of membrane glycoproteins, carbohydrate analysis, and immunochemistry. Preferably experience with epithelial cells from mammalian intestine. Publication record essential. Send curriculum vitae to: **Dr. Ramon Torres, Professor of Pediatrics, Chief of the Pediatric Gastroenterology Section, Oklahoma Children's Memorial Hospital, P.O. Box 26307, Oklahoma City, Oklahoma 73126.**

## DIRECTOR OF RESEARCH IMMUNOLOGIST/MOLECULAR VIROLOGIST

The Otsuka Pharmaceutical Co., Ltd., a major Japanese pharmaceutical corporation, has extended its deadline for applications for the position of Director of Research at its new Maryland research facility. The duties of this position shall include the development and administration of research programs, assembly of a multi-disciplinary research staff, and participation in research activities. The successful candidate will have over five years of post-doctoral research experience in the field of immunology or molecular virology and an outstanding publication record. Group leadership experience is a pre-requisite. Industrial experience is desirable. Special consideration shall be given to individuals who combine the above qualifications with an M.D. degree.

Otsuka Maryland Laboratories will be located in a suburb of Washington, D.C., and will begin operations in March of 1985. The facility, presently under construction, will engage in the discovery/evaluation of immune response modifiers (cytokines) of therapeutic value and the development of biotechnological production methods. Scientific staff (including technicians) shall number 25 - 30 individuals divided into molecular biology, immunology and cell biology groups. Fermentation facilities are also planned.

The position offers salary and benefits fully commensurate with experience and qualifications as well as an exceptional opportunity for professional achievement.

Applications should include C.V., publication record, statement of research, and at least three references. Applications will be accepted through August 20, 1984 and should be sent to:



Otsuka Pharmaceutical Co., Ltd.  
P.O. Box 8927  
Rockville, MD 20856  
Attention: Recruitment

*"Otsuka, people creating new products for better health worldwide"*

An Equal Opportunity Employer

## NATIONAL INSTITUTE OF ARTHRITIS, DIABETES, AND DIGESTIVE AND KIDNEY DISEASES OFFICE OF THE DIRECTOR

### DIRECTOR DIVISION OF DIGESTIVE DISEASES

(and Associate Director for  
Digestive Diseases)—Dual Position

Incumbent must be a recognized and respected leader in the field of digestive diseases related research, with experience and expertise in the development of new knowledge and new technology in digestive diseases. Responsibilities include identifying research needs and opportunities; planning, developing and implementing a high quality extramural research and research training program in the field; and conducting laboratory investigations in digestive diseases related research.

**Salary Range**—\$58,938 to \$66,400 per annum.

(Physicians may be eligible for a comparability allowance up to \$10,000 per year). Candidates may alternatively be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.

Position information, SF-171 (application), and qualifications requirements may be obtained by contacting:

**Mr. Clifford Moss, Executive Secretary**  
Search Committee for Director,  
Division of Digestive Diseases  
Building 31, Room 9A34  
National Institutes of Health  
Bethesda, Maryland 20205  
(301) 496-4231

Applications must be postmarked no later than July 31, 1984.

AN EQUAL OPPORTUNITY EMPLOYER

## British Columbia's Children's Hospital

### MEDICAL MICROBIOLOGIST

A vacancy exists at the Children's Hospital for a Medical Microbiologist. Applicants should hold an M.D., with Fellowship of the Royal College of Physicians or equivalent qualifications, and should have had practical diagnostic laboratory experience. Demonstrated capabilities in research and teaching will also be required. The successful candidate will be eligible for appointment at an appropriate faculty rank in the Division of Medical Microbiology of the Department of Pathology at The University of British Columbia.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Please direct enquiries to:

**Dr. J. D. Anderson,**  
Program Head, Division of Microbiology,  
Department of Pathology,  
British Columbia's Children's Hospital,  
4480 Oak Street,  
Vancouver, B.C. Canada V6H 3V4  
Telephone: (604) 875-2345, Local 7464

## British Columbia's Children's Hospital

### MEDICAL VIROLOGIST

A vacancy exists at the Children's Hospital for a Virologist. Applicants should hold a Ph.D. or an M.D., with Fellowship of the Royal College of Physicians or equivalent qualifications, and should have had practical diagnostic laboratory experience. Demonstrated capabilities in research and teaching will also be required. The successful candidate will be eligible for appointment at an appropriate faculty rank in the Division of Medical Microbiology of the Department of Pathology at The University of British Columbia.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Please direct enquiries to:

**Dr. J. D. Anderson,**  
Program Head, Division of Microbiology,  
Department of Pathology,  
British Columbia's Children's Hospital,  
4480 Oak Street,  
Vancouver, B.C. Canada V6H 3V4  
Telephone: (604) 875-2345, Local 7464



## POSITIONS OPEN

**BIOCHEMISTRY POSTDOCTORAL POSITIONS** available immediately. Background in biochemistry required; experience with heme proteins preferred. Work in multidisciplinary group with emphasis on use of biophysical techniques for the study of hemoglobin and red cells. Send curriculum vitae and names of three references to: **Dr. Mary Fabry, Department of Medicine, Division of Hematology, Ullmann Building Room 921, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, N.Y. 10461.**

The University of Michigan, Department of Psychiatry, has a full-time, **tenure-track position** open in its **CLINICAL NEUROPSYCHOLOGY PROGRAM** with an anticipated starting date of 1 September 1984. Applicants must have a doctoral degree from an accredited program in clinical psychology, a 1-year internship in clinical psychology, and at least 2 years of specialty training in clinical neuropsychology (one of which may be predoctoral). References should attest to the applicant's skills in neuropsychological evaluation. The nature of this position requires expertise in the use of computers with human bio-electrical recording techniques and experimental design and methodology. The person occupying this position will assist the program director in management of this very active clinical and academic program. The work involves clinical service delivery, teaching, and research in an active medical center setting. It is expected that the person occupying this position will develop formal research funding and should have ability in research activities as demonstrated by previous publication and research funding. This is a tenure-track position on the regular medical faculty with a possible joint appointment in the Department of Psychology. The person occupying this position should be licensed in the state of Michigan. Salary and rank are competitive and commensurate with background and experience. A letter of interest, curriculum vitae, and letters from three references should be sent to: **Stanley Berent, Ph.D., Chairman, Search Committee, Neuropsychology Program, Box 056, Department of Psychiatry, University of Michigan Medical Center, Ann Arbor, Michigan 48109. The University of Michigan is an Affirmative Action Employer.**

## RENAL PHARMACOLOGIST/PHYSIOLOGIST

Stuart Pharmaceuticals, a division of ICI Americas Inc., has immediate openings for the following two positions:

- Ph.D. in renal pharmacology or physiology with experience in renal techniques in large animals, with special emphasis on the regulation and control of renal hemodynamics. Training in microsphere and micropuncture techniques is highly desirable.
- BS/MS in Biological sciences or related discipline to work in in-vitro tests using isolated tissues for characterization of pharmacological activity of compounds. Familiarity with solute and electrolyte transport and membrane pharmacology/physiology desirable. In-vitro experiences in epithelial tissues preferred.

Stuart Pharmaceuticals Biomedical Research facilities are located in suburban Wilmington, DE and provide excellent work environment and career growth and benefits package.



P. J. Peters  
Employee Relations

**STUART PHARMACEUTICALS**

Division of ICI Americas Inc.

