

## Some Other Books of Interest

**Geology of the Henry Mountains, Utah, as Recorded in the Notebooks of G. K. Gilbert, 1875-76.** CHARLES B. HUNT. Geological Society of America, Boulder, CO, 1988. vi, 229 pp., illus. \$52.50. Geological Society of America Memoir 167.

Grove Karl Gilbert (1844-1918) was, in the opinion of Charles Hunt, "the tallest of the several giants" who contributed to the development of American geology. (For reviews of two accounts of Gilbert's life and work see *Science* 212, 787 [1981].) In 1875, at the instigation of John Wesley Powell, Gilbert set out, following prehistoric Indian trails, to investigate the structural geology of the Henry Mountains of southern Utah, with special interest in the igneous activity that produced them. The results of that work were published in a classic monograph dated 1877, but from the field notes, according to Hunt, a reader knowledgeable about the status of geology at the time "experiences the thrill of reading the first-hand account of the discovery of several concepts that today are accepted routinely as fundamental in the science." For this volume Hunt, who resurveyed the mountains in the 1930s in the U.S. Geological Survey's "last big pack-train project," has prepared transcripts of the notes. The texts of the ten notebooks, dated 29 May to 12 September 1875 and 17 July to 22 November 1876, are preceded by a general introduction by Hunt and individual summaries and are followed by appendixes listing key locations in Gilbert's expeditions and an index. The texts include more recent photographs of structures observed, as well as Gilbert's own sketches, for which Hunt has provided captions.—K.L.

**Great American Bridges and Dams.** DONALD C. JACKSON. Preservation Press, Washington, DC, 1988. 357 pp., illus. Paper, \$16.95. A National Trust Guide.

This volume is a selective guide to two categories of structure that "are among the most visible and most important manifestations of civil engineering in our environment" and "are essential components of the public works foundation that supports America's transportation, electric power, agricultural and water supply systems." The guide opens with three general chapters, on the history, technology, and uses of bridges and of dams and on their conservation. The guide proper is arranged regionally, beginning with New England and moving southward and westward, with a subsection for each state or territory. The numbers of

structures represented vary according to region and state, with the most space being devoted to the West (including Alaska, Guam, and Hawaii), the Midwest, and the Mid-Atlantic area. Wide outside margins on the 13-by-26-centimeter pages permit the use of sideheads to introduce each entry and allow for variation in the size and number of illustrations. Individual entries range in length from a paragraph to a page or more, and most include one or more photographs. In all, some 300 structures are included. An epilogue, also illustrated, is devoted to "the ones that got away"—ten bridges and five dams that have collapsed or been destroyed. A bibliography for further reading, lists of information and photographic sources, and an index complete the guide.—K.L.

## Books Received

**Academic Scientists and the Pharmaceutical Industry.** Cooperative Research in Twentieth-Century America. John P. Swann. Johns Hopkins University Press, Baltimore, 1988. xiv, 249 pp., illus. \$32.50.

**The Academic's Handbook.** A. Leigh Denef, Craufurd D. Goodwin, and Ellen Stern McCrate, Eds. Duke University Press, Durham, NC, 1988. xii, 287 pp. \$20; paper, \$9.95.

**Adenosine Receptors.** Dermot M. F. Cooper and Constantine Londos, Eds. Liss, New York, 1988. xii, 134 pp., illus. \$42. Receptor Biochemistry and Methodology, vol. 11.

**Aggression.** The Myth of the Beast Within. John Klama. Wiley, New York, 1988. xiv, 169 pp., illus. \$17.95.

**America Invulnerable.** The Quest for Absolute Security from 1812 to Star Wars. James Chace and Caleb Carr. Summit Books (Simon and Schuster), New York, 1988. 367 pp. \$19.95.

**Analogical Problem Solving.** Mark T. Keane. Horwood, Chichester, U.K., and Halsted (Wiley), New York, 1988. 151 pp., \$41.95. Ellis Horwood Series in Cognitive Science.

**Antibiotic Inhibition of Bacterial Cell Surface Assembly and Function.** Paul Actor *et al.*, Eds. American Society for Microbiology, Washington, DC, 1988. xxii, 657 pp., illus. \$75; to members, \$55. From a conference, Philadelphia, PA, May 1987.

**The Behavioral and Social Sciences.** Achievements and Opportunities. Dean R. Gerstein *et al.*, Eds. National Academy Press, Washington, DC, 1988. xviii, 282 pp., illus. \$29.50.

**Chromatography.** Concepts and Contrasts. James M. Miller. Wiley-Interscience, New York, 1988. xiv, 297 pp., illus. \$39.95.

**A Climate Modelling Primer.** A. Henderson-Sellers and K. McGuffie. Wiley, New York, 1988. xvi, 217 pp., illus. \$53.95. Research and Developments in Climate and Climatology.

**Coagulation Kinetics and Structure Formation.** Hans Sonntag and Klaus Strenge. Plenum, New York, 1987. 194 pp., illus. \$55.

**Cognition and Sentence Production.** A Cross-Linguistic Study. S. N. Sridhar. Springer-Verlag, New York, 1988. x, 118 pp. \$42.50. Springer Series in Language and Communication, vol. 22.

**Cognitive Neurochemistry.** S. M. Stahl, S. D. Iversen, and E. C. Goodman, Eds. Oxford University Press, New York, 1987. xiv, 395 pp., illus., + plates. \$49.95. From a symposium, Harlow, U.K., Oct. 1986.

**Compactness Methods for Nonlinear Evolutions.** I. I. Vrabie. Longman Scientific, Harlow, U.K., and Wiley, New York, 1988. xviii, 325 pp. \$77.95. Pitman Monographs and Surveys in Pure and Applied Mathematics, vol. 32.

**Computer Simulation in Physical Geography.** M. J. Kirkby *et al.* Wiley, New York, 1987. viii, 227 pp., illus. \$49.95.

**Correlative Microscopy in Biology.** Instrumentation and Methods. M. A. Hayat, Ed. Academic Press, San Diego, CA, 1987. xiv, 437 pp., illus. \$59.

**Domestic Violence and Control.** Jan E. Stets. Springer-Verlag, New York, 1988. xii, 166 pp. Paper, \$36.50.

**The Earth.** Problems and Perspectives. Barbara C. Atkin and Jeffrey A. Johnson. Blackwell Scientific, Palo Alto, CA, 1988. xx, 428 pp., illus., + plates. Paper, \$27.95.

**Eco-Computer.** The Impact of Global Intelligence. Geoff Simons. Wiley, New York, 1987. xvi, 206 pp. \$36.95.

**Egyptian Hieroglyphs.** W. V. Davies. University of California Press, Berkeley, and British Museum, London, 1988. 64 pp., illus. Paper, \$7.95. Reading the Past, vol. 6.

**Electron and Ion Optics.** Miklos Szilagi. Plenum, New York, 1988. xvi, 539 pp., illus. \$75. Microdevices.

**Empirical Studies of Programmers.** Second Workshop. (Washington, DC, Dec. 1987). Gary M. Olson, Sylvia Sheppard, and Elliot Soloway, Eds. Ablex, Norwood, NJ, 1987. viii, 263 pp., illus. \$37.50; paper, \$15. Human/Computer Interaction.

**Endocrine Genes.** Analytical Methods, Experimental Approaches, and Selected Systems. Yun-Fai Lau, Ed. Oxford University Press, New York, 1988. xvi, 224 pp., illus. \$39.95. Based on a series of seminars, San Francisco, 1984.

**Energy and the Evolution of Life.** Ronald F. Fox. Freeman, New York, 1988. xiv, 182 pp., illus. \$26.95.

**The Energy Question.** Gerald Foley. 3rd ed. Penguin, New York, 1988. xvi, 304 pp. Paper, \$6.95.

**Energy Transduction and Gene Transfer in Chemotrophic Bacteria.** Macromolecules on the Move. L. Grinius. Harwood, New York, 1987. x, 277 pp., illus. \$90. Soviet Scientific Reviews Supplement Series, Physicochemical Biology, vol. 6. Translated from the Russian by N. Bobrov.

**Grass.** Systematics and Evolution. Thomas R. Soderstrom *et al.*, Eds. Smithsonian Institution Press, Washington, DC, 1988. xiv, 473 pp., illus. \$45. From a symposium, Washington, DC, July 1986.

**Handbook of Behavioral Neurobiology.** Vol. 9, Developmental Psychobiology and Behavioral Ecology. Elliott M. Blass, Ed. Plenum, New York, 1988. xxii, 453 pp., illus. \$75.

**Hormones, Cell Biology, and Cancer.** Perspectives and Potentials. W. David Hankins and David Puett, Eds. Liss, New York, 1988. xvi, 299 pp., illus. \$60. Progress in Clinical and Biological Research, vol. 262. From a symposium, Washington, DC, Dec. 1986.

**How Brain-Like is the Spinal Cord?** Interacting Cell Assemblies in the Nervous System. Uwe Windhorst. Springer-Verlag, New York, 1988. xviii, 334 pp., illus. \$120. Studies of Brain Function, vol. 15.

**Human Aging Research.** Concepts and Techniques. Barbara Kent and Robert Butler, Eds. Raven, New York, 1988. xii, 372 pp., illus. \$86.50. Aging Series, vol. 34.

**Human Gene Therapy.** Eve K. Nichols. Harvard University Press, Cambridge, MA, 1988. x, 251 pp., illus. \$22.95; paper, \$9.95.

**Human Tumor Markers.** Biology and Clinical Applications. F. Cimino *et al.*, Eds. De Gruyter, Hawthorne, NY, 1987. xiv, 922 pp., illus. \$246. From a conference, Naples, Italy, April 1986.

**I Have a Photographic Memory.** Paul R. Halmos. American Mathematical Society, Providence, RI, 1987. x, 326 pp., illus. \$58. An annotated collection of snapshots of mathematicians, taken by the author.

**In Darkness Born.** The Story of Star Formation. Martin Cohen. Cambridge University Press, New York, 1988. x, 196 pp., illus. \$19.95.

**In Praise of Imperfection.** My Life and Work. Rita Levi-Montalcini. Basic Books, New York, 1988. xiv, 220 pp. + plates. \$18.95. Alfred P. Sloan Foundation Series. Translated from the Italian by Luigi Attardi.

**In the Shadow of Man.** Jane Goodall. 2nd ed. Houghton Mifflin, Boston, 1988. xxii, 297 pp., illus., + plates. \$21.95; paper, \$11.95.

**Individuals, Relationships and Culture.** Links between Ethology and the Social Sciences. Robert A. Hinde. Cambridge University Press, New York, 1987. xii, 207 pp., illus. \$32.50. Themes in the Social Sciences.

**Innovation and the Rise of the Tunneling Industry.** Graham West. Cambridge University Press, New York, 1988. xvi, 355 pp., illus. \$80.00.

**Inorganic Reactions and Methods.** J. J. Zuckerman, Ed. VCH, New York, 1987. Vol. 2, The Formation of the Bond to Hydrogen, part 2. xxvi, 476 pp., illus. \$120. Vol. 11, Formation of Bonds to C, Si, Ge, Sn, Pb, part 3. xxiv, 594 pp., illus. \$120.

**Ion Channels.** Vol. 1. Toshio Narahashi, Ed. Plenum, New York, 1988. xiv, 334 pp., illus. \$59.50.

(Continued on page 858)

## Products & Materials

### Journal Contents on Disk

Reference Update is a publication on floppy disk. Each week subscribers receive a floppy disk containing the tables of contents from the current issues of more than 300 journals in the fields of biology and medicine. Included is a retrieval software package that allows the user to define search terms and look for them in titles, keyword lists, authors, or journals. References retrieved are displayed in seconds. Synonyms may be defined. Reprint request cards can be printed automatically. Reference Update is available for the Macintosh and the IBM PC and compatible computers. \$89 (5.25-inch disks) or \$107 (3.5-inch disks) for 26 issues. Research Information Systems. Circle 570.

### Freeze Dryer

The Tray Dryer is a microprocessor-controlled freeze dryer. An experienced operator can program the freeze dryer by entering the eutectic temperature of the sample as well as a sequence of four shelf temperatures and vacuum levels. In automatic mode, an inexperienced operator need merely place the liquid on the shelves and press the start button. The dryer freezes the sample, measures its eutectic temperature, turns on the condenser and then the vacuum, and adjusts the temperature and vacuum until the sample is dry. The Tray Dryer has an RS-232 interface so that it can be connected to a printer or a computer. The titanium condenser is corrosion-resistant. The microprocessor performs diagnostic functions and alerts the operator if improper conditions exist. FTS Systems. Circle 464.

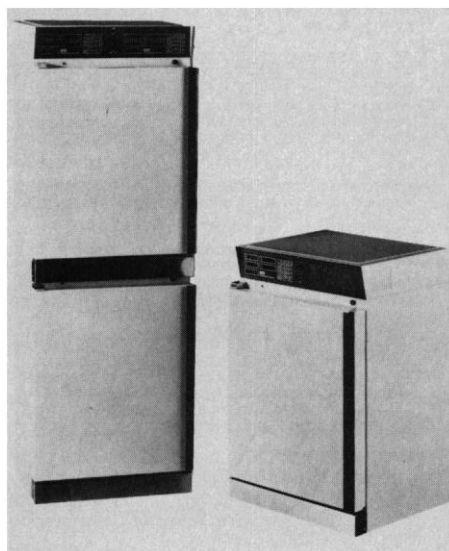
### Remote-Control Stirring Systems

The Multistir, the Stirpad, and the Controller are components of a remote-control stirring system. The Stirpad can be immersed in an oil or water bath as hot as 60°C. The Multistir is a six-position stirrer bed. The Controller sets and maintains indi-

vidual stir speeds and times for each position of the Multistir or for as many as six Stirpads at once. Each of the six positions of the Multistir and each Stirpad can accommodate beakers as large as 250 ml. Stir speeds between 50 and 1000 rpm are possible. Lux Scientific Instrument. Circle 466.

### Carbon Dioxide Incubators

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when electrical power fails. Each incubator has an RS-232 port so that carbon dioxide, oxygen, and humidity can be monitored elsewhere on a personal computer. Also, by hooking a modem to the RS-232 port, maintenance can be performed over the telephone. The incubators have stainless steel shelves, and all interior components can be removed for cleaning and decontamination. The 7000 series incubators are available as single-chambered and double-chambered models. Napco Scientific. Circle 575.

### Antibodies

Monoclonal antibody to phosphotyrosine, either free or bound to Sepharose. Amersham International (United Kingdom). Circle 434.

Rabbit antibody to mouse immunoglobulins. Serotec (United Kingdom). Circle 435.

Rabbit antibody to rat immunoglobulins. Serotec (United Kingdom). Circle 436.

Affinity-isolated goat antibody to human immunoglobulin G Fc, with no cross reactivity to other human immunoglobulins. CALTAG. Circle 437.

Monoclonal antibody to recombinant human  $\beta$  interferon. Kamiya Biomedical. Circle 438.

Monoclonal antibody to recombinant human  $\gamma$  interferon. Kamiya Biomedical. Circle 439.