Wilmington, DE 19897

An Equal Opportunity Employer M/F

## POSITIONS OPEN

### CANCER INVESTIGATOR

Research leadership position in immunology and molecular biology of human tumors. Applications are invited to fill an immediate position in the Department of Microbiology and Immunology. Ph.D. required with at least 3 years of postdoctoral experience in immunological and molecular research. Salary will be commensurate with experience. The applicant is expected to maintain existing and develop new, strong, and independent research programs on human tumors with emphasis on bladder cancer and lymphoma. Monoclonal antibody and transfection techniques are currently used. Please send curriculum vitae and a brief statement of research interest along with the names of three references by 17 August 1984 to: **Dr. John L. Fahey, Department of Microbiology and Immunology, University of California, Los Angeles, School of Medicine, Center for Health Sciences, Los Angeles, California 90024. The University of California is an Equal Opportunity/Affirmative Action Employer.**

### CNS MOLECULAR GENETICIST

The Biological Sciences Research Center (a multidisciplinary facility for research of developmental disorders of the central nervous system) and the Departments of Physiology and Biochemistry of the University of North Carolina at Chapel Hill seek an individual to head a new section on CNS molecular genetics. Qualifications: M.D. or Ph.D. in genetics, physiology, biochemistry, or microbiology. Must have extensive postdoctoral training in molecular genetics and be committed to applying molecular genetics to the study of diseases of the human central nervous system. This individual will be expected to establish, staff, and direct operations of this new laboratory and hold a tenure-track appointment (assistant or associate professor) in Department of Biochemistry or Physiology. Joint appointments in relevant academic clinical departments are not precluded. Applicants must send curriculum vitae, three letters of recommendation, copies of two published manuscripts, and a short discussion of research plan to: **John S. Kizer, M.D., Biological Sciences Research Center, 220H, University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27514. Minorities and women are encouraged to identify themselves voluntarily. Affirmative Action/Equal Opportunity Employer.**

### DEAN School of Medicine Medical College of Georgia Augusta, Georgia

The Medical College of Georgia is a state-supported health sciences university committed to achievement of excellence in education, health care, and research through collegiality, academic freedom, and equal opportunity. Schools within the university, other than medicine, are allied health sciences, dentistry, graduate studies, and nursing.

Applications are sought (closing date: 1 October 1984) from individuals with a doctor's degree and a background in medical teaching, research, and administration. Experience with patient care is also desirable. Please submit your curriculum vitae, with the names and addresses of at least three people who, based on personal knowledge, can describe your skills and achievements to:

**Dr. Roy Witherington, Chairman  
Search Committee for Dean  
School of Medicine  
Medical College of Georgia  
Augusta, Georgia 30912**

Nominations are also welcome and must be received by 1 September 1984 to permit follow-up.

*An Equal Opportunity/Affirmative Action Institution*

**EUKARYOTIC CELL BIOLOGIST.** Tenure-track. Available immediately. Rank open. Ph.D. in some areas of eukaryotic cell biology or molecular biology with postdoctoral experience in eukaryotic genetics (hybridoma or recombinant DNA technology preferred). Candidate will be expected to conduct independent research and to obtain external funding. The successful candidate will also teach and direct research in genetics, cellular/developmental biology, or molecular biology. Applications will be accepted until 15 August 1984, or until a suitable candidate is found. Submit curriculum vitae, transcripts, names and addresses of at least three references, and a statement of both teaching and research interests to: **Dr. Ronald B. Young, Department of Biological Sciences, University of Alabama in Huntsville, Huntsville, Ala. 35899. An Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

### DEAN AND ACADEMIC VICE PRESIDENT MEDICAL COLLEGE OF WISCONSIN

The Medical College of Wisconsin invites nominations and applications for the position of dean and academic vice president. Qualified applicants should send their curriculum vitae and references to:

**Sidney E. Grossberg, M.D., Chairman  
Dean Search Committee  
Department of Microbiology  
Medical College of Wisconsin  
8701 Watertown Plank Road  
Milwaukee, Wis. 53226  
Equal Opportunity/Affirmative  
Action Employer**

**ENVIRONMENTAL HEALTH.** Assistant professor, tenure-track. Open as early as 1 November 1984. Qualifications: Doctorate in environmental health or related field; academic training sufficient to teach toxicology (with laboratory), epidemiology, and institutional hygiene. College teaching and field experience desired. Duties: Undergraduate and graduate teaching and advising; research; service. Send curriculum vitae, transcripts and three references to arrive by 1 October 1984. Send to: **Dr. Barney Kane, Search Committee, Environmental Health, School of Allied Health and Social Work, East Carolina University, Greenville, N.C. 27834. Equal Opportunity/Affirmative Action Employer.**

### EXECUTIVE OFFICER Department of Biological Sciences University of Pittsburgh

The department seeks an experienced scientific administrator to assist the chairman in the general management of the department, its laboratories, and its three buildings. The incumbent will be responsible for supervision of the secretarial, fiscal, and laboratory service functions of the department; for liaison with the physical plant, other university staffs and offices, and outside contractors and service companies; and for the various other functions related to the teaching and research missions of the department.

Administrative skills or experience in the administration of scientific research is required. It is highly desirable that such experience has been in a university or research laboratory. Familiarity with building and laboratory planning, construction, and maintenance is desired. A minimum of a baccalaureate degree is required with advanced degrees being desirable.

Applications or nominations for the position should be sent to:

**Dr. Albert E. Chung  
Department of Biological Sciences  
University of Pittsburgh  
Pittsburgh, Pa. 15260**

For full consideration, nominations or applications should be submitted by 20 August 1984. *The University of Pittsburgh is an Equal Opportunity Employer.*

### FACULTY POSITION Biochemistry, University of Nebraska-Lincoln

The Department of Agricultural Biochemistry, in the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln (UNL), invites applications or nominations for a tenure-track faculty position. Will be expected to establish a creative and independent research program in basic biochemistry. Candidates from all areas of animal biochemistry will be considered, including, but not restricted to, mechanisms of genetic expression, cell differentiation, mechanisms of action of hormones and second messengers, influence of nutrients on metabolic processes, membrane structure and function, and enzyme mechanisms. Unique opportunities exist for interdisciplinary cooperative research through various UNL departments. The salary and rank of this 12-month position will be commensurate with training and experience. Requires Ph.D. Postdoctoral experience desirable. Teaching undergraduate and graduate courses is a part of the duties, but the instructional load is light—80 percent research, 20 percent teaching. Submit résumé and names and addresses of three references by 1 November to: **Dr. Fred W. Wagner, Department of Agricultural Biochemistry, University of Nebraska-Lincoln, Lincoln, Nebraska 68583-0718. Affirmative Action/Equal Opportunity Employer.**

## Applications Chemist

Beckman Instruments designs and manufactures the finest analytical instrumentation parts and systems for High Performance Liquid Chromatography applications. As an industry leader, we offer our employees high performance careers as we expand into our new facility in San Ramon, California in early 1985.

You will be responsible for new HPLC applications development to support marketing and sales efforts, work with customers on problem solving applications and participate in new instrument and column evaluation process. A BS or MS in medicinal chemistry, biochemistry and/or pharmacology demonstrating at least 3 years of practical HPLC experience in areas of HPLC analysis, chemical characterization and/or preparative isolation is required. Effective communication skills are essential.

Qualified candidates should send their resume and publications list to: Beckman Instruments/Altex Scientific Operations, 1716 Fourth Street, Berkeley, CA 94710. We are an equal opportunity employer.

**BECKMAN**

## ASSOCIATE CLINICAL DIRECTOR

Bristol-Myers Pharmaceutical Research and Development Division currently has an opening in Buffalo, N.Y. for an Associate Clinical Director in our Clinical Research Department.

Responsibilities in this position include providing assistance to our Clinical Director in the development, implementation and execution of clinical program plans for all Bristol-Myers dermatological R & D projects and Westwood Phase IV studies. This individual will also supervise CRA's for clinical projects and assist in the overall administration of Clinical Research.

The successful candidate will have a Ph.D. in a science-related discipline and a minimum of 6 years experience in a supervisory and program plan development role in clinical research.

This position offers a competitive salary, a comprehensive benefits package and growth opportunities. For confidential consideration, please submit your resume to:

Manager, Human Resources

**WESTWOOD**

PHARMACEUTICALS INC.

*A Subsidiary of Bristol-Myers Company*

100 Forest Avenue, Buffalo, N.Y. 14213

An Equal Opportunity Employer M/F/H/V

## SCIENTIFIC RESEARCH



## University Resident Research Program

The Air Force Office of Scientific Research seeks faculty members with unique scientific expertise to carry out challenging research in Air Force laboratories. One Year appointments are available at research organizations located in Arizona, California, Colorado, Florida, Massachusetts, New Mexico, New York, Ohio, Texas and Washington, D.C. Appointment starting date and salary are negotiable.

These areas are of particular interest in Air Force research.

- ★ Electronic and Materials Sciences
- ★ Mathematical and Information Sciences
- ★ Physical and Geophysical Sciences
- ★ Aerospace Sciences
- ★ Chemical and Atmospheric Sciences
- ★ Life Sciences

To be eligible for participation, individuals must be U.S. Citizens currently serving as full time faculty members of U.S. institutions of higher education; have an earned PhD in a scientific discipline or engineering; and have a publication record in their proposed area of research. All qualified applicants will receive consideration without regard to age, color, race, religion, sex or national origin. Successful applicants will require letters of endorsement from the university dean and department chairperson.

Major Amos L. Otis  
AFOSR/XOT  
Bolling Air Force Base, Washington, D.C. 20332  
Phone (202) 767-4971

Interested individuals are requested to send a resume, list of publications, and one page summary of proposed research to:

## AIR FORCE OFFICE OF SCIENTIFIC RESEARCH

Air Force Systems Command  
Equal Opportunity Employer

## POSITIONS OPEN

**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.**

**FACULTY POSITION IN BIOCHEMICAL PHARMACOLOGY.** Division of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital.

Applications are invited for a faculty position at the research associate or assistant member level. Applicants should have demonstrated research ability in enzymology and/or molecular biology. The successful applicant will occupy a position of responsibility in a research group, under the direction of Dr. Blakley. This group is investigating the biochemical pharmacology of antifolates and nucleoside analogs. Submit curriculum vitae and arrange for three letters of reference to be sent to:

**Dr. Raymond L. Blakley**  
Chairman, Division of Biochemical  
and Clinical Pharmacology  
St. Jude Children's Research Hospital  
332 North Lauderdale  
Memphis, Tennessee 38101

*An Equal Opportunity/Affirmative Action Employer*

### HEAD DEPARTMENT OF POULTRY SCIENCE NORTH CAROLINA STATE UNIVERSITY

Applications and nominations are invited for the position of professor and head of the Department of Poultry Science at North Carolina State University. The Department of Poultry Science, with a core faculty of 26, and three adjunct members, is an administrative unit of the School of Agriculture and Life Sciences offering B.S. and M.S. degrees in poultry science and Ph.D. degrees in disciplinary areas.

Candidates for the position must have an earned doctorate in a discipline related to poultry science and have a distinguished professional record. Preference will be given to candidates who have demonstrated leadership abilities and are committed to developing strong programs in research, teaching, and extension activities related to poultry science.

Nominations and applications must be received by 15 September 1984. Please send curriculum vitae and the names of three references to: **Chairman, Search Committee,**

**Dr. David R. Lineback**  
Professor and Head  
Department of Food Science  
Box 7624, North Carolina State University  
Raleigh, N.C. 27695-2724

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

**PLANT COMMUNITY ECOLOGIST.** Assistant professor/assistant ecologist in the University/Agricultural Experiment Station. Research on factors influencing the structural and functional properties of grassland communities using demographic and/or genetic techniques. Teaching and advising at the undergraduate and graduate levels. Send a statement of research interests, curriculum vitae, list of publications, transcripts, and names and addresses of three referees by 1 November 1984 to: **D. A. Phillips, Search Committee Chairman, Department of Agronomy and Range Science, University of California, Davis, Calif. 95616. The University of California is an Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL—FAT AND OIL CHEMIST** with background or interest in food science/technology to collaborate on studies of the sensory perception of fats and oils. Willingness to participate in multidisciplinary research essential. Submit letter of interest, curriculum vitae, and names of three references to: **Director, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, Pa. 19104. Equal Opportunity Employer.**

## POSITIONS OPEN

### IMMUNOLOGY

The West Virginia School of Osteopathic Medicine (WVSOM) invites applications for a tenure-track, 9-month-appointment, available immediately. Preference will be given to those applicants with abilities in parasitology, as well as immunology. Successful candidates will be expected to teach in a general microbiology course, participate in the committee structure of the School and take part in a developing research program. Qualified individuals must hold a Ph.D. in microbiology or immunology and postdoctoral experience is desirable. Rank and salary will be commensurate with experience. Applications, including current curriculum vitae and the names of three references, should be sent to: **Michael K. Cope, Ph.D., Associate Dean for Academic Affairs, West Virginia School of Osteopathic Medicine, Lewisburg, West Virginia 24901. Deadline for applications is 30 August 1984.**

*WVSOM is an Affirmative Action/Equal Opportunity Employer.*

**IMMUNOLOGIST, FACULTY POSITION.** A full-time, tenure-track position in the Pathology Department at rank of assistant or associate professor. Ph.D. or comparable degree with demonstrated leadership in teaching and research. Establish research program competitive for external funding. Participation in Ph.D. graduate programs in department expected. Limited hospital service responsibility in immunopathology laboratory. Send curriculum vitae and references to: **C. Robert Baisden, Chief, Section of Clinical Pathology, Medical College of Georgia, Augusta, Ga. 30912. Equal Opportunity Employer, M/F. J1805.**

### NEUROSCIENCE Assistant Professor

The Kinsmen Laboratory (Department of Psychiatry, University of British Columbia) invites applications from outstanding individuals with a commitment to excellence in research and teaching in neuroscience. The appointee will be expected to develop an independent research program in an emerging field of neuroscience. Applicants should have a Ph.D. and/or M.D. degree and have shown clear evidence of a capacity for productive original research. The laboratory offers excellent research facilities and collaborative, interdisciplinary research is encouraged, as is collaboration with clinical psychiatrists and neurologists. The laboratory is located in the psychiatric hospital; adjacent hospitals have research clinics in epilepsy, movement disorders, and Alzheimer's disease, as well as a PET-NMR imaging center. Applicants should send curriculum vitae, list of publications, a brief summary of research plan, and the names and addresses of three references to: **Dr. E. G. McGeer, Division of Neurological Sciences, Department of Psychiatry, The University of British Columbia, Vancouver, British Columbia, Canada, V6T 1W5. In accordance with Canada Employment and Immigration Regulations, priority will be given to Canadian citizens and permanent residents.**