Monoclonal antibodies to keratins and other epithelial antigens. ICN Biomedicals, ImmunoBiologicals Division. Circle 440.

### Protein-Free Cell Culture Medium

PRO-FREE LC-115 is a protein-free culture medium that consists of defined low molecular weight components. It was developed for long-term cultivation of transformed and established cell lines. The medium is available powdered in packages of 10 or 200 liters and comes with two vials of trace element mixtures as supplements. Shelf life of the powder and liquid supplements is 1 year at 2° to 8°C. Marcor Development. Circle 470.

### Literature

*Products for Molecular Biology* is a catalog of membranes, syringe filters, capsule filters, and other products for protein blotting and nucleic acid hybridization. Micron Separations. Circle 456.

*NOVA-3 Spectrofluorometer* is a brochure about a scanning spectrofluorometer with a built-in computer. SPEX Industries. Circle 458.

*The AtomScan 25 Spectrometer* is an 8-page brochure that features a sequential inductively coupled plasma emission spectrometer. Thermo Jarrell Ash. Circle 459.

*Laboratory Acrylics* is a catalog of plastic laboratory accessories, such as slide trays, slide holders, column and pipette racks, tissue culture trays, and storage boxes. Isolab. Circle 460.

The *Catalog Addendum/Price List* has 16 pages of biochemicals for biotechnology and cell culture. Miles, Diagnostics Division. Circle 461.

*Fermentation Software* is a brochure about a software program that automates fermentation and data collection and analysis. Astra Scientific. Circle 462.

The brochure *ProPac PA1 Series of Columns for Proteins and Nucleic Acids* describes a family of columns for ion-exchange chromatography. Dionex. Circle 481.

*1877 Series TRIPLEMATE Triple Spectrograph* is about a spectrograph with multi-channel detectors that is sensitive to light from the ultraviolet to the infrared. SPEX Industries. Circle 545.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

(Continued from page 856)

**Leslie A. White.** *Ethnological Essays.* Beth Dillingham and Robert L. Carneiro, Eds. University of New Mexico Press, Albuquerque, 1987. x, 389 pp. \$29.95; paper, \$14.95.

**Mechanoreceptors.** Their Functional Organization. G. N. Akoev, N. P. Alekseev, and B. V. Krylov. Springer-Verlag, New York, 1988. x, 197 pp., illus. \$95. Translated from the Russian.

**Medical Neuropsychology.** The Impact of Disease on Behavior. Ralph E. Tarter, David H. Van Thiel, and Kathleen L. Edwards, Eds. Plenum, New York, 1988. xvi, 350 pp., illus. \$42.50. Critical Issues in Neuropsychology.

**Psychology.** Gardner Lindzey, Richard F. Thompson, and Bonnie Spring, 3rd ed. Worth, New York, 1988. xviii, 734 pp., illus. \$34.95.

**Psychology in Twentieth-Century Thought and Society.** Mitchell G. Ash and William R. Woodward, Eds. Cambridge University Press, New York, 1988. x, 320 pp. \$42.50.

**Quantifying Archaeology.** Stephan Shennan. Edinburgh University Press and Academic Press, San Diego, CA, 1988. x, 364 pp., illus. \$34.95.

**Quantities, Units and Symbols in Physical Chemistry.** Ian Mills *et al.*, Eds. Blackwell Scientific, Palo Alto, CA, 1988. x, 134 pp. \$32.50. Revision of *Manual of Symbols and Terminology for Physicochemical Quantities and Units*.

**Radon and Its Decay Products in Indoor Air.** William W. Nazaroff and Anthony V. Nero, Jr., Eds. Wiley-Interscience, New York, 1988. xxvi, 518 pp., illus. \$75. Environmental Science and Technology.

**Synaptic Transmitters and Receptors.** Stanislav Tuček, Ed. Wiley-Interscience, New York, 1987. xii, 438 pp., illus. \$79.95. Based on a meeting, Prague, Czechoslovakia, Sept. 1986.

**Trace Elements in Environmental History.** Gisela Grupe and Bernd Herrmann, Eds. Springer-Verlag, New York, 1988. x, 174 pp., illus. \$41. Proceedings in Life Sciences. From a symposium, Göttingen, F.R.G., June 1987.

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**Immunologist Ph.D.** Specialist in cellular immunology, hybridomas, monoclonal antibodies, and lymphokines. Experience in biotechnology research and development in cancer immunotherapeutics. Seeking position in industrial or academic laboratory investigating immunological approaches to human disease. Excellent background and references. Box 118, SCIENCE.

**Physiologist/Neuroscientist, Ph.D.** with proven publication record. Research relating to cerebral blood flow and energy metabolism, using current methods and techniques. Seeking a research or research/teaching position in the southeast. Box 131, SCIENCE.

**Plant Ecologist. Ph.D. 1986 Woodland/Wetland Ecology.** Lecturing experience in plant ecology and environmental problems. Current research on tropical high altitude forests. Seeking faculty/pure research position, from July 1989. U.S. Resident Alien. Box 133, SCIENCE.

**Translation from Japanese** publications, patents, and technical reports. P.O.B. 211063, Columbus, OH 43221.

## POSITIONS OPEN

**ANIMAL DEVELOPMENTAL BIOLOGIST/ELECTRON MICROSCOPIST:** Assistant professor, tenure-track position, for fall 1989, contingent upon budgetary approval. The successful candidate will teach one course in his/her area of expertise, serve as director of the departmental electron microscopy facility (one technologist, two scopes), and teach TEM and SEM to seniors and graduate students. Development of an independent research program in some facet of animal developmental biology is expected. Must have significant postdoctoral experience, thorough knowledge of electron microscopy, a commitment to excellence in teaching and research, and enthusiasm for interactions with a diverse biology faculty. Please send curriculum vitae, statement of research goals, and three letters of reference before 7 October 1988 to: **Dr. Kathryn Vogel, Biology Department, The University of New Mexico, Albuquerque, NM 87131.** Affirmative Action/Equal Opportunity Employer.

### ASSISTANT PROFESSOR, BIOCHEMISTRY/MOLECULAR BIOLOGY UNIVERSITY OF ILLINOIS

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## POSITIONS OPEN

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### ASSISTANT PROFESSOR COGNITIVE NEUROBIOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

Applications are invited for a tenure-track position at the level of assistant professor in cognitive neurobiology. Preference will be given to applicants who have demonstrated expertise in the organization of neural systems underlying cognition, cognitive changes induced by disease and aging, and/or neural modeling or cognitive processes.

The Department of Psychobiology emphasizes interdisciplinary approaches to the study of the nervous system and behavior. The current major research themes of the Department are development, reorganization following injury and disease, and learning and memory.

Please submit by 1 October 1988, curriculum vitae, description of research interests, and three confidential letters of recommendation to: **Dr. James L. McGaugh, Chair, Department of Psychobiology, University of California, Irvine, CA 92717.**

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### ASSISTANT OR ASSOCIATE PROFESSOR DEPARTMENT OF ANATOMY UNIVERSITY OF TORONTO

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Applicants should include curriculum vitae, a statement of research interests and goals, and the names, addresses and telephone numbers of three referees. They should be sent before 31 October 1988 to: **Dr. Ian Taylor, Chairman of Search Committee, Department of Anatomy, Room 6255, Medical Sciences Building, University of Toronto, Toronto, Ontario, Canada, M5S 1A8.**

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## POSITIONS OPEN

### ASSISTANT PROFESSOR PHYTOPLANKTON BIOLOGY

The Department of Marine Sciences, The University of Connecticut, announces a 9-month, tenure-track assistant professor position in phytoplankton biology, anticipated for 1 September 1989.

Applicants should have a Ph.D. in oceanography/marine sciences with expertise in coastal, process-oriented research. The successful applicant is expected to establish a strong research program, advise and support graduate students (M.S. and Ph.D.) and teach at the undergraduate and graduate level. Salary commensurate with qualifications and previous experience. Applicants should send résumé, a statement of research and teaching interests and names of three references to: **R. B. Whitlatch, Head, Department of Marine Sciences, The University of Connecticut, Groton, CT 06340.** Closing date for applications: 1 November 1988. *The University of Connecticut is an Equal Opportunity Employer. (Search #8A430).*

The Department of Neurosciences, University of California, San Diego, is seeking qualified applicants for a position as **ASSISTANT RESEARCH NEUROSCIENTIST**. The successful candidate will have extensive experience with single-cell physiology and retinal histology, skilled in the application of immunohistochemistry and *in situ* hybridization with experience working with a variety of mammalian, avian and amphibian retinas; experience in intracellular single-cell recording, as well as in intracellular-filling techniques; requires skill in stereotaxis, particularly of avian brain, computer application of morphometric techniques for data collection on avian retina. M.D. or Ph.D. required with at least 5 years of postgraduate experience. Applications received on or before 1 September 1988 will be considered. Salary will be commensurate with candidate's experience and University policy. Send curriculum vitae, names and addresses of five references to: **Dr. Harvey Karten, Department of Neurosciences, M-008, University of California, San Diego, La Jolla, CA 92093.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

### ASSOCIATE RESEARCH SCIENTIST

The Department of Pharmacology is seeking an associate research scientist with an M.D. or Ph.D. degree to participate in studies of cardiac electrophysiology and pharmacology and of the mechanisms of action of antiarrhythmic drugs. The successful candidate will be required to have a background in biochemistry with emphasis on receptor-effector coupling, receptor binding assays including those for adenylate cyclase and ADP ribosylation and experience in preparation of single cardiac myocytes and in use of patch clamp methods and internal dialysis to study membrane ionic currents of single isolated mammalian cardiac cells.

Interested persons should send curriculum vitae and the names of three references to:

**Dr. Brian F. Hoffman  
Department of Pharmacology  
College of Physicians and Surgeons  
Columbia University  
630 West 168th Street  
New York, NY 10032**

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

### BIOGENETIC RESEARCH SCIENTISTS

Biogenetic Services, Inc. (BGS) is a newly founded company dedicated to providing state-of-the-art molecular genetic screening services to private companies, individuals, and public institutions engaged in research, development, and production of plants and/or animals.

Positions are available immediately for individuals with B.S., M.S. or Ph.D. degrees, who have both theoretical knowledge and practical experience in the application of isozyme and RFLP technology.

Salaries and benefits are competitive.

Interested candidates should send a letter and résumé to: **Dr. Alex L. Kahler, President, Biogenetic Services, Inc., P.O. Box 710, Brookings, SD 57006.** Telephone: 605-697-8110.

Applications will be accepted until positions are filled.

**BIOGENETIC SERVICES, INC.**

*BGS is an Equal Opportunity Employer*

## POSITIONS OPEN

### ASSISTANT PROFESSOR MOLECULAR NEUROBIOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

Applications are invited for a tenure-track position at the level of assistant professor in molecular neurobiology. Preference will be given to applicants who have demonstrated expertise in applying molecular biology to research problems within the themes emphasized by our Department.

The Department of Psychobiology emphasizes interdisciplinary approaches to the study of the nervous system and behavior. The current major research themes of the Department are development, reorganization following injury and disease, and learning and memory.

Please submit by 1 October 1988, curriculum vitae, description of research interests, and three confidential letters of recommendation to: **Dr. James L. McGaugh, Chair, Department of Psychobiology, University of California, Irvine, CA 92717.**

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

**BIOCHEMISTRY/PHARMACOLOGY** Applications are invited for **POSTDOCTORAL POSITIONS** to study cerebral metabolism and blood-brain transport and conduct research on brain membrane lipid metabolism in response to neurotoxins, particularly cholinesterase inhibitors. A Ph.D. in biochemistry/pharmacology or a related field is required. Send curriculum vitae, a description of research interests, and the names of three references by 9 September 1988, to: **Dr. L. R. Drewes, Department of Biochemistry, University of Minnesota School of Medicine, Duluth, MN 55812.** *The University of Minnesota is an Equal Opportunity Educator and Employer.*

### BIOCHEMISTS

Tenure-track faculty positions are available for candidates interested in developing strong and independent research programs with long-term growth potential. All areas will be considered. The Department of Biochemistry has excellent facilities and is undergoing substantial expansion. Teaching includes medical, dental, and graduate students within a sizable medical complex. Salary is commensurate with experience. Curriculum vitae, brief statement of present and future research interests, and three letters of recommendation should be sent to: **Dr. R. D. Wells, Department of Biochemistry, The University of Alabama at Birmingham, Birmingham, AL 35294.**

*An Equal Opportunity/Affirmative Action Employer.*

### BIOTECHNOLOGY SCIENTIST

Ciba Corning Diagnostics, a leader in the development, manufacture and marketing of clinical diagnostics products, has an immediate opening for an individual to help develop a new electrophoresis product line. Position requires a Bachelor's degree and 2 to 5 years of hands-on experience with nucleic acid separation and analysis in a molecular biology setting. Located in the beautiful San Francisco Bay area, we offer an excellent salary and benefits package. Send résumé to: **Personnel, Ciba Corning Diagnostics Corporation, 490 San Antonio Road, Palo Alto, CA 94306.** *Equal Opportunity Employer.*

**CELLULAR BIOPHYSICS AND MOLECULAR PHYSIOLOGY:** Several **TENURE-TRACK POSITIONS** (Assistant-Associate-Full Professor) will be available in the Department of Physiology at the University of Virginia School of Medicine that is to be expanded in these areas with the appointment of **Dr. A. P. Somlyo** as the new Chairman of the Department. Applications are invited from individuals and demonstrated accomplishments in applying the methods of molecular genetics, light optical, electron optical, spectroscopic and modern electrophysiological approaches to cell physiology. Potential areas of interest include subcellular transport and transporting membrane proteins, intracellular signaling and cell motility. Some preference may be given to individuals with an interest in the cell physiology of the cardiovascular system and contractility. Send curriculum vitae and a list of four references to: **Physiology Department Search Committee, School of Medicine, Box 449, Charlottesville, VA 22908.** *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### BIOHAZARDS SAFETY OFFICER

The Johns Hopkins University is seeking applicants for a Biohazards Safety Officer for its Office of Safety and Environmental Health. The successful candidate will join a multidisciplinary safety department and will be responsible for biosafety program planning, biosafety training, risk assessment, proposal review, registration of laboratories working with biohazardous agents and recombinant DNA, and will provide advice, guidance to research and support employees, supervision and management of biocontainment equipment, facilities and biological safety work practices. Candidates should have a Master's Degree, preferably a Ph.D. degree in a biological science with laboratory experience, and a technical background in microbiology, virology or public health. Training or experience in biological safety is desirable.

Applicants should submit a résumé, including the names of at least three references to: **Paulette Harlee, Employment Manager, 1830 East Monument Street, Room 2-100, Baltimore, MD 21205.**

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

### CELL BIOLOGIST

Alkermes, Inc. is a private start-up bio-technology company dedicated to the research and development of carrier systems to deliver drugs across the blood-brain barrier. We are presently seeking Ph.D. and M.S. level cell biologists with extensive backgrounds in tissue culture. Experience growing endothelial cells is especially desirable. Alkermes offers a competitive salary and benefits package.

Please send curriculum vitae and names of three references to: **Dr. Phillip Friden, Alkermes, Inc., 26 Landsdowne Street, Cambridge, MA 02139.**

*Alkermes is an Equal Opportunity Employer.*

### CELL BIOLOGY/ANATOMY BIOMEDICAL LASER RESEARCH

Ph.D. in anatomy or cell biology to head morphology unit of state-of-the-art Laser Research Laboratory performing basic and applied studies of laser interaction with ocular tissues. Harvard Medical School appointment possible. Reply to: **Carmen A. Puliafito, M.D., Director, Laser Research Laboratory, Massachusetts Eye and Ear Infirmary, 243 Charles Street, Boston, MA 02114. Telephone: 617-573-3438. MEEI is an Equal Opportunity Employer.**

### CHAIRPERSON DEPARTMENT OF ANATOMY

The University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School (formerly Rutgers Medical School) invites applications and nominations for the position of Professor and Chairperson of Anatomy. The applicant or nominee should be an outstanding scientist with an international reputation in an area of cellular, molecular, developmental biology or neurobiology. Current faculty research interests in the department include neurobiology, neuroendocrinology, muscle and cell motility, and reproductive endocrinology. The appointed chairperson will have the opportunity to appoint additional faculty.

Robert Wood Johnson Medical School is in a period of active growth with recently appointed chairpersons of Biochemistry and Molecular Genetics and Microbiology. Adjacent buildings on Busch Campus of Rutgers University house the Rutgers University Departments of Biological Science and Biochemistry, the Waksman Institute of Microbiology, as well as the newly established Center for Advanced Biotechnology and Medicine, which is a joint venture of the Medical School and Rutgers University.

Applicants should submit curriculum vitae including list of publications, description of research accomplishments, and past and current grant record to: **Dr. N. Ronald Morris, Department of Pharmacology, UMDNJ—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635.**

*UMDNJ—Robert Wood Johnson Medical School is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### CELLULAR IMMUNOLOGIST

Applications are invited for an assistant professor in cellular immunology for appointment in early 1989. This is a tenure-track, faculty position with responsibilities for research and teaching (12-month appointment) in the area of infectious diseases of livestock. Position is supported by full-time research technician and seed money. Salary range will be \$35,000 to \$39,000 per year based on the experience and qualifications.

Required qualifications: Ph.D. in an appropriate area of cellular immunology, postdoctoral experience in cellular immunology, preferably in livestock diseases and a record indicating the ability to perform independent research and potential to establish a competitive, extramurally-funded research program. A willingness to undertake research on the cellular immunology of disease agents of livestock, to collaborate with other faculty and to participate in an active graduate program is essential. Interested applicants should send letter of application, curriculum vitae and the names and addresses of three references to: **D. E. Burgess, Veterinary Research Laboratory, Montana State University, Bozeman, MT 59717.** Screening of applicants will begin 31 August 1988 and continue until a suitable applicant is found. *An Equal Employment Opportunity/Affirmative Action Employer.*

**CHAIR, DEPARTMENT OF PHYSICAL THERAPY/EXERCISE SCIENCE.** Researcher/scholar with demonstrated record of publications and extramural funding in area related to physical therapy or exercise science. Administrative skills essential. Opportunity to direct development of a growing department which offers master's and doctoral programs in exercise science. Eligible for tenure at associate professor/professor. Application deadline, 1 December 1988. Contact: **Leigh F. Kieffer, Ph.D., Department of Physical Therapy/Exercise Science, 401 Kimball Tower, SUNY at Buffalo, Buffalo, NY 14214.** *Affirmative Action/Equal Opportunity Employer.*

**CHAIRPERSON, DEPARTMENT OF EPIDEMIOLOGY,** School of Medicine, University of California, San Francisco (UCSF). Qualified candidates are invited to apply. Applicants should submit curriculum vitae, bibliography, and the names of four references to: **Professor Henry R. Bourne, Chairman, Search Committee for Department of Epidemiology Chairperson, c/o Ms. Valli McDougale, Dean's Office, School of Medicine, S-224, University of California, San Francisco, CA 94143-0410.** *UCSF is an Affirmative Action/Equal Opportunity Employer. Women and minorities are urged to apply.* Applications should be received by 30 November 1988.

**DIRECTOR, MOLECULAR DIAGNOSIS LABORATORY:** The Division of Medical Genetics of the Mount Sinai Medical Center is seeking a Director of a newly established Molecular Diagnosis Laboratory. Responsibilities will include (i) implementation of molecular diagnosis, including prenatal diagnosis and risk assessments, for various inherited diseases and (ii) independent research in molecular genetics. Applicants must have a Ph.D. and experience in molecular biology/recombinant DNA technology. Rank and salary negotiable. Send curriculum vitae and two letters of reference to: **R. J. Desnick, Ph.D., M.D., Mount Sinai School of Medicine, Fifth Avenue at 100th Street, New York, NY 10029.**

### DIRECTOR OF THE PROVASOLI-GUILLARD CENTER FOR CULTURE OF MARINE PHYTOPLANKTON

With the scheduled retirement of Dr. R. R. L. Guillard in 1989, the Bigelow Laboratory seeks an experienced research scientist to become the second director of the Center for Culture of Marine Phytoplankton (CCMP). Applicants should be capable of administering a laboratory and associated staff with an annual core budget of about \$200,000, and of developing an independent research program and income consistent with the objectives of the CCMP. At least 6 months salary a year, negotiable according to age and experience, is provided for the director's position from the National Science Foundation grant and laboratory funds.

Applications, with the names of three references, should be sent by 1 October 1988 to: **The Director, Bigelow Laboratory for Ocean Sciences, McKown Point, West Boothbay Harbor, ME 04575.**

*The Bigelow Laboratory is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**CHEMICAL ENGINEER** (Postdoctoral Associate, Chemistry): Perform experimental research in new synthetic methodology relating to polyenolate chemistry of alpha dicarbonyl systems; develop new methodology based on chalcogen-stabilized carbonium ions. Require: Ph.D. synthetic organic chemistry, 3 years of experience using IR, HNMR, MS, CNMR, GC, LC and interpreting derived data; original research in chalcogen-stabilized carbonium ions and application to synthesis of natural products demonstrated by thesis or reputable journal publication. Salary: \$17,800 per year, 40 hours per week. Résumé, two references to: **Albany Job Service, Attention: Mr. R. H. Dayton, 115 Ontario Street, Albany, NY 12206.** Refer to job order #0404465, DOT CODE 008.061-018.

**DIRECTOR, CENTER OF EXCELLENCE—FIELD BIOLOGY,** Ph.D., experimental ecology, 12 months. Develop an externally funded research program. Fifty percent administration, 50% research. Successful background in external funding required. Salary commensurate with experience. Send transcripts, curriculum vitae, and three letters of recommendation to: **Dr. B. P. Stone, Chairman, Biology Department, Austin Peay State University, Clarksville, TN 37044.** Closing date: 15 December 1988 or until filled. Appointment 1 August 1989. *APSU is an Equal Opportunity/Affirmative Action Employer. Minorities, women and members of other protected groups are encouraged to apply.*

**DIRECTOR, CYTOGENETICS LABORATORY:** The Division of Medical Genetics at the Mount Sinai Medical Center is seeking an experienced Ph.D. or M.D. cytogeneticist. Board eligibility or certification by the ABMG is required. Responsibilities include: (i) direction of a busy clinical cytogenetics laboratory, (ii) independent clinical and/or basic research and (iii) teaching. Rank and salary negotiable. Send curriculum vitae and letters of reference to: **R. J. Desnick, Ph.D., M.D., Mount Sinai School of Medicine, Fifth Avenue at 100th Street, New York, NY 10029.**

## IMMUNOMEDICS

### DIRECTOR RADIOCHEMISTRY

Immunomedics, the pioneer company in the use of antibodies for cancer imaging and therapy, is expanding its Department of Radiochemistry.

Responsibility will be to interact with research, development, clinical affairs and regulatory affairs to develop and manufacture reagents and labeling kits for Phase I-III clinical trials.

Applicants should have experience in radiolabeling of proteins, use of HPLC instrumentation, construction and use of isotope generators, and a working knowledge of radiation safety procedures. Experience in writing specifications for IND/PLA FDA submissions is desired.

We offer a competitive employment package including company-paid health/dental, a 401K retirement plan, and the opportunity for stock and stock option merit awards.

For confidential consideration, please send curriculum vitae with salary history/requirements to:

**Personnel Director  
Immunomedics, Inc.  
150 Mt. Bethel Road  
CN 4918  
Warren, NJ 07060**

*Equal Opportunity Employer M/F.*

### ENDOTHELIAL CELL BIOLOGY

**RESEARCH ASSOCIATE** positions at postdoctoral level available for work on NIH-funded study of gene expression and release of peptide growth factors by adult human endothelial cells and effects of growth factors and extracellular matrix on endothelial and smooth muscle cell phenotype. Prior training in molecular biology and/or tissue culture techniques is desirable. Applications from medical or surgical residents/fellows seeking a 2-year training for careers in academic medicine are also sought. Send letter and curriculum vitae to: **J. Sharefkin, M.D., c/o Personnel Office, USUHS, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.**



## HEART RESEARCH INSTITUTE, SYDNEY, AUSTRALIA

### MOLECULAR BIOLOGIST, BIOCHEMISTS AND CLINICAL RESEARCHERS Macrophage physiology and pathology and free radical biochemistry

The Heart Research Institute, Sydney, Australia has newly been established to promote research into mechanisms and consequences of atherosclerosis. It is an autonomous Institute, with laboratories adjacent to Sydney University and the Royal Prince Alfred Hospital, both of which are closely involved with the Institute.

The Director Elect, Professor Roger T. Dean, is now seeking group leaders, post doctoral workers, research assistants and technicians, to start work in 1989 at dates to be agreed. There will later be opportunities for visiting workers and PhD students. Persons interested in any of these positions are requested to apply to the Director.

Salaries and conditions are based on the National Health & Medical Research Council, Australia, scales and the practice in other autonomous Australian research institutions. Contracts will be for periods up to 5 years, and in many cases renewable on the basis of performance. Post-doctoral workers will be accorded appropriate academic status in the University of Sydney.

The scientific programme of the Institute will concern, firstly, the role of the macrophage in the generation of foam cells in the atherosclerotic lesion; and secondly, the roles of free radicals in the deposition of lipid in such atherogenic processes and in damage subsequent to myocardial infarction. The objective of the Institute will be to seek preventive and prophylactic measures useful in relation to atherosclerosis. The work will be done at molecular biological, biochemical, cell biological, epidemiological and clinical levels.

Researchers with interests in these areas are invited to apply to:

**Prof. Roger Dean**  
at the Cell Biology Research Group  
Brunel University  
Uxbridge, Middlesex, UB8 3PH  
UNITED KINGDOM (Fax: + 44 895 32806)

within 6 weeks of the appearance of this advertisement. Please send a full curriculum vitae, names of two referees, two representative recent publications, and a brief statement of future research interests which relate to the above scientific programme. Interviews will be held in Sydney, London and the U.S.A.

## EniChem Americas Inc.

has a postdoctoral position available in its Plant Molecular Biology Group at their Research Center near Princeton, N.J. EniChem Americas Inc is the American affiliate of EniChem—the chemical arm of ENI (Ente Nazionale Idrocarburi).

This vacancy presents a unique opportunity to join a group of highly motivated scientists developing programs on crop improvement through biotechnology. We are particularly interested in candidates with expertise in molecular biology to work in the area of gene expression in plants and/or plant transformation.

Successful candidates will enjoy the benefits of joining a new research team in a well-equipped, custom designed facility supported by a major European corporation.

Please send Curriculum vitae, statement of research interests and names of three references to:

**Personnel Coordinator**  
**Dr. D.A. Pierce**  
**Group Leader Molecular Genetics**

## EniChem Americas Inc.

2000 Princeton Park Corporate Center  
Monmouth Junction, N.J. 08852

Equal opportunity employer m/f

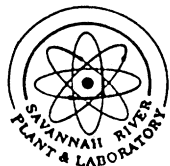
# Fisheries Biologist

The SAVANNAH RIVER SITE offers three clear advantages: CAREER CHALLENGE, CAREER OPPORTUNITY, AND LOCATION NEAR AIKEN, SOUTH CAROLINA.

Operated for the United States Department of Energy, the Savannah River Site produces radioactive isotopes for national defense, medicine, and America's space program. While this outstanding environment broadens your professional horizons, our geographical location offers a mild climate with access to some of the Southeast's most attractive cultural and recreational resources.

The Savannah River Laboratory is seeking a freshwater fisheries biologist to join a multidisciplinary team of ecologists. Initial responsibilities will include writing and reviewing environmental reports and administration of environmental monitoring contracts. Long-term opportunities exist for applied research related to the effects of industrial effluents (thermal and/or chemical) on fish populations in reservoirs and coastal plain streams/wetlands. Strong statistical background and good writing skills are required. Minimum requirements include a Ph.D. degree in Fisheries or related field and two years experience in freshwater fisheries biology.

**Salary is commensurate** with your training and experience. Our highly regarded benefits program includes relocation assistance. For confidential consideration, please send letter of inquiry, curriculum vitae, and statement of research interests to: Professional Staffing, Building 719-4A, Room 1120, Savannah River Plant, Aiken, SC 29808.