### POSTDOCTORAL POSITION IN IMMUNOLOGY

A position is available for full-time research in studies of T cell triggering. Emphasis is on purification, characterization, and molecular cloning of lymphokines involved in stimulating activation of resting T lymphocytes. Background in protein chemistry, molecular techniques, and cell culture is desirable. Please send curriculum vitae and three letters of recommendation to: **Dr. David Raulet, Room E17-128, Center for Cancer Research, Massachusetts Institute of Technology, Cambridge, Mass. 02139.**

**POSTDOCTORAL POSITION in MUSCLE PROTEIN RESEARCH** to start fall 1984; funded for 2 years. Research on C-protein, a component of striated muscle, its interactions with myosin and actin, and its phosphorylation. Experience with protein phosphorylation, cross-linking, or fluorescent probes preferred. Send résumé and references to: **Dr. Carl Moos, Biochemistry Department, State University of New York, Stony Brook, N.Y. 11794. An Equal Opportunity/Affirmative Action Employer. AK 129.**

### POSTDOCTORAL POSITION

**POSTDOCTORAL POSITION** available to investigate the biochemistry and molecular biology of *Chlamydia*. Experience working with nucleotides desirable but not required. Send curriculum vitae and names of three references to: **Thomas P. Hatch, Department of Microbiology and Immunology, University of Tennessee Center for Health Sciences, Memphis, Tenn. 38163.**

## POSITIONS OPEN

### IMMUNOLOGY—VIROLOGY FACULTY POSITION

Ph.D. to teach immunology and virology to second-year medical students. Assist in teaching laboratories. Three-member Ph.D. department. Demonstrated successful teaching excellence preferred. Interdisciplinary research with clinical faculty encouraged. Cultural suburban living. Rank and salary commensurate with qualifications. Begin September or as arranged. Send curriculum vitae plus names, addresses, and telephone numbers of three current references by 15 August to: **Dr. E. H. Whitten, Associate Dean, The University of Health Sciences, College of Osteopathic Medicine, 2105 Independence Boulevard, Kansas City, Mo. 64124. Telephone: 816-283-2402. Applications encouraged from all qualified persons.**

**POSTDOCTORAL POSITION** available 1 September 1984, for anatomical and physiological studies of visual cortex. Applicants should have experience with neuroanatomical techniques, single unit recording, or visual psychophysics. This position also provides teaching experience in medical neuroscience, histology, or gross anatomy. Send curriculum vitae and names of references to: **N. Berman, Department of Anatomy, Medical College of Pennsylvania, 3200 Henry Avenue, Philadelphia, Pa. 19129. Equal Opportunity Employer, M/F.**

**POSTDOCTORAL POSITIONS** available 1 September 1984 for research with Professors Robert R. Sokal and F. James Rohlf on numerical taxonomy (Sokal/Rohlf), spatial analysis of variation in human populations (Sokal), and statistical analysis of environmental monitoring variables (Rohlf). Ph.D. trained in relevant areas of biology, physical anthropology, or geography with strong quantitative and computing backgrounds should send résumé and three letters of reference to: **Dr. F. James Rohlf, Department of Ecology and Evolution, State University of New York (SUNY) at Stony Brook, Stony Brook, N.Y. 11794. SUNY, Stony Brook, is an Affirmative Action/Equal Opportunity Educator and Employer. AK number 132.**

**POSTDOCTORAL POSITION** available beginning fall 1984 for recent Ph.D. qualified to apply for later U.S. Public Health Service or other competitive fellowship, for studies on ATP synthase and membrane bioenergetics. Stipend: \$17,000. Contact: **Paul D. Boyer, Molecular Biology Institute, University of California, Los Angeles, Los Angeles, Calif. 90024.**

**POSTDOCTORAL POSITION.** Veterinary immunology. Structural, allotypic, and idiotypic studies on swine and bovine antibodies and studies on ELISA immunochemistry.

**J. E. Butler**  
Department of Microbiology  
University of Iowa  
Iowa City, Iowa 52242

**POSTDOCTORAL POSITION.** Study the pharmacological and electrophysiological properties and phospholipase A2 enzyme on the phrenic nerve-diaphragm junction and the isolated heart muscle. Opportunity to learn biochemical techniques and correlate results with electrophysiological data. Salary: \$20,000 per year; 2- to 3-year appointment. Submit letter of interest, curriculum vitae, and names of three references by 1 September 1984 to: **Dr. Philip Rosenberg, UNIVERSITY OF CONNECTICUT, School of Pharmacy, Storrs, Conn. 06268. (Search S-217.) Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available immediately to study the biogenesis, processing, and intracellular topogenesis of kidney brush border enzymes using classical protein chemistry and molecular biology approaches. Send résumé and three references to: **Dr. S. S. Tate, Department of Biochemistry, Cornell University Medical College, 1300 York Avenue, New York, N.Y. 10021.**

**POSTDOCTORAL POSITIONS.** Two positions to study biological nitrogen fixation, specifically, leg-hemoglobin in legume nodules (requires expertise in enzyme purification and spectrophotometric techniques), and associative nitrogen fixation (requires expertise in microbiological techniques); \$16,000 plus fringe benefits; renewable for a second year. Apply with résumé and two references by 1 September to: **Robert V. Klucas, Department of Agricultural Biochemistry, University of Nebraska-Lincoln, Lincoln, Nebraska 68583-0718. Affirmative Action/Equal Opportunity Employer.**



## SeaPharm

SeaPharm, a new international biotechnology company developing pharmaceutical applications for marine natural products, is seeking several key scientists for its Research Department. Specific areas of specialty are:

- **Natural Products Chemistry**

The applicant should have demonstrated ability to isolate and characterize a variety of biologically active compounds from natural sources, especially marine or fermentation; be experienced in modern chromatographic and spectroscopic techniques; possess a Ph.D. in organic chemistry with emphasis in natural products isolation or structure determination.

- **Microbiology**

The applicant should have experience in industrial research, designing and operating screens and assay systems for the discovery of new pharmaceutical products; be able to work closely with isolation chemists and conduct appropriate in-vitro and in-vivo testing of new antimicrobial, antitumor or antiviral products; possess a Ph.D. in microbiology or related area and two or more years of experience.

- **Pharmacology**

The applicant should have experience in the design and operation of both in-vitro primary screens and in-vivo secondary test systems for new pharmaceutical products; skill in antitumor, antiviral and general pharmacologic evaluation of new drug candidates highly desirable; possess a Ph.D. in pharmacology or biology and two or more years experience.

Applicants must be willing to relocate to the beautiful area of Florida's Eastern Treasure Coast. Call or send resume to: Ms. Kathy M. Spencer, SeaPharm Inc., 741 Alexander Road, Princeton, New Jersey 08540, (609) 452-7140.

## HABITAT RESTORATION SCIENTIST

B.S./B.A. in botanical or ecological sciences plus 5-10 years additional training and/or experience in the field of habitat restoration. At least 2-3 years of this training/experience must be in a position that was directly involved in practical, applied habitat restoration on a large scale, preferably for an energy related project and must have had more than technical input to the program. Must have demonstrated publication record including senior authorship, plus training in remote sensing in the broadest sense, biostatistics, computer technology, modelling, radiation biology, ecology, techniques, and experience with wildlife, especially endangered species desired. Will implement habitat restoration plan at Elk Hills, Kern County, California, design and conduct R&D programs, assist with botanical and ecological support. Will assist supervisor in developing new programs and provide both oral and written communications with sponsors. Will synthesize literature and research data into professionally acceptable topical reports and articles in refereed, scientific journals.