An Equal Opportunity Employer M/F/H/V  
U.S. Citizenship Required

## POSITIONS OPEN

### ELECTRICAL AUDITORY PROSTHESES PSYCHOPHYSICS

The House Ear Institute invites applications for Assistant Director or Director of Electrical Auditory Prosthesis Research, a senior staff position equivalent to associate or full professor. Candidates should have a Ph.D. in either audiology, psychology, or hearing or speech science, with postdoctoral research training and research experience in assessment of deafness in patients, psychophysics of prostheses evaluation, and test development. Preference will be given to candidates with current NIH funding and experience in conforming to FDA protocols and regulations. The Director will lead a team of junior- and senior-level research assistants in the design and implementation of prostheses evaluation research projects and in test development to improve prosthesis evaluation. The Director will be responsible for research with both adults and children and assuring conformity to FDA regulations. The Director will supervise currently funded psychophysical research on cochlear and cochlear nucleus implants as well as conduct his/her own research on electrical auditory prostheses. Salary and rank dependent on experience. Please send résumé and letter of interest to: **Donald W. Nielsen, Ph.D., Executive Vice President, Research, House Ear Institute, 258 South Lake Street, Los Angeles, CA 90057.**

*The House Ear Institute is an Equal Opportunity/Affirmative Action Employer.*

### ELECTRON MICROSCOPIST

The Division of Molecular Virology and Immunology (DMVI), Department of Microbiology, Georgetown University Medical Center is recruiting for an electron microscopist with research interests in cell biology/animal virology to manage a core EM facility. The activities of the core unit involve collaborative interactions with scientists of the NIH and DMVI in research on the pathobiology of HIV and hepatitis viruses, immediate hypersensitivity/mast cells/basophils and host defense mechanisms/neutrophil activation. Applicants with a strong background and supporting publications in animal virology are preferred. Academic appointment to the research track and salary commensurate with experience. Send letter of application, curriculum vitae, selected reprints to:

**Dr. John L. Gerin**  
Director, Division of  
Molecular Virology and Immunology  
Georgetown University Medical Center  
5640 Fishers Lane  
Rockville, MD 20852

*An Equal Employment/Affirmative Action Employer.*

### FACULTY POSITION IN BIOCHEMISTRY MEDICAL COLLEGE OF OHIO

The Department of Biochemistry, Medical College of Ohio, invites candidates to apply for a tenure-track position at the assistant professor level. The Department is expanding its faculty to include those with research interests that extend its present programs, which include regulation of gene expression, mechanisms of hormone action, protein structure-function relationships, antifolates, protein kinases, posttranslation modification of peptides, peptide hormone analogues, neuroendocrine regulation, membrane receptors, growth factors, and oncogene function. Candidates who employ molecular approaches to their research problems are particularly encouraged to apply. Responsibilities will include establishment of an active research program and participation in the teaching of medical and graduate students. Research facilities within the Department include a core laboratory with state-of-the-art equipment for peptide and oligodeoxynucleotide synthesis, and for protein sequence analysis. Application deadline is 15 October 1988. Send curriculum vitae, brief summary of research goals, and three letters of reference to:

**Dr. Larry Gentry**  
Chairman, Search Committee  
Department of Biochemistry  
Medical College of Ohio  
C.S. 10008  
Toledo, OH 43699

*An Equal Opportunity Employer.*

## POSITIONS OPEN

### ENVIRONMENTAL SPECIALISTS

Limnologists, wetland and estuarine ecologists, environmental scientists. The St. Johns River Water Management District has current and projected openings in applied research and research management for surface water restoration and preservation programs. Appropriate areas of specialization include limnology, aquatic, wetland and estuarine ecology, and environmental sciences. Starting salaries are commensurate with experience and vary approximately \$20,000 to \$28,000. Bachelor's degree in limnology, biology, ecology, and related sciences required. Send résumé to: **St. Johns River Water Management District, Office of Employee Relations, P.O. Box 1429, Palatka, FL 32078-1429.**

*Equal Employment Opportunity/Affirmative Action/Veterans Preference Employer.*

### ENZYME IMMOBILIZATION

Immediate position available for **RESEARCH SCIENTIST** with experience in immobilization of proteins to biocompatible membranes. Project focuses on the development of bioreactors for use during surgery to remove toxins from blood. Activities will include development and testing of immobilization chemistries and evaluation of device biocompatibility and performance. The candidate should have a Ph.D. and ideally 3 years of relevant experience. Company laboratories are located at the ultramodern Biotechnology Research Institute in Montreal. Competitive salaries and opportunity for advancement in biotechnology company offered. Interested scientists should send curriculum vitae and references to: **Continental Pharma Cryosan Inc., 1625 Sherbrooke Street West, Montreal, Quebec, H3H 1E2, Canada. Attention: Robert Heft.**

### FACULTY POSITION IN BIOCHEMISTRY AT THE UNIVERSITY OF NEBRASKA MEDICAL CENTER

The Department of Biochemistry of the University of Nebraska Medical Center at Omaha is seeking a qualified individual to fill a tenure-leading assistant professor position. All applicants should hold a Ph.D. in biochemistry or a related discipline and should have postdoctoral experience in structural biology. Salary will be commensurate with education and experience. We are primarily interested in an individual who will be able to set up a research program in protein structure and who will oversee a protein core laboratory. The successful applicant will be expected to develop an independently-funded research program and contribute to building a strong graduate educational program. Please forward curriculum vitae, a statement of research goals, and three letters of recommendation to: **Dr. Edward Bresnick, Department of Biochemistry, The University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, NE 68105.** *The University of Nebraska is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION IN MICROBIOLOGY

McGill University invites applications for a tenure-track faculty position in the Department of Microbiology and Immunology. The rank of the appointment will be commensurate with experience. Applications are encouraged from candidates who use modern approaches to study molecular mechanisms of microbial pathogenesis. Applications will also be considered from candidates with expertise in any microbe-oriented research area, including nucleic acid metabolism, protein structure and function, development and regulation. Ph.D. or M.D. with relevant postdoctoral experience is required. The successful candidate will be expected to develop a creative research program and to supervise the training of graduate students. Additional responsibilities include the participation in undergraduate and postgraduate courses. *In accordance with Canadian immigration requirements, the advertisement is directed to Canadian citizens and permanent residents of Canada. Others are encouraged to apply.* Applicants should submit curriculum vitae, a one-page statement of research interests, and the names of three references to:

**Dr. Robert A. Murgita**  
Department of Microbiology and Immunology  
McGill University  
3775 University Street  
Montreal, Quebec  
Canada H3A 2B4

## POSITIONS OPEN

**FACULTY POSITION IN MOLECULAR NEUROBIOLOGY AT THE UNIVERSITY OF TEXAS MEDICAL SCHOOL AT HOUSTON.** The Department of Neurobiology and Anatomy is recruiting for a tenure-track position in the area of molecular neurobiology. The Department is expanding its research efforts in the general area of neuronal and synaptic plasticity. Preference will be given to an appointment at the assistant professor level, but consideration will be given to candidates at higher levels. Existing research programs in the Department include neuronal development, cellular basis of learning and memory, second messengers, neuroimmunology, vision and the role of protein phosphorylation in neuronal function. Exceptional laboratory facilities and start-up funds and competitive State supported salaries are available to outstanding individuals who intend to develop a strong and independent research program. Those who wish to be considered should send curriculum vitae, names of four references and a brief description of research interests to: **Dr. Paul T. Kelly, Department of Neurobiology and Anatomy, The University of Texas Medical School at Houston, P.O. Box 20708, Houston, TX 77225.** *The University of Texas is an Equal Opportunity Employer. Women and Minorities are encouraged to apply.*

### FACULTY POSITIONS AT THE GEORGIA INSTITUTE OF TECHNOLOGY

The School of Chemistry and Biochemistry, Georgia Institute of Technology, invites applications and nominations for the following tenure-track faculty positions: **ANALYTICAL CHEMISTRY.** Candidates in all areas will be considered particularly those interested in separation science, surface analysis, and bioanalytical chemistry.

**BIOCHEMISTRY.** Candidates in all areas will be considered including those interested in physical biochemistry (computational biochemistry, molecular dynamics, protein folding, physical techniques) and bioorganic chemistry.

**ORGANIC CHEMISTRY.** Candidates in all areas will be considered particularly those with interests in new synthetic methods or in advanced materials research.

Outstanding scientists from universities, government laboratories and industry are encouraged to apply. Appointments will probably be at the assistant professor level but applications for senior positions may be considered.

A complete application must include curriculum vitae, a two to three page description of proposed research, copies of graduate and undergraduate transcripts, and letters from at least three professional references. The closing date for completed applications is 31 October 1988. Candidates should send application materials to: **Professor Robert A. Pierotti, Director, School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA 30332-0400.** *Georgia Tech is a member of the University System of Georgia and an Equal Opportunity/Affirmative Action Employer.*

### HEARING AID RESEARCH

The House Ear Institute invites applications for **ASSISTANT DIRECTOR OR DIRECTOR OF HEARING AID RESEARCH**, a senior staff position equivalent to associate or full professor. Candidates should have a Ph.D. in either audiology, psychology, or hearing or speech science, with postdoctoral research training and experience in hearing aid evaluation, assessment of hearing impairment, and test development. Preference will be given to candidates with current NIH funding and experience conducting confidential research with commercial companies. The Director will lead a team of junior- and senior-level research assistants in the design and implementation of hearing aid evaluation research projects and in test development to improve hearing aid evaluation. Engineering and programming support are available. The Director will be responsible for research with adults and children and will supervise currently funded research, conduct his/her own research, and stimulate and direct growth in this high-priority research area. Salary and rank dependent on experience. Please send résumé and letter of interest to: **Donald W. Nielsen, Ph.D., Executive Vice President, Research, House Ear Institute, 256 South Lake Street, Los Angeles, CA 90057.**

*The House Ear Institute is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**FACULTY POSITION RESEARCH INSTRUCTOR**—Participate in and initiate laboratory studies with members of the reproductive endocrinology division. Two years of postdoctoral experience required. Training or research experience in cell biology or biochemistry with particular emphasis on regulation of steroidogenesis and growth factors. Preference will be given to those with experience in electron microscopy and in situ hybridization. Please submit curriculum vitae to: **Dr. Bruce Carr, Professor, Department of Obstetrics and Gynecology, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9032.** The University of Texas is an Equal Opportunity Employer.

### ENVIRONMENTAL TOXICOLOGY DEPARTMENT UNIVERSITY OF CALIFORNIA, DAVIS

**GEOCHEMICAL TOXICOLOGIST**, assistant professor of environmental toxicology/assistant geochemical toxicologist in the Agricultural Experiment Station, available starting 1 September 1988. Eleven-month, teaching and research, tenure-track appointment. Requirements include Ph.D. in environmental toxicology or environmental chemistry, or related discipline and/or a strong background in environmental biochemistry. The area of research specialization will be either chemical or biochemical studies on the environmental occurrence, fate, and health effects of toxicants of a primarily inorganic nature. Examples might include inorganic interactions, exposure assessment, and toxic wastes related to agricultural/environmental concerns. Teaching will include the equivalent of two formal courses per year, advising, and supervision of undergraduate and graduate students. By 15 September 1988, send résumé, transcripts (official transcripts if the Ph.D. was granted in the past 5 years), list of publications, and names and addresses of three references to: **Chairman, Geochemical Toxicologist Search Committee, Department of Environmental Toxicology, University of California, Davis, CA 95616.**

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

### GEOGRAPHIC MEDICINE

The Division of Geographic Medicine, Department of Medicine, University of Alabama, School of Medicine, Birmingham, Alabama, announces the availability of additional **FACULTY POSITIONS**. Academic rank will be determined by the qualifications of the individual appointed but assistant/associate professors and instructors are being sought. The positions are open to individuals fulfilling these criteria: (i) Having a research background, being able to perform independent research, and being committed to major involvement in personal and divisional research programs. (ii) Having a firm commitment to and involvement in teaching programs for medical students, housestaff and fellows. (iii) Adding expertise in the management of patients. To apply send full credentials to: **Director, Division of Geographic Medicine, Department of Medicine, 621 Medical Education Building, University of Alabama Medical Center, Birmingham, AL 35294.** UAB is an Equal Opportunity/Affirmative Action Employer.

**HEAD, ANATOMIC PATHOLOGY**, Ottawa General Hospital and Faculty, Department of Pathology, University of Ottawa. A GFT faculty position for an anatomic pathologist with an academic track-record and administrative skills is available at the Ottawa General Hospital, a tertiary care 580-bed hospital where 12,000 surgicals and 14,000 cytologies are processed yearly. The hospital is affiliated with the University of Ottawa, School of Medicine. Research facilities are available both in the hospital and the university. Undergraduate and postgraduate teaching are required. *In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.* Send letters of inquiry, curriculum vitae and three references to: **Dr. Samuel W. French, Professor and Chairman of Pathology, University of Ottawa, School of Medicine, 451 Smyth Road, Ottawa, Ontario, Canada, K1H 8M5.**

12 AUGUST 1988

# TOXICOLOGISTS

ICI Americas Inc. has several career opportunities conducting mammalian toxicology studies available at its Environmental Health Center located in Farmington, CT. Responsibilities include participation in the design of studies, preparation of protocols, implementation and overall supervision of studies, evaluation and interpretation of results, and preparation of written reports and summaries. These positions offer excellent opportunities for collaborative work in the pathogenesis of toxic effects.

Qualified candidates should have a Ph.D. or equivalent in toxicology, pharmacology or related life science and strong communications skills. A background in neurotoxicology or inhalation toxicology would be a plus. One to three years' experience with agricultural/industrial chemicals in a contract or industrial laboratory is desirable.

ICI Americas Inc. offers on-going growth opportunities, excellent salaries and an attractive package of paid company benefits. The Environmental Health Center is adjacent to the University of Connecticut Health Center, in one of the state's most attractive semi-rural towns. To apply, please send your resume, a brief description of your experience, and your salary requirements to: **Lois Lumbert, ICI Americas Inc., 400 Farmington Ave., Farmington, CT 06032.** We are an Equal Opportunity Employer M/F.



ICI Americas Inc.

## Environmental Scientists/Toxicologists

International Technology Corporation, a leader in the environmental management field, is expanding its capabilities in the area of health and environmental risk evaluation.

We have immediate openings for Ph.D.'s in toxicology, environmental chemistry and biology, public health or epidemiology. The ideal candidates will have a minimum of two years' post-doctoral work experience and knowledge of:

- the conduct of health and environmental risk assessments
- federal environmental and hazardous waste regulations including CERCLA and RCRA

Computer literacy and excellent communication skills are essential.

The positions in Knoxville, TN and Pittsburgh, PA are with multidisciplinary groups that provide opportunities to contribute to the success of large environmental restoration projects. The persons selected will also be involved in resolving technical issues with regulatory agencies and representing the company at scientific and trade association meetings.

We offer a salary commensurate with experience and education and an attractive fringe benefit program. Candidates should forward their resumes in confidence to: **Tony Dury, International Technology Corporation, 2790 Mossdale Boulevard, Monroeville, PA 15146.** An Equal Opportunity Employer M/F/H/V.



INTERNATIONAL  
TECHNOLOGY  
CORPORATION

Creating a  
safer tomorrow.



**AERONOMER - BRANCH CHIEF  
SPACE SCIENCE LABORATORY  
NASA/George C. Marshall Space Flight Center  
Huntsville, Alabama 35812**

The Solar-Terrestrial Physics Division is seeking a highly qualified individual to serve as Chief of the Atomic Physics and Aeronomy Branch. The Branch is involved in an active research program in the physics and chemistry of the upper atmosphere and ionosphere. Research Programs are currently underway in stratospheric, meso-spheric, thermospheric, and lower magnetospheric photochemistry, energetics, and dynamics. Instruments for Space Shuttle, satellite, and high altitude balloon investigations of these regions currently emphasize state-of-the-art optical systems over wavelengths extending from the extreme ultraviolet to the infrared. Well-equipped laboratory facilities are available within the Branch to support instrument design, development, and calibration. Computer facilities available include VAX minicomputers together with IBM and CRAY machines. Extensive theoretical modeling of the thermosphere, ionosphere, and plasmasphere is underway, and efforts will be made to strengthen modeling of the middle atmosphere. In addition to performing his/her own research, the incumbent will be expected to guide the work of the Branch and to pursue new directions as appropriate. Salary will be \$46,679 - \$71,377, depending on experience and qualifications. Further technical information concerning the position can be obtained by calling Dr. M. R. Torr (205-544-7676).

**Qualifications:** The successful candidate must be a recognized research scientist with administrative interest. In addition, candidates must have completed an appropriate professional academic background in science and/or engineering, plus have increasingly responsible experience directly related to the duties of the position.