Qualified candidates send resume to:

EG&G Energy Measurements, Inc.

Attn: Personnel

P.O. Box 98

Goleta, California 93116

U. S. Citizenship Required

An Equal Opportunity Employer

## RADIO RESEARCH BOARD AUSTRALIA POSTDOCTORAL FELLOWSHIP

**GENERAL:** As part of its activities designed to foster research in electronics, telecommunications, radio science, and related fields in the universities and other appropriate organizations, the Radio Research Board offers a fellowship scheme. Under this scheme, fellowships are awarded each year for full-time research by young scientists or engineers of exceptional promise and proven merit. These are postdoctoral awards tenable for a period of 2 years in an Australian university, approved research institute, or industrial laboratory as determined by negotiation between a prospective fellow and the board. The agreed area of research will also be determined by negotiation but the board is prepared to consider any proposal relevant to its interests.

**QUALIFICATIONS:** The applicants should have a Ph.D. degree or its equivalent and be preferably under 30 years of age.

Radio Research Board Fellowships are available to applicants of all nationalities but they are asked to indicate their future plans.

**STIPEND:** The stipend will normally follow that applicable to the Queen Elizabeth II awards, currently A\$25,447 (A\$27,628 over 28 years of age.) The stipend is subject to income tax.

**ALLOWANCES:** Appropriate allowances and travel expenses are available. Host institutions may be paid an allowance towards the cost of supporting the fellow.

**APPLICATIONS:** Persons interested in applying for the above fellowship should obtain application forms and a statement of the conditions from: The Secretary, Radio Research Board, P.O. Box 225, Dickson ACT 2602, Australia.

Applications close on 14 September 1984 and in the normal course of events applicants may expect to be advised on the outcome of their applications in December 1984.

## Research Supervisor/ Animal Metabolism

SDS Biotech Corporation, an established Agricultural Chemicals and Animal Health Company with a new name, has an opening for a Research Supervisor/Animal Metabolism to work in the Department of Safety Assessment at its World Headquarters, located approximately thirty miles east of Cleveland, in Painesville, Ohio.

The candidate selected for this position must have a PhD in Pharmacology, Biochemical Toxicology or Biochemistry with at least four years of technical experience in animal metabolism, pharmacokinetics and metabolite isolation and identification. Experience is also required in instrumental methods including HPLC, handling of radiolabelled compounds and animal handling including dosing methods and necropsy. Previous supervisory experience is preferred.

Excellent salary and benefits package. Interested candidates should send resumes and salary history, in strictest confidence to:

L.H. Manburg  
Supervisor, Administration  
SDS Biotech Corporation  
P.O. Box 348  
Painesville, Ohio 44077



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## Fisheries Biologist—PhD

Argonne National Laboratory, Environmental Research Division, offers an individual with a PhD or equivalent and leadership qualities an opportunity to complement an existing multi-disciplinary team in conducting environmental impact analyses and assessments on the siting of energy facilities adjacent to or in river ecosystems. The successful applicant would have expertise and experience in fisheries management, including habitat requirements of important recreation species. Experience with anadromous species and the application of instream flow assessment methodologies desirable.

This position requires knowledge of data collection and analysis techniques and experience in report preparation. Successful applicant will have ability to interact with personnel from federal and state agencies and will become familiar with federal and state regulations pertaining to fisheries management.

We offer comprehensive benefits including 5 weeks vacation and excellent salary commensurate with your background. For prompt consideration, send your resume and qualifications to Rosalie L. Bottino, Box D-ERD-3564-55, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439



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Affirmative Action Employer

## Scientist and Postdoctoral Researcher Molecular Biology

Genentech, Inc., on the San Francisco Peninsula, is a rapidly growing and recognized leader in the field of genetic engineering and biotechnology research. Our Molecular Biology Department has two openings for a Scientist and Postdoctoral Researcher. Both positions require a relevant PhD involving molecular biology of nucleic acids (Scientist position requires min. 2 yrs. postdoctoral research).

The successful candidates will be involved in basic and applied research in the areas of blood clotting factors, other blood proteins, and more generally, proteins of potential human pharmaceutical use.

Genentech offers excellent salaries and benefits in a most stimulating environment. Please send resume to Human Resources Department, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer m/f.

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### POSITIONS OPEN

**POSTDOCTORAL POSITION** for monoclonal antibody study of plant disease resistance gene products available September 1984. Experience in immunochemical techniques (monoclonal antibody production), plant cell culture, membrane isolation, or recombinant DNA is desirable. Send curriculum vitae and names of three references to: **Dr. Arthur R. Ayers, Department of Cellular and Developmental Biology, The Biological Laboratories, Harvard University, 16 Divinity Avenue, Cambridge, Mass. 02138.**

**POSTDOCTORAL POSITIONS** available immediately to study cell and molecular biology of toxin and hormone action, and replication of animal viruses, as models for receptor mediated endocytosis, biosynthesis and processing of proteins, and regulation of gene expression. Applicants with a background in molecular cell biology/biochemistry and experience with hybridoma production, recombinant DNA technology, or protein chemistry of receptors and enzymes will be considered. Send curriculum vitae, copies of publications, summary of research experience, and names of three references to: **Dr. Thomas Moehring, Department of Medical Microbiology, University of Vermont, College of Medicine, Burlington, Vt. 05405. Equal Opportunity/Affirmative Action Employer.**

#### POSTDOCTORAL RESEARCH ASSOCIATE

Core electron microscopy laboratory requires a Ph.D. with training and experience in TEM/SEM and a wide variety of associated methods. Will interact with many research groups in the areas of cell biology and immunology and will be involved in the core laboratory's own research, related to the use of immune probes of ultra structure. Salary commensurate with experience. Send curriculum vitae, statement of research interests, and names and telephone numbers of three references to: **Cindy Bates, JFB 10, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02155. An Affirmative Action/Equal Opportunity Employer.**

#### POSTDOCTORAL RESEARCH ASSOCIATE

Position available immediately for research on purification and specificity studies of protease enzymes from dormant and germinated barley seeds. Strong background in biochemistry required and experience in plant enzymology would be helpful. Salary: \$16,000 per year. Send curriculum vitae and names of three references to: **Dr. Berne L. Jones, University of Wisconsin, Cereal Crops Research Unit, 501 North Walnut Street, Madison, Wisconsin 53705. An Equal Opportunity Employer.**

#### POSTDOCTORAL RESEARCH ASSOCIATE

Position available immediately to study mechanisms of hormone action in regulation of fatty acid synthesis. Experience in protein phosphorylation, protein/peptide isolation, cell techniques desirable. Applicant must be able to move to Dartmouth Medical School in late 1984. Send curriculum vitae plus two reference letters to: **Dr. Lee A. Witters, Diabetes Unit, Massachusetts General Hospital, 32 Fruit Street, Boston, Mass. 02114; telephone: 617-726-2873.**

**RESEARCH BIOLOGIST.** The Agricultural Research Service, Brookings, South Dakota, is seeking an independent scientist to perform duties involving the development and validation of mathematical models to describe the dynamics of pest insect populations affecting graminaceous crops with emphasis on *Diabrotica* spp. Knowledge of quantitative population ecology, insect biology, stimulation modeling, and skill in computer-based system analysis is required. Salary of \$25,489 to \$30,549 commensurate with education and experience. Must be U.S. citizen. Contact: **Dr. Gerald R. Sutter, telephone: 605-693-5201**, for further information on job duties. Contact: **Barbara Fleischmann**, for application procedures, **telephone: 301-344-4569**, by 1 October 1984. Announcement Number NCR-SCI-3841. *An Equal Opportunity/Affirmative Action Employer.*

**RESEARCH TECHNICIAN.** M.S. degree in either biochemistry or biophysics. No experience necessary. Requires training in infrared spectroscopy and familiarity with biophysical techniques, protein chemistry needed for cancer research. Duties include isolation and characterization of various proteins utilizing sophisticated biomechanical and protein physico-chemical techniques, radioactivity monitoring, and studies of nuclear activation mechanism of receptor proteins. Job site: Los Angeles; \$14,000 per year; 40 hours per week; no overtime. Send this ad and your resume to: **Job Number 3066, P.O. Box 865, Sacramento, Calif. 95804**, no later than 10 August 1984.