To apply, forward a resume or Application for Federal Employment (SF-171), along with a list of publications, to NASA/George C. Marshall Space Flight Center, CM44/S. Payne, Huntsville, AL 35812. Forms may be obtained by calling 205-544-7530. Deadline for filing is September 30, 1988.



An Equal Opportunity  
Employer

U.S. Citizenship Required



THE MIAMI PROJECT TO CURE PARALYSIS

**SPINAL CORD PLASTICITY  
& REGENERATION**

**RESEARCH ASSOCIATE/POSTDOCTORAL** positions (6) available in an integrated, multidisciplinary research group focusing on anatomical, cellular, electrophysiological, molecular and functional correlates of spinal cord injury and regeneration. Specific areas of research include: use of primary glia and Schwann cells to promote spinal cord regeneration (R.P. Bunge); basic Schwann cell functions, particularly those relating to neuronal regeneration (M.B. Bunge); plasticity, repair and behavioral recovery of motor and autonomic pathways following spinal cord injury using transplantation techniques (V.R. Holets); *in vivo* chamber model to allow direct visualization and temporal examination of regenerating CNS and PNS pathways (W.J. Levy); molecular cloning of novel neurotrophic factors and the development of neuronal cell lines for transplantation (S.R. Whittemore); anatomical and functional plasticity of spinal and supraspinal components of the somatosensory system (R.P. Yezierski). Positions open from 09/01/88.

Send curriculum vitae and names of 3 references to: **DR. RICHARD P. BUNGE, SCIENTIFIC DIRECTOR**, The Miami Project, Department of Neurological Surgery, University of Miami School of Medicine, 1600 NW 10th Avenue (R48), Miami, FL 33136.

**ANALYTICAL  
BIOCHEMIST**

Continued expansion at the Lever Research and Development Center, the principal research arm of Lever Brothers, a wholly owned subsidiary of Unilever, the world's largest consumer package goods company, creates an immediate need for a qualified Biochemist in Analytical Chemistry.

The responsibilities will include establishing new analytical methods for biomolecules with emphasis on enzymes and collaborating effectively with scientists from other departments.

The position requires a Ph.D in Biochemistry or a related area of chemistry with experience in the analysis/characterization of enzymes, modern methods of protein purification and sequencing. A strong background in chemical reaction mechanisms is a plus.

As a member of the Lever Research and Development team, you will work with state-of-the-art instrumentation in an exciting, growth oriented organization, and will also have the opportunity to interact with Scientists associated with Unilever's European Research Laboratories. If you wish to be considered for this position, submit your resume to: Mr. Robert S. Bewley, Manager of Personnel, Lever Research Inc., 45 River Road, Edgewater, New Jersey 07020.

An Equal Opportunity Employer



Research & Development

***The science of  
a great career.***

Liposome Technology, Inc. (LTI), develops and manufactures innovative liposome-based products. These products are designed to improve efficacy, safety and convenience of pharmaceutical products. Impressive technological breakthroughs have created an exciting opportunity in our San Francisco Peninsula research headquarters for a:

***Physical Chemist***

Your primary responsibility will be to conduct method development research on the physical characterization of liposomes. You will focus on particle size determination, surface charge and liposome structure. In addition, you will recommend new equipment acquisition for these studies. Requires a PhD in physical chemistry and a knowledge of dynamic light scattering, electron microscopy, electrophoretic mobility and thermal and spectroscopic methods.

LTI is committed to providing its employees with both sophisticated facilities and a competitive salary and benefits package. For immediate consideration, please send your resume, to: LTI, Dept. HR/PC, 1050 Hamilton Court, Menlo Park, CA 94025. Principals only; please, no phone calls. LTI is an equal opportunity employer.



# Research Scientists

Triton Biosciences Inc. is a biotechnology company focused on diagnostics and pharmaceuticals for cancer and other life threatening diseases. This entrepreneurial subsidiary, of Shell Oil Company is seeking goal-oriented researchers with experience in the diagnostics industry to help create high quality products that fill critical medical needs. Current opportunities include:

## **Infectious Disease**

Requires a PhD in Microbiology or equivalent experience. Duties will include the purification and antigenic analysis of viral proteins, evaluation of monoclonal antibodies and the construction of sensitive immunoassays. Refer to Box SC.

## **Molecular Immunology**

Requires a PhD in Immunology or Biochemistry with further postdoctoral experience in the immunological and molecular characterization of protein antigens. Background in tumor markers, cancer immunology and immunoassay development desirable. Refer to Box RW.

## **New Cancer Marker**

Requires a PhD in Cancer Biology, Immunology or equivalent experience with expertise in the evaluation of cancer markers. Duties include effective interaction with a multidisciplinary team in evaluating new cancer markers for diagnostic use. Refer to Box GL.

## **Histopathology/Oncogene**

Requires a PhD in Biological Sciences or equivalent with experience in immunohistochemistry. Duties will include the evaluation of antibodies to oncogenes, mucins and other new cancer markers as well as developing immunohistochemical reagents. Refer to Box YT.

Triton offers competitive salaries and benefits including relocation assistance. For consideration, send CV. with salary history and references to: Triton Biosciences Inc., 1501 Harbor Bay Parkway, Alameda, CA 94501. An Equal Opportunity Employer.



Triton Biosciences Inc.

# PHARMACOLOGY RESEARCH SCIENTISTS

The Dermatological Research Group of the Bristol-Myers Pharmaceutical Research and Development Division has two career opportunities for Research Scientists at our state-of-the-art laboratories in Buffalo, New York.

## **SENIOR RESEARCH SCIENTIST**

This position requires a Ph.D. in Biochemistry or Pharmacology with 3-5 years experience in general pharmacological techniques. The successful candidate will be expected to develop an independent research effort to develop new models of cutaneous disease. This scientist also will be responsible for identifying new drugs for the treatment of psoriasis and acne. Experience in the biology of retinoids would be especially helpful. Supervisory experience and leadership skills are important since this position will supervise other scientists.

## **RESEARCH SCIENTIST**

To qualify for this position a Ph.D. in Biochemistry, Pharmacology, or related area and 1-3 years experience is required. This scientist will be responsible for initiating a research program on skin aging. Responsibilities include cutaneous model development and screening of potential drugs. research experience in photobiology would be desirable.

These positions offer an opportunity to work on exciting scientific programs in Dermatology. A very attractive and competitive salary and comprehensive benefits package is available. Submit resume and salary requirements in confidence to:

Manager, Human Resources

## **Bristol-Myers Company**

Pharmaceutical Research & Development Division  
100 Forest Avenue  
Buffalo, NY 14213

An Equal Opportunity Employer M/F/H/V

## POSITIONS OPEN

### MOLECULAR BIOLOGIST

Tenure-track position at the assistant/associate rank beginning August 1989 for a molecular biologist. Ph.D. required. Candidates must demonstrate a commitment to teach undergraduate students, a desire to involve undergraduates in scholarly activity, and a willingness to teach non-major service courses. The candidate will be expected to develop and teach an undergraduate molecular biology course and establish an independent research program. Salary and fringe benefits are excellent. *Minorities and women are encouraged to apply.* Send letter of application, curriculum vitae, transcripts, a statement of interests, and three letters of references to: **Dr. Robert Hart, Biology Department, Slippery Rock University, Slippery Rock, PA 16057.** To ensure consideration, application materials should be received by 1 November 1988.

*Slippery Rock University is an Affirmative Action/Equal Opportunity Employer.*

**NEUROPHARMACOLOGIST/ELECTROPHYSIOLOGIST:** Independent faculty position in expanding Neuroscience Program. Interest in psychotomimetic and neuroleptic drug mechanisms desirable. Expertise in extra- and intracellular recording techniques essential. Rank commensurate with experience. Send curriculum vitae, a short statement of research plans, and names of three references to: **Robert Schwarcz, Ph.D., Maryland Psychiatric Research Center, P.O. Box 21247, Baltimore, MD 21228.**

Positions available for individuals interested in **NEUROPHYSIOLOGICAL AND NEUROANATOMICAL STUDIES** of the gustatory system. Areas of investigation include: sensory-motor integration of gustatory signals and oral behaviors, receptive field organization of gustatory neurons, gustatory-somatosensory interactions, neuroanatomical microcircuitry of brainstem taste pathways. Opportunities exist to collaborate with one, or a combination of three investigators. Experience in neurophysiology or neuroanatomy preferred, experience in immunohistochemical staining procedures or intracellular recording techniques welcome. Stipend commensurate with NIH levels of support. Send curriculum vitae and statement of research interests to: **Drs. J. Travers, S. Travers, or M. Whitehead, Department of Oral Biology, College of Dentistry, The Ohio State University, Columbus, OH 43210.** *Equal Opportunity/Affirmative Action Employer.*

### NEUROSCIENTIST

Applications are invited for a position as assistant professor (contingent appointment) in the Department of Physiology and the Spinal Cord Research Centre at the University of Manitoba Faculty of Medicine and the Winnipeg Health Sciences Centre. Candidates should have a Ph.D. or equivalent and postdoctoral training, be eligible for a Medical Research Council Scholarship Award, and be able to establish a strong research program. Preferred areas of interest include neuropharmacology, tissue slice or neuron culture methodology, molecular biology of neurons, growth and development of the central nervous system, plasticity, regeneration, and transplantation. Experience in graduate and undergraduate teaching would be an asset. Primary appointment would be in the Department of Physiology. Send curriculum vitae, an outline of future research plans, and arrange for three letters of reference to be sent to: **Dr. H. G. Friesen, Professor and Head, Department of Physiology, The University of Manitoba, Winnipeg, Canada R3E 0W3.** Deadline for receipt of applications is 15 October 1988. *Both women and men are encouraged to apply. In accordance with Canadian Immigration, priority will be given to Canadian citizens and permanent residents of Canada.*

**ORGANIC CHEMIST.** The Positron Emission Tomography Program at UCLA has two postdoctoral positions available. The project involves the synthesis of new biochemical probes for in-vivo assessment of pre- and postsynaptic neurotransmitter function. Applicants must have a Ph.D. degree in synthetic organic chemistry. Opportunity for expanded knowledge and training in this rapidly expanding field. Salary Range: \$24,000 to \$29,000 per year. Send résumé to: **Dr. Jorge R. Barrio, UCLA School of Medicine, Division of Nuclear Medicine and Biophysics, Los Angeles, CA 90024.** *UCLA is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### NMR SPECTROSCOPY RESEARCH POSITION AVAILABLE

An NMR scientist is being sought to join the faculty of the University of Michigan, Department of Radiology. Faculty rank and tenure/research track are dependent on qualifications and interest. A background in biochemical physiological/biophysical applications of NMR and a Ph.D. degree in a field such as biochemistry, physiology, biophysics, or related field such as chemistry, or physics are required. One or more years of experience with in-vivo NMR spectroscopy is preferred.

Current facilities include a 2.0T, 31 cm bore spectroscopic/imaging research system, 0.35T and 0.5T head and body imagers, a 1.5-2T head and whole body imaging/spectroscopy system, 20 and 60 MHz spectrometers and an image analysis computer system. An additional, very high field NMR research system is anticipated, as is a substantial research initiation package.

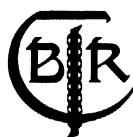
Please write and send curriculum vitae to: **William Martel, M.D., Professor and Chairman, Department of Radiology, University of Michigan Hospitals, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0030.**

*The University of Michigan is an Equal Opportunity Employer.*

The Department of Pediatrics at the University of Michigan is seeking an individual who is sub-board certified in **PEDIATRIC NEPHROLOGY.** The position requires the skills likely to support a career in academic medicine. Interested physicians are requested to send their curriculum vitae with a statement of personal goals to:

**Robert C. Kelsch, M.D.  
Director, Pediatric Nephrology Unit  
Box 0318-TC-Room 1924  
1500 East Medical Center Drive  
Ann Arbor, MI 48109-0318**

*The University of Michigan is a Non-discriminatory/Affirmative Action Employer.*



California Institute of Biological Research

### POSTDOCTORAL AND RESEARCH ASSISTANTS

California Institute of Biological Research (CIBR), a non-profit institute, has recently been established by Stratagene in La Jolla, CA. The institute in a beautiful coastal location in close proximity to the Salk Institute, Research Institute of Scripps Clinic, Medical Biology Institute, La Jolla Cancer Research Center, and the University of California, San Diego. CIBR consists of laboratories with research interests in eukaryotic gene regulation, oncogenes, cellular and molecular transformation, control of immune responses, molecular biology of differentiation, mammalian development, and human diseases. Several years of experience in molecular and/or cell biology is required.

Send curriculum vitae with the names of three references to: **Dr. Manuel Perucho, California Institute of Biological Research, 11099 North Torrey Pines Road, La Jolla, CA 92037.**

One **POSTDOCTORAL FELLOW** and one **ASSISTANT RESEARCH SCIENTIST** positions for conducting studies on the developmental regulation of mammary glycoproteins. Candidates for the postdoctoral position must be recent graduates in molecular biology or biochemistry; candidates for the assistant research scientist position must have minimum of 2 years of postdoctoral experience in molecular biology. Knowledge of mammary gland biology will be an advantage. Highly competitive salary consistent with N.I.H./University rates. Send curriculum vitae and names of three references to: **Dr. I. K. Vijay, Professor of Animal Sciences and Agricultural Biotechnology, University of Maryland, College Park, MD 20742.** *An Equal Opportunity Employer.*

## POSITIONS OPEN

The Agricultural Research Service, Grand Forks Human Nutrition Research Center, is seeking a **POSTDOCTORAL ASSOCIATE IN BIOCHEMICAL NUTRITION**, to apply the techniques of cell culture and molecular biology to study zinc nutrition and the regulation of dipeptidyl carboxypeptidase enzymes in the male reproductive organs. A recent Ph.D. degree in physiological and/or nutritional biochemistry, or related fields with knowledge of animal physiology, biochemistry, cell culture and recombinant DNA techniques and endocrinology are desirable qualifications. The appointment is for up to 2 years with a salary range of \$27,716 to \$33,218. The Grand Forks Human Nutrition Research Center is a major ARS research facility and is well equipped for the type of work proposed. For information on the research, contact: **Dr. Philip Reeves at 701-795-8497.** For application procedures, contact: **Ms. Julia A. Murchison at 301-344-3138.** Applications in response to this ad should be marked 8W019-RA-88-35 and addressed to: **Philip G. Reeves, Ph.D., USDA, ARS, Human Nutrition Research Center, Box 7166, University Station, Grand Forks, ND 58202.** *An Equal Opportunity Employer.*

**POSTDOCTORAL** for linkage mapping by allozyme and RFLP analysis. Salary \$25,000 to \$30,000.

### GENETICIST

Curriculum vitae, and names, and telephone numbers of references to: **Dr. Thomas Brown, Department of Entomology, Clemson University, Clemson, SC 29634.** Telephone: 803-656-5038. *An Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION

Positions available immediately and later to study the regulation and function(s) of insulin-stimulated MAP (microtubule-associated protein) kinase [see *PNAS* 85: 3753 (1988)], a serine/threonine kinase which may be regulated by tyrosine phosphorylation. Please send application (with three references) to: **Tom Sturgill, Departments of Medicine and Pharmacology, Box 419, University of Virginia Medical Center, Charlottesville, VA 22908.**

**POSTDOCTORAL POSITION** available immediately to study mechanisms of papillomavirus and retrovirus infections in mice. The areas of investigation will include (i) viral-chemical co-carcinogenesis and pathogenesis, (ii) viral and cellular gene expression in murine tumors, and (iii) vector development and establishment of transgenic mice. Candidates must have experience with molecular technology. Send curriculum vitae and three letters of recommendation to either: **Dr. John P. Sundberg** or **Dr. Hendrick Bedigian, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609-0800.**

**POSTDOCTORAL POSITION** available in molecular neurobiology in neurodegenerative diseases, including Alzheimer's disease, in established multidisciplinary laboratory. Qualifications include a Ph.D. or M.D., and a strong background in biochemistry and molecular biology to explore the molecular basis of these diseases. Submit curriculum vitae and three references to: **Dr. Carol A. Miller, Department of Pathology, USC Medical School, 2011 Zonal Avenue, Los Angeles, CA 90033.**

**POSTDOCTORAL POSITION**, available immediately to study DNA sequences and/or proteins involved in genome reorganization during macronuclear development in ciliated protozoa. Background in biochemistry and/or molecular biology is desirable. Send curriculum vitae and names of three references to: **Dr. Carolyn Jahn, Laboratory for Cell, Molecular and Developmental Biology, University of Illinois at Chicago, P.O. Box 4348 m/c-067, Chicago, IL 60680.** *UIC is an Equal Opportunity Employer.*

**POSTDOCTORAL POSITION**—Seek recent Ph.D. in physical or inorganic chemistry with interest in kinetic aspects of gas phase chemical interactions. Experience in microwave activation techniques of molecules preferred, but not required. Position available immediately.

Send résumé and references to: **Lawrence Berkeley Laboratory, Building 90, Room 1012, Berkeley, CA 94720.** (Specify Job C/4799). *An Equal Opportunity Employer M/F/H.*

**NATIONAL INSTITUTES OF  
HEALTH  
NATIONAL INSTITUTE OF  
ALLERGY AND INFECTIOUS  
DISEASES  
IMMUNOLOGY, ALLERGIC AND  
IMMUNOLOGIC DISEASES  
PROGRAM  
OFFICE OF THE DIRECTOR  
HEALTH SCIENTIST  
ADMINISTRATOR  
(BIOLOGICAL SCIENCE),  
GS-601-15  
OR  
MEDICAL OFFICER  
(ADMIN.), GS-602-15**

Salary Range: \$54,907 to \$74,281\* per annum. Physician's Comparability Pay up to \$20,000\* may be payable. Salary commensurate with qualifications. If appointed in the USPHS Commissioned Corps, salary will be consistent with appropriate rank for that system. \*Maximum payable rate is \$72,500 per annum.

As Deputy Director of the Immunology and Allergy Extramural Program, assists Program Directors in planning, design and conduct of Program activities, special studies and projects; supervises and coordinates the work of Branch Chiefs and Program professional staff in research grants and contract functions, and conference activities concerned with basic immunology and allergic and immunologic diseases; prepares special reports, budget and publication materials; conducts surveys and analysis of scientific and administrative issues.

Experience in immunology or other biomedical science with immunologic relevance and national reputation with the research community in immunology or related discipline desired.

Civilian applicants must obtain a competitive notice of rating. All applicants must be U.S. citizens and submit an Application for Federal Employment (SF-171) and/or CV. For qualification and application information contact: NIAID Personnel Office, Jane Schriver, 9000 Rockville Pike, Building 31, Room 7A-27, Bethesda, MD 20892, (301) 496-4634.

For position information contact:

Dr. David Scott  
NIH, NIAID  
9000 Rockville Pike  
Building 31, Room 7A-52  
Bethesda, MD 20892  
(301) 496-1886

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

## POSTDOCTORAL POSITIONS

### Weis Center for Research-Geisinger Clinic

Applications are encouraged from individuals with backgrounds in cell biology, biochemistry, physiology or molecular biology.

Areas currently under investigation by staff scientists include:

- Role of extracellular matrix in growth and development of glial and vascular smooth muscle cells.
- Structure and function of G-proteins involved in neuro-hormonal signaling.
- Control of cAMP production and ribosome formation in response to cellular deformation and pressure overload in the heart.
- Isoprenoid synthesis and post-translational protein modification in relation to cell cycling and differentiation.
- Fatty acid metabolism and coenzyme A synthesis in cardiac muscle.
- Mechanisms of cell damage during myocardial ischemia.
- Mechanisms of excitation-contraction coupling and the roles of protein kinases in regulation of vascular smooth muscle.
- Structure, function, regulation and molecular genetics of vascular smooth muscle cell surface and extracellular proteoglycans.
- Regulation of the turnover of ribosomal RNA and proteins in cardiac hypertrophy.
- Molecular and biochemical mechanisms of action of angiotensin peptides in the cardiovascular system.

The Weis Center is a new basic research institution affiliated with the Geisinger Clinic. We offer superb facilities, competitive salaries and benefits, and an interactive environment. The Center is located in an attractive, semi-rural setting in Northeastern Pennsylvania.

For consideration please send curriculum vitae, brief statement of research interests, and names of three references to:

**Geisinger**

**Howard E. Morgan, M.D.**  
Senior Vice President for Research  
Weis Center for Research  
Geisinger Clinic  
Danville, PA 17822

Equal Opportunity Employer M/F/H/V

## Opportunities For MOLECULAR VIROLOGISTS

Committed To  
Scientific  
Excellence

The Sterling Research Group announces several openings in the expanding antiviral research program in the Microbiology Department at the Sterling-Winthrop Research Institute in Rensselaer, NY.

The successful candidates will possess a Ph. D. degree in virology or molecular biology with relevant postdoctoral experience. The scientists will be expected to apply current molecular techniques to the analysis of the replication and pathogenesis of several viruses of biomedical importance. Supervision of other scientific staff is expected and strong interpersonal and communication skills are required.

Located near Albany, NY, we offer an attractive salary and benefits package as well as opportunities for professional development in a dynamic environment utilizing a multidisciplinary approach to research. Interested scientists should send curriculum vitae in confidence to:

**Mr. John P. Harvey**  
Employment Relations Administrator

**STERLING-WINTHROP  
RESEARCH INSTITUTE**

Sterling Research Group  
A Division of Sterling Drug Inc.  
Rensselaer, NY 12144

Equal Opportunity Employer M/F/H/V



## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately to study thyroid hormone ( $T_3$ ) action on keratin gene expression during development, when  $T_3$  appears to act via regulatory genes, as opposed to its action in adult tissues where it directly activates tissue-specific genes. Experience with molecular techniques required. Send curriculum vitae to: **Dr. Leo Miller, Laboratory for Cell, Molecular, and Developmental Biology, M/C 066, University of Illinois at Chicago, Box 4348, Chicago, IL 60680.**

**POSTDOCTORAL POSITION** now available for collaborative studies of growth factor synthesis and function in hormone responsive and unresponsive prostate cancer cells. Molecular studies of hormonal regulation of gene expression and biochemical studies of growth factor function will be pursued with **Dr. Sydney A. Shain**. Candidates must have strong background and laboratory experience in cell biology and/or molecular biology. Appointments are for 1-year periods up to 3 years. Send curriculum vitae and the names and telephone numbers of three references to: **Personnel Director (847), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78284.** *Equal Opportunity Employer M/F.*

**POSTDOCTORAL POSITION** available to study interactions of glycosaminoglycans with serine proteinase inhibitors and cell adhesion molecules. Ongoing projects include investigation of ligand-binding sites of heparin cofactor II by site-directed mutagenesis of the cDNA, elucidation of the structures of heparin and dermatan sulfate oligosaccharides that stimulate heparin cofactor II, and sequence analysis of dysfunctional variants of heparin cofactor II. In addition, phosphorylation of a serine residue in the heparin-binding domain of vitronectin is being investigated. Experience in protein chemistry or molecular biology is desirable. Send curriculum vitae and the names of three references to: **Douglas M. Tollefsen, M.D., Ph.D., Hematology-Oncology—Box 8125, Washington University Medical School, 660 South Euclid, St. Louis, MO 63110.**

## POSITIONS OPEN

### CENTER OF ADVANCED RESEARCH IN BIOTECHNOLOGY, UNIVERSITY OF MARYLAND POSTDOCTORAL POSITION

To carry out crystallographic studies of  $\beta$ -lactamase. Candidates should have experience in crystallography and keen interest in the structure and function of macromolecules. State-of-the-art equipment is available. Send applications including curriculum vitae and the names and addresses of three referees to: **Dr. Osnat Herzberg, CARB, NBS, Building 221, A353, Gaithersburg, MD 20899.**

**POSTDOCTORAL POSITION.** A postdoctoral position is available immediately to study the alkaline phosphatase (APase) gene family of *B. subtilis*. Studies include (i) analysis of the overlapping regulation by sporulation control and the phosphate regulon on the individual APase genes and (ii) analysis of factors determining the final destination of the mature APase proteins. Experience in biochemistry and/or molecular genetics is desirable. Send curriculum vitae and names of three references to: **Dr. F. Marion Hulett, Laboratory of Cell, Molecular and Developmental Biology, University of Illinois at Chicago, P.O. Box 4348 m/c-067, Chicago, IL 60680.** *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available 15 September 1988 for studies of calcitonin gene regulation (including transcription and alternative RNA processing). Position is collaborative effort between the Departments of Medicine, Cell Biology, and Biochemistry of the Baylor College of Medicine. Candidate must have completed work for Ph.D. or equivalent degree. Send curriculum vitae and letter describing current scientific interests and names of three references to:

**Dr. Robert F. Gagel  
Baylor College of Medicine  
2002 Holcombe Boulevard (111E)  
Houston, TX 77030**

*Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately to study structure and regulation of a gene encoding a cell surface protein induced by tumor promoters. Applicants should hold a recent Ph.D. and have strong background in molecular biology. Appointment for 2 years with opportunity for extension and/or promotion. Salary \$20,000+ depending on experience. Submit curriculum vitae, a brief description of current research, and three letters of reference to: **Dr. Judith K. Christman, Director, Molecular Biology Program, Michigan Cancer Foundation, 110 East Warren Avenue, Detroit, MI 48201.** *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately for well-established studies of cellular electrophysiology in the hippocampal formation following long-term ethanol exposure. Laboratory utilizes an interdisciplinary approach involving physiological, morphological and biochemical techniques. Preference will be accorded applicants with a Ph.D. in neurosciences and a strong background in electrophysiology, the in vitro hippocampal slice and laboratory computer instrumentation. Curriculum vitae and names of three references should be sent to: **Drs. Don W. Walker/Bruce E. Hunter, Department of Neuroscience, JHMH Box J-244, University of Florida, Gainesville, FL 32610.** *An Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION BIOCHEMISTRY/IMMUNOLOGY UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Postdoctoral position to investigate HIV antigen presentation and immunogenicity, using synthetic peptides and recombinant proteins associated with liposomes, working in the laboratories of **N. Düzgünes, and D. Stites**. Applicants should have a Ph.D. in biochemistry and an interest in immunology. Please send curriculum vitae, statement of research interests and the names and telephone numbers of three references immediately to: **Dr. Daniel Stites, Department of Laboratory Medicine, University of California, San Francisco, CA 94143-0100.**

## OLIGONUCLEOTIDE CHEMIST

We seek an individual to operate a central facility in nucleic acid chemistry in the Cancer Center of the Worcester Foundation for Experimental Biology. This position, and the facility, is supported by a NCI Cancer Center core grant (Dr. Thoru Pederson, Principal Investigator). The appointee will be responsible for automated synthesis of oligonucleotides for cloning, sequencing and hybridization projects in the Center, and for organic synthesis of modified nucleotides and oligonucleotides. The facility is associated with a group working on therapeutic applications of antisense oligonucleotides (Drs. Paul Zamecnik and John Goodchild), and the appointee will have scientific interactions with this and other nucleic acid-gene expression research groups in the Center. A Ph.D. degree in Organic Chemistry is preferred although other candidates with relevant experience in oligonucleotide chemistry will be considered. The Worcester Foundation is a nonprofit, basic research institute located on a 100-acre wooded campus 38 miles west of Cambridge. Send curriculum vitae and a synopsis of research interests and career objectives including the names of three individuals who can be contacted to: **Oligonucleotide Chemist, C/O Personnel Office.**

**Worcester Foundation for  
Experimental Biology  
222 Maple Avenue  
Shrewsbury, MA 01545 USA**  
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## POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS

Five positions, supported by the PEW Neuroscience Program, are available for studies related to neural transplants in primates beginning September 1, 1988. Investigative areas include:

- allogeneic and xenogeneic fetal transplants.
- peripheral neural and paraneural transplants.
- immunobiology of neural transplants.
- development of cell lines for transplantation.

Mentors for these studies include Drs. David Felten, Don Gash, Ira Shoulson and John Sladek. Stipends \$20,000 and up depending on background and experience. Send vita, summary of research interests and names of three references to:

**Professor Don M. Gash  
Primate Transplantation Program  
Department of Neurobiology  
and Anatomy, Box 603  
University of Rochester School of Medicine  
Rochester, New York 14642**

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# Biotechnology Research

For the most advanced research opportunities in protein drug delivery and genetically engineered human therapeutics, consider California Biotechnology Inc. Our focus on the union of innovative science and good business has attracted some of the most respected researchers in the industry. Currently we have positions available in the following critical research areas:

## **Staff Scientist Senior Scientist Scientist Diabetes & Obesity**

A PhD and knowledge of the sciences relating to diabetes and/or obesity (e.g. animal models of these diseases or insulin chemistry, biosynthesis or action) is essential for all positions. Expertise in molecular biology and/or protein chem-

istry is strongly desired. Staff and Senior Scientist positions require post-doctoral experience.

## **Scientist Drug Delivery Formulation**

Major responsibilities include the physicochemical characterization of proteins and peptides in solution, bioanalytical method development, investigations into the mechanisms of protein transport across mucous membranes and alternative dosage form design. A PhD in biochemistry, physical chemistry, or pharmaceutical chemistry is required; post-doctoral experience preferred.

## **Scientist Neurotrophic Factors**

This position calls for someone with a PhD and expertise in protein purification/characterization and immuno assays to work with a group applying biotechnology to the development of novel therapeutics for neuropathies and neurodegenerative diseases. Familiarity with the characterization of polypeptide hormones and their receptors is a plus.

## **Sr. Research Associate Alzheimer's Disease**

Requirements for this position include a BS/MS, as well as recombinant DNA and tissue culture experience. Research experience in neurobiology is a plus.

## **Research Associate Monoclonal Antibodies**

Handle all aspects of hybridoma tissue culture, including conducting cell fusions, developing clonal lines, and maintaining, expanding, and freezing cells. Requirements include a BA/BS with coursework in immunology, 1-3 years' experience, and sterile tissue culture expertise.