# Senior Scientist

## IMMUNOCHEMIST/BIOCHEMIST

ImmuCell, a new company developing diagnostic and therapeutic products for veterinary and human health care, is currently seeking a creative and energetic doctoral level scientist with a strong chemistry background and experience in non-isotopic immunoassay design or in therapeutic drug development.

Individual should have 2-4 years of postdoctoral experience in enzyme or fluorescence immunoassays and knowledge of protein modification and hapten conjugation or experience in antibiotic or biopolymer synthesis.

This position offers an attractive compensation and benefits program and the opportunity for equity participation.

ImmuCell is located 90 miles north of Boston in Portland, Maine — a community with an excellent quality of life and ready access to the recreational advantages of coastal and inland Maine.

If you seek the challenges and rewards to be found in a rapidly developing young company, please send your resume and salary history to:

Dr. Frank E. Ruch, Jr.  
ImmuCell Corporation  
966 Riverside Street  
Portland, ME 04103

ImmuCell Corp.  
**ImmuCell Corp.**

## MANAGER OF BIOLOGICAL LABORATORIES

Wyeth Laboratories is seeking an outstanding individual to fill a key research and development vacancy. The Manager of Biological Laboratories will direct and oversee the research of six PhD's and 12 assistants in the cell biology, molecular biology, and monoclonal antibody labs, as well as maintain contact with external agencies. This manager will plan, implement, monitor, and evaluate various vaccine and biological projects.

The successful candidate must have a PhD in molecular biology, virology, or microbiology with at least five years' relevant experience. Besides very current knowledge of research in vaccines and other biologicals, candidates must exhibit proven administrative, managerial, and communicative skills to effectively supervise the labs, coordinate with production, and interface with government regulators. The position reports to an accomplished scientist/research director, pays a substantial salary, and includes liberal fringes. It is located in Wyeth's modern suburban Philadelphia research facility at Radnor.

Submit resumes with salary history in strict confidence to Personnel Department.

**Wyeth Laboratories, Inc.**



P.O. BOX 8299  
Philadelphia, PA 19101

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# MOLECULAR BIOLOGISTS

The Agricultural Biotechnology Group of Rohm and Haas Company has immediate openings for experienced BIOLOGICAL SCIENTISTS at its Research Center in Spring House, PA. They will be members of a multidisciplinary team dedicated to developing novel products for agriculture.

We are looking for two senior scientists, preferably with postdoctoral experience. Each will have responsibility for initiating and conducting laboratory programs for improving crop characteristics by molecular approaches:

- **Ph.D. Plant Molecular Biologist or Plant Biochemist**, with expertise in procedures of plant transformation, tissue culture, selection and regeneration. Familiarity with biochemistry of plant secondary metabolites is useful.
- **Ph.D. Plant Molecular Biologist**, skilled in plant transformation procedures. Understanding of host-pathogen biochemistry or genetics of disease control is required.

We also seek two scientists to conduct and support laboratory programs for improving crop lines:

- **M.S. or B.S. Plant Scientist (Molecular Biology, Genetics, Biochemistry, Physiology)**, with two to five years of experience in plant tissue culture and regeneration procedures, immunology, and enzyme work.
- **M.S. or B.S. Biologist**, with two to five years of direct experience in DNA sequencing procedures and automated DNA synthesis. Familiarity with plant science is desirable.

Rohm and Haas offers a highly competitive salary and benefits program, including relocation assistance. We provide solid opportunities for professional development and advancement. Whenever possible, we promote from within.

Candidates should be U.S. citizens or permanent residents. Please send a detailed resume, in confidence, to:

Recruiting and Placement #3884

**ROHM AND HAAS**   
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## POSITIONS OPEN

### POSTDOCTORAL FELLOW IN CLINICAL NEUROPHYSIOLOGY

Postdoctoral position available 1 September 1984. Individual will participate in ongoing clinical service providing both diagnostic evoked potential testing and computerized EEG analysis, as well as intraoperative monitoring. Opportunity to participate in ongoing research projects in nonlinear analysis of the CNS, recording from implanted depth electrodes, and biomagnetism. Laboratory has heavy emphasis on real-time computing and statistical analysis. Prefer either Ph.D. in neuroscience with computing background or M.D. with neurology training and interest in computing. Salary appropriate to background and experience. Applicants should send curriculum vitae and names of three references to: **Robert J. Scabassi, M.D., Ph.D., Department of Neurological Surgery, School of Medicine, University of Pittsburgh, Pittsburgh, Pa. 15213.**

**POSTDOCTORAL RESEARCH ASSOCIATE** (one position)—Microbiologist or immunologist with strong microbiologic background to participate in a collaborative research program to assess the effects of marijuana smoke on resistance of mice to low virulence pathogens. Duties include: conduct of the laboratory work; preparation of reports, papers, and proposals. Applicants must have Ph.D. in microbiology or immunology. Résumés should be directed to: **Dr. E. Sue Watson, Research Institute of Pharmaceutical Sciences, University of Mississippi, University, Miss. 38677, by 27 August 1984. Equal Opportunity Employer.**

**PROFESSOR OF ENVIRONMENTAL HEALTH.** The Department of Microbiology and Environmental Health, Colorado State University, invites applications for a 9-month, tenure-track position at the rank of assistant professor. Salary is competitive and negotiable. Candidates should have a firm commitment to research and demonstrated ability to teach in general environmental health courses and environmental toxicology. Experience in hazardous waste management is desirable. Qualifications include a Ph.D. (or equivalent) with postgraduate experience in environmental health. Closing date for applications is 15 September 1984, or until the position is filled. Submit curriculum vitae, names and addresses of three references, and a letter of intent detailing professional interests and experience to: **Dr. John R. Bagby, Search Committee Chairman, Department of Microbiology and Environmental Health, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, Colorado 80523; telephone: 303-491-6228/6136. Colorado State University is an Equal Opportunity/Affirmative Action Employer.**

Duke University—A **RESEARCH FELLOW** position in the Duke University Department of Psychiatry—Affective Disorders Program is available immediately. Fellows will work under the preceptorship of a senior investigator. The fellowship offers an exciting variety of learning experiences, including close contact with clinical and basic science investigators, participation in ongoing and fellow-initiated research projects, journal club, lectures, and seminars. Major clinical investigators include: Drs. Bernard Carroll, Charles Nemeroff, Dan Blazer, and Peter Loosen. PGY-4 residents or Board-eligible psychiatrists are invited to submit curriculum vitae and three letters of recommendation to: **P. T. Loosen, M.D., Duke University Medical Center, Box 3857, Durham, N.C. 27710.**

Exciting **RESEARCH OPPORTUNITY** in West Germany; partake in studies on intracellular metabolism and ion movements in organelles and intact cells. Ideal candidate must have a Ph.D. (junior faculty) and should have experience in high-resolution NMR technology ( $^{31}\text{P}$ ,  $^{23}\text{Na}$ ) and its application to complex biological systems. A Bruker multinuclear NMR instrument (AM 400 widebore) is expected to be installed by the end of June 1984. In addition to the researcher's salary, this federally funded position includes salary for one technician, start-up funds, and an appropriate supply budget. The research laboratories are part of the Max-Planck-Institut für Systemphysiologie in Dortmund, West Germany. Starting date: August 1984. Please send curriculum vitae and references to:

**Dr. Rolf Kinne, Director,  
Max-Planck-Institut für Systemphysiologie  
Rheinlanddamm 201  
4600 Dortmund 1  
West Germany**

## POSITIONS OPEN

### PROFESSOR/CHAIR

The department of Biochemistry and Biophysics of the College of Agricultural and Environmental Sciences at the University of California, Davis, invites nominations and applications for a full-time (11 months per year) tenured position as professor (63 percent), biochemist in the Agricultural Experiment Station (37 percent), and chair of the department. Responsibilities are to conduct research in biochemistry, preferably in cellular or molecular biology, to teach and advise undergraduate and graduate students, and to provide leadership as chair for a dynamic department of 15 tenure-track faculty, 430 undergraduate majors, 33 graduate students, and 24 postdoctoral fellows and visiting scientists; with opportunity to recruit new faculty. A Ph.D. (or equivalent) in biochemistry or a closely related field, demonstrated excellence in research, teaching, and leadership qualities are required. Send résumé including a complete dossier of research, teaching, and administrative experience, publication list, and names and addresses of five references to: **Professor John R. Whitaker, Chair, Search Committee, Department of Biochemistry and Biophysics, University of California, Davis, Calif. 95616; telephone: 916-752-3611.** Closing date: Open until filled; in order to be assured of consideration, application must be received by 1 October 1984. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

**RESEARCH ASSOCIATE IN CELLULAR IMMUNOLOGY.** Individual should be a dentist with training and experience in clinical studies of cellular immunity in periodontal diseases. Salary commensurate with experience. Send curriculum vitae to: **A. M. Haas, State University of New York at Buffalo, Oral Biology Department, Foster Hall, Buffalo, N.Y. 14214. We are an Equal Opportunity/Affirmative Action Employer.**

**RESEARCH ENTOMOLOGIST.** Agricultural Research Service, Brookings, South Dakota, is seeking a scientist to perform duties involving in-depth studies to develop new knowledge of insect behavior (interrelationships of pest species and their host plants and environment). Incumbent will (i) conduct detailed behavioral studies to determine feeding, oviposition, movement, and migration habits of insects affecting graminaceous crops with special emphasis on *Diabrotica* spp; and (ii) provide a lead role in coordinating a multistate pilot test involving management of adult *Diabrotica* using insect pheromones, plant kairomones, and toxicants. Knowledge of insect ecology and insect biology is required. Salary: \$25,489 to \$30,549 commensurate with education and experience. Must be U.S. citizen. Contact: **Dr. G. R. Sutter, telephone: 605-693-5201, for job information. Contact: B. Fleischmann, telephone: 301-344-4569 for application procedures, by 1 October 1984 (NCR-SCI-3842). An Equal Opportunity/Affirmative Action Employer.**

**THREE TO FOUR RESEARCH FACULTY POSITIONS** available in basic oral science department. (i) One or two geneticists with training and experience in molecular genetics of mammalian and microbiological systems. (ii) Biomedical scientist with training and experience in application of nuclear magnetic resonance procedures to biomedical problems. (iii) Protein chemist with training and experience in peptide synthesis and HPLC purifications. Faculty or postdoctoral position depending upon qualifications. Salary commensurate with training and experience. Send curriculum vitae to: **A. M. Haas, State University of New York at Buffalo, Oral Biology Department, 135 Foster Hall, Buffalo, N.Y. 14214. Minority and female candidates sought. We are an Equal Opportunity/Affirmative Action Employer.**

### BARROW NEUROLOGICAL INSTITUTE DIVISION OF NEUROBIOLOGY

Is inviting applications for **TWO STAFF POSITIONS.** Investigative neuroscientists with a Ph.D., postdoctoral training, and experience in motor system neurophysiology are being sought. Applications from both junior and senior investigators will be considered. Particular attention will be directed toward an evaluation of the candidates' research achievements and their demonstrated or potential capability for obtaining research support. Please forward letters of application, list of references, and curriculum vitae to: **James R. Bloedel, Chairman, Division of Neurobiology, Barrow Neurological Institute, St. Joseph's Hospital and Medical Center, 350 West Thomas Road, Phoenix, Arizona 85013. St. Joseph's Hospital is an Equal Opportunity Employer.**

## POSITIONS OPEN

**RESEARCH ASSOCIATE** position available in the area of gene structure and expression in soybean. Background in molecular biology preferred. One-year appointment with renewal for second year; funded by U.S. Department of Agriculture (USDA) Competitive Grant. Send résumé with names of references to: **Dr. Lila Vodkin, Building 006, Plant Genetics and Germplasm Institute, Beltsville Agricultural Research Center, Beltsville, Md. 20705. USDA is an Affirmative Action/Equal Opportunity Employer.**

## FELLOWSHIPS

**POSTDOCTORAL FELLOWSHIP IN EXPERIMENTAL HEMATOLOGY.** Research positions available for work in the areas of molecular biology of abnormal hemoglobin synthesis and degradative mechanisms in erythroid cells. Experience in nucleic acid technology and protein chemistry desirable.

Send résumé and names of three references to: **Dr. R. F. Rieder, Downstate Medical Center, State University of New York, 450 Clarkson Avenue, Box 20, Brooklyn, New York 11203. Equal Opportunity/Affirmative Action Employer. DMC 499.**

**POSTDOCTORAL RESEARCH FELLOWSHIP IN THE NEUROSCIENCES.** This 2- to 3-year position in the Ensor Foundation Research Laboratory is available immediately or by mutual arrangement. The laboratory, under a new chief, will be engaging in toxic and genetic studies relevant to understanding the etiology and treatment of brain disorders of movement, dementia, and schizophrenia utilizing a multidisciplinary approach. A Ph.D. or M.D. and laboratory experience is required.