Our excellent compensation and benefits program includes a flexible time-off plan. For immediate consideration, please forward your curriculum vitae, indicating position of interest, and three references (Scientist positions require 3 letters of reference) to Liza Mingione, California Biotechnology Inc., Human Resources, 2450 Bayshore Parkway, Mountain View, CA 94043. We are an equal opportunity/affirmative action employer.

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## **SENIOR RESEARCH SCIENTIST Toxicology**

G.D. Searle is a worldwide leader in the pharmaceutical industry with a constant innovation and continuing commitment to high performance standards. To ensure progress in our Product Safety Assessment Department, we seek an experienced Toxicology Research Scientist for a Senior position.

Reporting to the Director of Toxicology, the selected candidate will manage the scheduling, conduct and reporting of assigned general toxicology projects and studies, including short and long-term rodent and nonrodent systemic toxicity studies. Initiating task forces to solve technical/mechanistic problems will also be involved in addition to providing toxicology expertise for various internal functions and external groups.

To qualify, you should possess a Ph.D. in Toxicology or related discipline and have an understanding of applicable regulations for IND and NDA submissions and GLP conformance. 8-10 years of industrial toxicology experience, with direct involvement in laboratory operations is required, as is a supervisory/management background. We prefer an individual who is a Diplomat of the American Board of Toxicology with knowledge of broader requirements for product development on a worldwide basis. Experience with managing toxicology of related areas in drug safety evaluation and designing and conducting special studies is also desired.

We offer a stimulating scientific environment, strong growth potential, and excellent compensation and benefits. For consideration, please send resume and salary history to: **G.D. Searle & Co., Human Resources Dept. CM2, 4901 Searle Parkway, Skokie, IL 60077.** Equal Opportunity Employer M/F.

**SEARLE **

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately, for a biochemist with interest in research of folic acid metabolism and endothelial damage. Applicants with a background in protein purification and molecular genetics are particularly encouraged. Send curriculum vitae and reprints to: **Dr. David Kang, Department of Pediatrics, Genetics Section, Rush Medical College, Chicago, IL 60612. Telephone: 312-942-6298.**

**POSTDOCTORAL POSITION** available at the Department of Plant Pathology, University of California, Davis, from 1 September 1988, for the biochemical analysis of RNA polymerase II in vitro transcription in *Neurospora*. Applicants should have solid experience in protein chemistry, plus ideally some experience with DNA binding proteins or DNA/RNA techniques. Send curriculum vitae plus names of three referees to: **Brett Tyler, Present address: Research School of Biological Sciences, Australian National University, P.O. Box 475, Canberra ACT2601, Australia.**

### POSTDOCTORAL POSITION IN FETAL PHYSIOLOGY/ENDOCRINOLOGY

Available January 1989, position supported by USPHS-NIH Training Grant. Regulation of several fetal endocrine systems and the cardiovascular system are under investigation. Studies include: development of the hypothalamic-pituitary-adrenal axis, the hormonal and neuroendocrine regulation of the onset of labor, fetal cardiovascular-endocrine interactions, and placental transport of ions. Studies involve the use of in vitro and in vivo approaches as well as mathematical modeling.

Applicants should have a strong background in endocrinology, physiology, or cell biology. Send curriculum vitae and the names of three references to: **Dr. Lawrence D. Longo, Division of Perinatal Biology, Department of Physiology, School of Medicine, Loma Linda University, Loma Linda, CA 92350. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION IN PEPTIDE CHEMISTRY** now available. Will design and do synthesis, purification and characterization of synthetic peptides for immunochemical studies related to HIV vaccine development. Work will be coordinated by **Dr. Patrick Kanda**. Requires experience in peptide or protein purification and characterization with Ph.D. in biochemistry or related area. Annual salary ranges from \$20,500 to \$23,920, dependent upon experience. Please mail curriculum vitae with names and telephone numbers of three references to: **Personnel Director (868), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78284. Equal Opportunity Employer M/F.**

**POSTDOCTORAL POSITIONS** (two) available immediately to study molecular mechanisms underlying hormone transmembrane signalling. Particular emphasis will be paid to mitogenic hormone action and regulation of cellular phospholipid metabolism. One position will be filled with a person interested in protein purification. Send curriculum vitae and names of three references to: **Dr. L. M. Fredrik Leeb-Lundberg, Department of Biochemistry, The University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284-7760. An Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL POSITIONS IN MOLECULAR NEUROENDOCRINOLOGY

A postdoctoral position is available 1 December 1988 for the study of biosynthetic mechanisms involved in opioid peptide production in chromaffin cells [*JBC* 263, 2548 (1988)] and cell lines transfected with opioid peptide cDNA. An additional position is available to work on a related project; the purification and molecular cloning of an enkephalin-generating trypsin-like enzyme. Experience in protein purification and/or molecular genetics helpful. Facilities, scientific environment, and funding for these studies are excellent; starting date is negotiable. Send curriculum vitae and names, addresses and telephone numbers of three references to: **Dr. Iris Lindberg, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, 1901 Perdido Street, New Orleans, LA 70112. LSUMC is an Equal Employment Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS—INSECT SCIENCE

The Center for Insect Science at the University of Arizona occasionally has openings for postdoctoral training in interdisciplinary programs dealing with insect biology. Research areas include biochemistry, behavior, chemistry, ecology, endocrinology, genetics, molecular biology, neurobiology, physiology, and systematics of insects. Stipends will be commensurate with experience. Applications may be submitted at any time. Please send curriculum vitae and names, addresses and telephone numbers of three references to: **Dr. John H. Law, Acting Director, Center for Insect Science, University of Arizona, Biosciences West 364, Tucson, AZ 85721. The University of Arizona is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITIONS** available to study: (i) DNA photolyase and the mechanism of enzymic photorepair of DNA damaged by ultraviolet light; (ii) Structure/function relationships in bacterial sarcosine oxidase, a multisubunit, tetrahydrofolate-binding protein containing both covalent and noncovalent flavin. Applicants should have an interest in enzymes and/or photochemistry. Please send curriculum vitae and names of three references to: **Dr. M. Jorns, Department of Biochemistry, Hahnemann University, Broad and Vine, Philadelphia, PA 19102.**

**POSTDOCTORAL POSITIONS** in immunology available immediately. One position is for a cellular immunologist who will be generating B cell hybridomas and utilizing a variety of immunochemical techniques for the subsequent detection, purification and analysis of such antibodies. The second position is for a molecular immunologist who will utilize the techniques of in vitro mutagenesis and mammalian cell transfection to study idiotypically altered antibody molecules. Send curriculum vitae to: **Dr. Constantin Bona, Box 1124, Department of Microbiology, The Mount Sinai School of Medicine, One Gustave Levy Place, New York, NY 10029-6574.**

Several **POSTDOCTORAL POSITIONS**, available now and in July 1989, in cellular and molecular immunology in the laboratories of **Susan Swain** and **Richard Dutton**. Projects include molecular and cellular analyses of the role of lymphokines and the cell biology of T cell-B cell interactions in the regulation of the immune response. Experience in cell biology, biochemistry, cellular or molecular immunology required. Send curriculum vitae and the names of three referees to: **Alecia Schwartz, Department of Biology, Q-063, University of California San Diego, La Jolla, CA 92093. The University of California is an Equal Opportunity Employer.**

### POSTDOCTORAL POSITIONS UNIVERSITY OF PENNSYLVANIA

Positions are available in the following areas: (i) molecular biological and immunological studies of  $\beta$ -adrenergic, dopamine, and muscarinic cholinergic receptors (**Drs. Barry B. Wolfe** or **Perry B. Molinoff**); (ii) molecular biological, biochemical and electrophysiological studies of ion channel and receptor function; biosynthesis and assembly of ion channels and receptors (**Dr. Michael M. White**); (iii) biochemistry and molecular pharmacology of G protein effector systems in ocular ciliary epithelia (**Dr. Martin B. Wax**). Newly renovated research facilities. Competitive salaries and benefits. Send curriculum vitae and letters of recommendation to: **Postdoctoral Search Committee, Department of Pharmacology, University of Pennsylvania Medical School, Philadelphia, PA 19104-6084. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITIONS:** Conduct immunochemical and cellular immunological studies in vivo and in vitro of interactions between parasites and hosts of varying ages. Must have background in immunology and biochemistry.

**Dr. Julia W. Albright**  
Department of Microbiology  
George Washington University Medical Center  
2300 I Street, NW  
Washington, DC 20037

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS

Available immediately for Ph.D. or M.D. in immunology/cell and molecular biology. Research will involve studies on cellular and molecular mechanism of human B cell differentiation. This area includes (i) Biochemical purification and molecular cloning of various factors; (ii) Regulation of lymphokine gene expression; (iii) Functional characterization of growth factor receptors.

Salary is negotiable. The interested candidate is encouraged to send curriculum vitae to:

**Dr. Y. S. Choi**  
Director, Laboratory of Cellular Immunology  
Alton Ochsner Medical Foundation  
1520 Jefferson Highway  
New Orleans, LA 70121

**POSTDOCTORAL POSITIONS** available to work on the molecular biology of human lysosomal and heme biosynthetic enzymes and diseases: cloning, gene structure, expression, site-directed mutagenesis and structure/function analyses. Applicants should have a strong background in recombinant DNA technology and/or biochemistry. Send curriculum vitae and two letters of reference to: **Dr. R. J. Desnick, Division of Medical Genetics, Mount Sinai School of Medicine, Fifth Avenue at 100th Street, New York, NY 10029.**

**POSTDOCTORAL POSITIONS:** Two positions are available for the study of murine B lymphocyte activation and differentiation. Investigation will focus on the role of B cell membrane Ig, lymphokines, and cognate B cell-T cell interactions in the induction of antibody secretion in vivo. Applicants should have cellular immunology experience. Send curriculum vitae and names of three referees to: **Dr. Fred Finkelman, c/o Civilian Personnel, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. USUHS is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL RESEARCH**—Applications are invited from Ph.D.'s with training in yeast genetics to work on a project in which the yeast systems will be used to study the genetics and biochemistry of retroviral integration. The successful candidate will have the opportunity to expand his/her training in areas of molecular genetics and retrovirology as a member of an established, interactive group in an outstanding Philadelphia institution. Send curriculum vitae and a list of three references to: **Dr. Anna Marie Skalka, Director, Institute for Cancer Research, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Fox Chase Cancer Center is an Equal Opportunity Employer.**

**POSTDOCTORAL/RESEARCH APPOINTMENTS** are occasionally available in the Department of Biochemistry, at Emory University School of Medicine, Atlanta, GA 30322. Appointments are normally made for 1 year, but with the possibility of renewals for a maximum of 2 more years. A description of the research interests of the faculty is available from the department upon request, and highly qualified persons are invited to apply directly to the faculty member with whom they wish to work. If no position is available with that faculty member, the application may be circulated to others in the department with similar research interests. Applications should include a résumé, a brief statement of research interests and goals, and the names and addresses of three references. *Emory University is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATE POSITION** is available to study the molecular basis of organ preference of cancer metastasis. These studies involve the purification and characterization of homing receptors from host endothelial cell surfaces and the control of receptor expression by components of the extracellular matrix. The successful candidate will have a Ph.D. in biochemistry with a strong background in cell surface protein purification techniques. Please send curriculum vitae and three letters of recommendation by 30 September 1988 to: **Dr. Bendicht U. Pauli, Cancer Cell Biology Laboratories, Department of Pathology, Cornell University College of Veterinary Medicine, Ithaca, NY 14853-6401.**

*Cornell University is an Equal Opportunity/Affirmative Action Employer/Educator.*

# Pharmacological Sciences

Genentech, Inc., a leader in the field of biotechnology, is currently seeking the following individuals.

## Scientist

An opportunity is available for an Enzymologist to undertake studies utilizing his/her 2-3 years' post-doctoral experience in enzyme inhibition, isolation and characterization and the development of enzyme inhibition assays. Additional requirements include a BS in Chemistry or Biology, a PhD in Biochemistry and a knowledge of receptor binding techniques/methodologies as well as second messenger studies. Knowledge of HPLC, radioreceptor and *in vivo* assessment of enzyme inhibition techniques is desirable. Reference position #1664.

## Senior Research Associate

We are also seeking an individual to participate in preclinical studies of assessment of IFN-8 as a therapeutic for pulmonary infections in the immunocompromised host. These studies will characterize impairment of macrophage activation during immunosuppression and the ability of IFN-8 to overcome the suppression. Requirements include a BS/MS in Cell Biology, Microbiology, Immunology, Virology or related science and 5-8 years' experience in cell culture techniques including RNA/DNA extraction. Experience with ELISA assays and gel electrophoresis would be a plus. Reference position #2371.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. For consideration, please send your resume, indicating reference number on the outside of the envelope, to Eric Mankuta, Human Resources Department, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

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## EcoScience Laboratories

### CAREER OPPORTUNITIES IN THE BIOLOGICAL CONTROL OF PESTS

EcoScience Laboratories is committed to the development and marketing of ecologically compatible products for the biological control of plant pathogens, insect pests and weed plants.

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**INSECT PATHOLOGIST** - PhD with several years industrial or field experience and knowledge of genetic engineering technologies.

**FERMENTATION BIOCHEMIST**— MS or PhD with industrial experience in developing pilot scale processes.

**Research Associates** (BS/MS) who are interested in a level of responsibility and challenge beyond the norm are also encouraged to apply.

- We are located in beautiful central Massachusetts within a five college community. We offer a competitive salary and benefits package.

Interested parties should send their resumes to:

**Dr. David W. Miller**

**Director of Research and Development**

**EcoScience Laboratories, Inc.**

**PO Box 300, Amherst, MA 01004**

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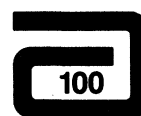
A \$4.4 billion worldwide leader in the health care and related products field, Abbott Laboratories continues to put a heavy emphasis on new product development. Now we're looking for individuals with the ability to manage the fast-pace of new product introductions in our Chemical & Agricultural Products Division. With this challenge, you'll find a career opportunity with a company recognized for exceptional growth and top-quality management.

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One of the candidates we seek will focus on domestic (U.S. and Canada) agricultural regulatory affairs, and the second on international regulatory affairs. A minimum of 7 years experience in Agricultural Product Development and product registration and/or regulatory affairs experience is required. A PhD in Chemistry, Biochemistry, Toxicology, Entomology or Agronomy is desired. The international position requires a minimum of 5 years international experience. Travel will be required for both positions.