Stipend is \$16,000 to \$18,000 per annum. Applicants should send curriculum vitae to: **Dr. Martin Cohen, Associate Professor, Department of Neuropsychiatry and Behavioral Science, University of South Carolina School of Medicine, P.O. Box 202, Columbia, S.C. 29208, or telephone: 803-758-5764.**

### POSTDOCTORAL FELLOWSHIP

Postdoctoral position available immediately to study the neurochemical correlates of spinal cord injury, with particular reference to polyunsaturated fatty acids and neuropeptides. Candidate should have training in neurochemistry and experience with HPLC. Send curriculum vitae and three letters of reference to:

**Dr. Alan I. Faden  
Department of Neurology  
University of California  
San Francisco, Calif. 94143**

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

**THREE POSTDOCTORAL RESEARCH FELLOWSHIPS** in the psychobiology of the major psychiatric and psychosomatic disorders. Immediately available for 1 to 2 years. This is an NIMH-supported fellowship for psychiatric research training. Applicants should have a Ph.D. or have completed their residency training in psychiatry. Areas of research include training in endocrine, biochemical, immunological, pharmacological, physiological, and psychological techniques as applied to the major behavioral and psychophysiological disorders and the mechanisms underlying them. Candidates must be U.S. citizens or permanent residents. Address letters of application stating topic of interest, curriculum vitae, and three letters of recommendation to: **Dr. Herbert Weiner, Neuropsychiatric Institute, University of California, Los Angeles, 760 Westwood Plaza, Los Angeles, Calif. 90024. An Equal Opportunity/Affirmative Action Employer.**

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# TOXICOLOGISTS

## (3 Positions)

The Carcinogenesis and Toxicology Evaluation Branch of the Toxicology Research and Testing Program, National Institute of Environmental Health Sciences, Research Triangle Park, NC, has immediate openings for three positions with a salary range of \$25,366 to \$39,519 per year.

The candidates will be responsible for a comprehensive research effort involving the conduct of large-scale, pre-chronic and chronic animal studies of chemical toxicity and carcinogenicity. They will be expected to design, evaluate, and publish results of separate components of multidisciplinary studies which are conducted through in-house research projects and at contract laboratories.

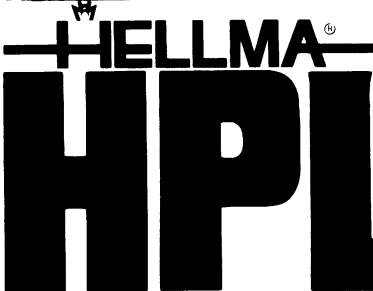
Desirable training for the position includes the following:

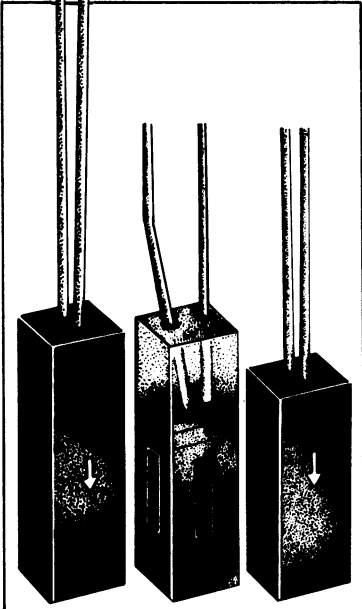
- Ph.D. degree or the equivalent in toxicology, pharmacology, physiology or other allied subjects dealing with toxicological research
- Post-doctoral research experience in toxicology or carcinogenesis
- Experience in development and management of research projects by contract mechanisms
- Demonstrable written and oral communication skills
- Relevant scientific publications

Applicants should send curriculum vitae to Ms. Lou Rozier, Personnel Office, National Institute of Environmental Health Sciences, P.O. Box 12233, Research Triangle Park, North Carolina 27709.

United States Citizenship is required.

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Circle No. 26 on Readers' Service Card



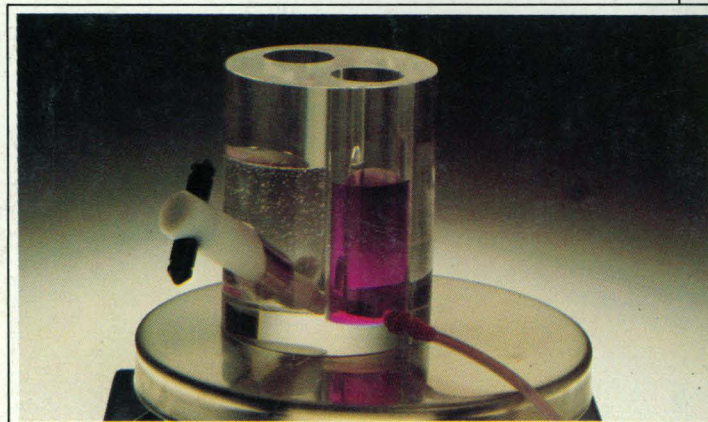
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In order to run gradient gels successfully in a horizontal system, instead of vertically, a reliable method is required for casting ultrathin gels. The LKB Horizontal Electrophoresis System is unique in having this capability, while a new large-scale gradient gel kit makes full use of the larger cooling plate of the Multiphor II.

*Using the LKB MicroGrad Gradient Maker to produce linear or exponential gradient gels ►*

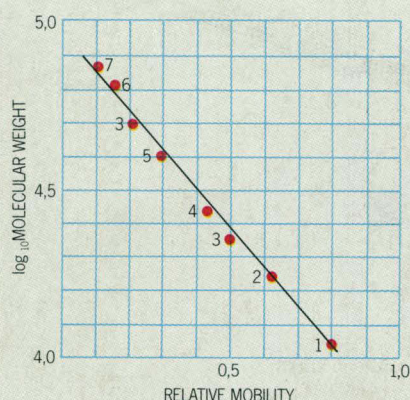
*SDS electrophoresis provides accurate molecular weight determination ▼*



The use of SDS, disc and gradient gel electrophoresis on this large cooling plate enables molecular weights to be determined with improved resolution. The limited sample volume inherent to ultrathin gels has now been overcome by the use of highly sensitive silver stains or alternative detection methods.

Thicker gels, produced with the help of the standard LKB SDS/PAGE kit, are ideal whenever electroblotting is to be used, while disc gel electrophoresis allows the use of sample volumes as large as those found in vertical systems.

This is one in a series of advertisements describing the unrivalled versatility of the LKB Horizontal Electrophoresis System. For further information about these conventional techniques, and the many other applications of the system, send today for our brochure.

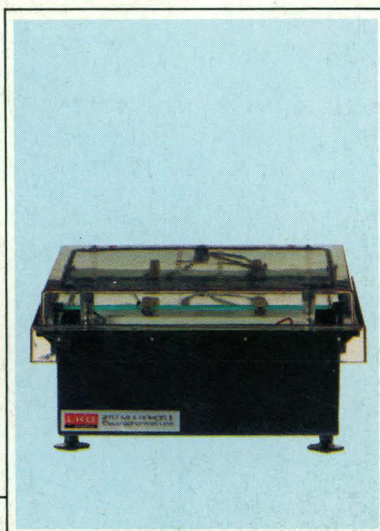


- | No. | Protein                            |
|-----|------------------------------------|
| 1   | Cytochrome c (muscle)              |
| 2   | Myoglobin (equine skeletal muscle) |
| 3   | γ-Globulin (L-chain)               |
| 4   | Carbonic anhydrase (bovine)        |
| 5   | Ovalbumin                          |
| 3   | γ-Globulin (H-chain)               |
| 6   | Albumin (human)                    |
| 7   | Transferrin (human)                |

### THE LKB SYSTEM

Only LKB can offer the research scientist a complete, integrated system in which each component works with and complements all the others. Based on the new and improved Multiphor II, the system also includes a 5KV power supply, thermostatic circulator, laser densitometer and data evaluation software.

In addition to the instrumentation, LKB provides a range of 18 major kits plus a complete programme of high quality chemicals, supplies and accessories, backed by the full worldwide support of the market leader in electrophoresis and electrofocusing. LKB—the electrophoresis experts.



**LKB**  
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