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## POSITIONS OPEN

### POSTDOCTORAL RESEARCH ASSOCIATE

A 2-year position is available immediately for a Ph.D. immunologist to work with **Dr. A. Lucas** on projects involving the ontogeny and expression of human cross-reactive idiotypes, the regulation of anti-polysaccharide immunity and idio-type vaccines. Send complete curriculum vitae and the names of three references to: **Children's Hospital Oakland, Research Institute, Human Resources Department 2027, 747 52nd Street, Oakland, CA 94609. Equal Opportunity Employer.**

### POSTDOCTORAL RESEARCH ASSOCIATE

Position available to study the biochemical mechanisms of hormone action in membranes and the cellular mechanisms of urinary acidification. Preference given to Ph.D. in biochemistry with expertise in one or more of the following areas: enzymology, receptor assays, flow cytometry, lipid chemistry. Salary negotiable depending upon expertise; excellent benefits. Send curriculum vitae and the names and addresses of three references to: **Dr. Sandra Sabatini, Department of Internal Medicine, Texas Tech University HSC, Lubbock, TX 79430. An Equal Opportunity Employer.**

**POSTDOCTORAL RESEARCH ASSOCIATE IN CELLULAR IMMUNOLOGY:** to study the role of lymphokines in mucosal immunity, including analyses of lymphokines produced by T cells from several murine lymphoid organs (Peyer's patches, mesenteric lymph nodes, and spleens). Background in basic cellular immunology would be helpful but is not required. Salary range \$20,000 to \$23,000 depending upon qualifications. Send curriculum vitae and names of three references to: **Susan L. Tonkonogy, College of Veterinary Medicine Department of Microbiology, Pathology, and Parasitology, North Carolina State University, 4700 Hillsborough Street, Raleigh, NC 27606.**

### POSTDOCTORAL RESEARCH FELLOW

Postdoctoral training position in molecular pharmacology on regulation of Na-K ATPase gene expression in developing myocardium and relationship to cardiac function.

Interested persons should send curriculum vitae and the names of three references to:

**Dr. Michael R. Rosen  
Department of Pharmacology  
College of Physicians and Surgeons  
Columbia University  
630 West 168th Street  
New York, NY 10032**

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

### POSTDOCTORAL RESEARCH POSITIONS—

Openings exist for two postdoctoral associates within the Department of Pharmacology to study aspects of drug resistance in human cancers. Areas of interest include regulation of glutathione S-transferase, isozyme expression and enzyme characterization in patients before and after drug therapy; studies on microtubule associated proteins (MAP's) and human tumors and in cells with acquired resistance to estramustine.

Send curriculum vitae and three references to: **Dr. Kenneth D. Tew, Chairman, Pharmacology Department, c/o Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.**

**POSTDOCTORAL STUDY IN RADIATION BIOEFFECTS**—The Center for Basic Research in Radiation Bioeffects has an immediate opening in a project examining the interaction between ionizing and nonionizing (microwave) radiation. Expertise in cytogenetics and tissue culture is preferred, but individuals trained in nucleic acid molecular biology or NMR techniques will be considered. The position is for a minimum of 1 year, with the possibility of advancement into a staff position in radiobiology. Send résumé and names and telephone numbers of three references to: **Dr. Martin L. Meltz, Ph.D., CBRB, Department of Radiology, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284. Telephone: 512-567-5560. UTHSCSA is an Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

The Department of Chemistry, Yale University, invites applications for a tenured position at the level of **PROFESSOR** in the area of synthetic or bioorganic chemistry. An outstanding, established teacher-scholar is sought whose research interests will complement those of the current staff. The position is to be occupied in the academic year 1989 to 1990.

Applicants should submit curriculum vitae, and a list of publications to: **Professor Peter B. Moore, Chair, Senior Search Committee, Department of Chemistry, Yale University, 225 Prospect Street, P.O. Box 6666, New Haven, CT 06511-8118 before 30 September 1988. Yale University is an Equal Opportunity/Affirmative Action Employer.**

**PROFESSOR AND HEAD**, Department of Soil Science, University of Minnesota. Qualifications: Ph.D. in soil science or related field; 8 years of professional experience. Send letter of application, 1-page summary of career goals, curriculum vitae, and names of three references by 30 September 1988 to: **George Foster, 213 Agricultural Engineering, University of Minnesota, St. Paul, MN 55108. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

### PROFESSOR OF NEUROSCIENCE

Massachusetts General Hospital and Harvard Medical School are seeking to recruit a Senior Neuroscientist to direct the Neuroscience Unit of the Howard Hughes Medical Institute at the Massachusetts General Hospital. The successful candidate will be appointed as Professor of Neuroscience at Harvard Medical School. The candidate, who should be an international authority in the field of molecular neurobiology, is expected to direct an independent laboratory and to train graduate students and postdoctoral fellows. The search committee invites applications from outstanding candidates. *Women and minority candidates are encouraged to apply.* Applicants should submit curriculum vitae and a statement of research interests to: **Joseph B. Martin, M.D., Ph.D., Department of Neurology, Massachusetts General Hospital, 32 Fruit Street, Boston, MA 02114. Harvard Medical School/Massachusetts General Hospital are Affirmative Action/Equal Opportunity Employers.**

### PROTEIN CHEMIST

The Department of Biological Sciences at Stanford University is seeking a person with a Ph.D. or equivalent experience in protein chemistry to establish and operate a molecular biology service laboratory with primary responsibility for peptide sequencing and synthesis and a supervisory role for nucleic acid synthesis and sequencing. The person will be responsible for operation of the facility, supervision of technical assistants, periodic updating of equipment and techniques, and for providing instruction to faculty and students. Applicants should provide curriculum vitae and the names of three references to: **Professor Richard Scheller, Department of Biological Sciences, Stanford University, Stanford, CA 94305-5020. Stanford University is an Equal Opportunity Employer and encourages applications from minorities and women.**

### RESEARCH Ph.D.

Immediate opening for Ph.D. with interest in basic and clinical research work in cardiac physiology, electrophysiology/biochemistry. The successful candidate should have interest and experience in cardiovascular animal research. Experience in handling various biochemical techniques like HPLC, RIA, spectrophotometry desirable. This challenging position offers opportunity for growth in clinical as well as basic cardiovascular research. Winthrop-University Hospital is a 533-bed teaching affiliate of SUNY, Stony Brook School of Medicine, offering competitive salary, comprehensive benefit package and a professional working environment. The institution has state-of-the-art animal research, electrophysiology, invasive cardiac and cardiac surgical facilities. Send résumé or contact:

**Steven Zeldis, M.D., or Kul D. Chadda, M.D.  
Winthrop-University Hospital  
259 First Street  
Mineola, Long Island, NY 11501**

or call: **The Human Resources Department, Telephone: 516-663-2351.**

*Equal Opportunity Employer M/F/H*

## POSITIONS OPEN

**RESEARCH ASSISTANT/ASSOCIATE** position in the Gastroenterology Division, Department of Medicine, Beth Israel Hospital and Harvard Medical School. Opportunity for biochemical pharmacologist to perform research in the area of gastrointestinal smooth muscle contraction-relaxation and the role of neuropeptides. The candidate should be familiar with the basic techniques in biochemistry and must have an M.S. or Ph.D. degree. The level of appointment will be commensurate with the candidate's experience. Send curriculum vitae to: **Dr. Satish Rattan, Gastroenterology Division, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215. We are an Equal Opportunity/Affirmative Action Employer.**

### RESEARCH ASSOCIATE

The Laser and Applied Technology Laboratory, Charlotte Memorial Hospital and Medical Center, invites applications for a full-time research associate position. The position will involve research in cardiovascular applications of lasers. Individuals applying should have previous experience in small animal cardiac surgery, cardiac catheterization, cardiopulmonary bypass perfusion of canines, and the use of lasers. A 2- or 4-year degree in a related field is also required. Salary range \$24,003.20 to \$36,004.80. Interested applicants should submit curriculum vitae and letters of recommendation by 15 September 1988 to:

**George Tatsis  
Heineman Medical  
Research Laboratory  
P.O. Box 32861  
Charlotte, NC 28232  
Equal Opportunity Employer**

### ASSOCIATE IN RESEARCH DEPARTMENT OF SURGERY

Division of Thoracic Surgery at the Brigham and Women's Hospital has an opening for a research associate to study electrophysiology of gastrointestinal smooth muscle. Applicant should have experience with in-vivo experimentation and chronic animal preparations and basic electrophysiologic techniques. Experience with techniques of blood flow measurement welcome.

Candidates should have a Ph.D. in a related field and capacity for interdisciplinary research and growth. Please send résumé, letter of interest and names of references to: **David J. Sugarbaker, M.D., Chief, Department of Thoracic Surgery, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.**

**RESEARCH BIOLOGIST/POSTDOCTORAL FELLOW** to participate in the study of mechanisms of chemical carcinogenesis. Successful candidate must possess a Ph.D. in biology and must have experience in light, scanning, and transmission electron microscopy, radioisotope techniques, immunohistochemistry and cytochemistry, cell and organ culture, and measurement of morphometric parameters. Duties include establishment and characterization of normal human and animal epithelial cell cultures; in vitro study of transformations of these cultures; elucidation of mechanisms of chemical carcinogenesis; study of the regulation of growth and differentiation of normal and transformed cells; writing research proposals and reports; experimental design; and supervision and training of junior staff. Salary: \$26,400 per year for 40-hour week. Qualified applicants contact: **Mr. George Johns, Alabama State Employment Service, 1816 8th Avenue, North, P.O. Box 12046, Birmingham, AL 35202-2046. Telephone: 205-251-1181. Job Order #A10542755. Affirmative Action/Equal Opportunity Employer.**

**SENSORY NEUROPHYSIOLOGIST:** Tenure-track possibility for position available at assistant professor level. Serious commitment to collaborative work within the Microsurgical Research Center. Expertise required to characterize electrophysiologically the properties of central axons which have regenerated along peripheral nerve implants. Preference given to applicants experienced in spinal cord neurophysiology and tract-tracing and histological techniques. Please send curriculum vitae with three letters of recommendation to: **Dr. Julia K. Terzis, Microsurgical Research Center, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501.**



## INFLAMMATION BIOLOGIST

NOVA PHARMACEUTICAL CORPORATION, a leading Research and Development company in Baltimore, MD, is building a multi-disciplinary team to work on the discovery and development of novel compounds for the treatment of inflammation. The inflammation team has an immediate need for an innovative scientist to contribute expertise especially in the area of *in vivo* models of inflammation. Qualified candidates will possess a PhD in Pharmacology, Immunology, Physiology or related science plus a minimum of 2 years post doctoral experience in inflammation research.

NOVA PHARMACEUTICAL CORPORATION offers a competitive compensation and benefits package which includes relocation. Interested individuals who seek a challenging work environment please send their CV to: L. Faris - IB/LS, Nova Pharmaceutical Corp., 6200 Freeport Centre, Baltimore, MD 21224-2788. EOE.

## UNIVERSITY OF OXFORD

### Readership in Bacteriology

The electors intend to proceed to an election to the Readership in Bacteriology in the Sir William Dunn School of Pathology with effect from 1 October 1989 or such later date as may be arranged. The stipend of the reader is on the scale £20,270 - £22,910.

Applications (ten copies, or one from overseas candidates), naming three referees, should be received no later than 19 September 1988 by the Registrar, University Offices, Wellington Square, Oxford, OX1 2JD, from whom further particulars may be obtained. The University is an equal opportunity employer.

## Food Chemicals Codex

### Senior Program Officer

The Institute of Medicine of the NATIONAL RESEARCH COUNCIL has an immediate opportunity for an individual to organize and manage the Food Chemicals Codex Project. The incumbent will work with a committee of experts to collect and analyze relevant scientific data and draft background reports and monographs. Applicants should have a Ph.D. or equivalent in Chemistry, Food Science, Toxicology, or a related discipline, plus at least 5 years of experience in one of these fields. Good communication skills required. Knowledge of FDA food regulation desirable. The NRC offers a starting salary based upon qualifications, plus an outstanding benefits package including paid relocation to the Washington, D.C. area. Please submit résumé as soon as possible in confidence to:  
**INSTITUTE OF MEDICINE,  
F. Peter, 2101 Constitution  
Avenue N.W.,  
Washington, D.C.  
20418. EOE.**



## Research Fellow PLASTIC SURGERY RESEARCH MD or Ph.D.

Experience in animal research essential. Knowledge and/or experience in plastic surgery preferred. Duties include supervision of an animal laboratory, writing of scientific and clinical protocols and final preparation of manuscripts for publication. An ability to work without supervision is essential. Please send application in writing to: Human Resources Department, **ALLEGHENY GENERAL HOSPITAL, 320 E. North Avenue, Pittsburgh, PA 15212.** An Equal Opportunity Employer.



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## POSTDOCTORAL FELLOW MOLECULAR GENETICS

The Squibb Institute for Medical Research is recognized internationally as a leader in the research and development of novel pharmaceuticals. We have recently established a Molecular Biology Department to study the molecular basis of human cancer. We are offering a postdoctoral fellowship position to study oncogenes and the control of cellular growth and differentiation.

You will conduct research in a laboratory dedicated to the use of model fungal systems to study mammalian oncogenes through their heterologous expression in yeast as well as fungal analogues of mammalian oncogenes. You will also have multiple opportunities for the application of yeast molecular genetics to problems in metazoan cells. Collaboration with scientists at neighboring academic institutions will be encouraged.

This position is based in Princeton, New Jersey, a pleasant semi-rural community located mid-way between New York City and Philadelphia. For consideration, please submit curriculum vitae to: **The Squibb Institute for Medical Research, Human Resources Department 18, P.O. Box 4000, Princeton, New Jersey 08543-4000.** An equal opportunity employer.



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## POSITIONS OPEN

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Repligen Sandoz Research Corporation, a joint venture between Sandoz Ltd., a multi-national company based in Basel, Switzerland, Sandoz Chemical Corporation, its U.S. based division and Repligen Corporation, a biotechnology company located in Cambridge, Massachusetts needs biochemists (Bachelor's, Master's degrees) with experience in protein purification and enzyme kinetics. We are an exciting new company with fantastic opportunities. Our objective is to develop enzymes for the chemical field (mainly for paper, textiles and waste water treatment). Excellent comprehensive benefits program. Very competitive salary.

Please send inquiries and curriculum vitae to: **Dr. Chitra Mishra, Repligen Sandoz Research Corporation, 128 Spring Street, Lexington, MA 02173.**

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**SENIOR RESEARCH ASSOCIATE** for studies of human heritable disorders of connective tissue (HDCT). Required: Ph.D. in biochemistry with at least 10 years of postdoctoral work including three or more years of postdoctoral experience in collagen. Publications as primary author of at least twenty research papers in peer reviewed journals; demonstrated ability to secure research funding as principal investigator; experience in mammalian tissue culture, HPLC, molecular biology and 2D electrophoretic techniques. Teaching and supervision of biochemistry graduate students will be an integral part of the responsibilities. Salary: \$23,484 to \$38,436, commensurate with experience. Send curriculum vitae, three references and current salary to:

**David W. Hollister, M.D.**  
Department of Biochemistry  
Oregon Health Sciences University  
3181 SW Sam Jackson Park Road  
Portland, OR 97201

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The School of Chemical Sciences at the University of Illinois at Urbana-Champaign has openings for two **SPECTROSCOPISTS** in its mass spectrometry laboratory.

Requirements for the first position include a Ph.D. or the equivalent in chemistry or related field, experience with double-focusing mass spectrometers and modern ionization techniques such as CI, FI, FD, and FAB, and in the interpretation of such mass spectra. Experience in the maintenance of mass spectrometers and associated equipment is also highly desirable. Duties, under minimal supervision of the Laboratory Director, will include the operation and maintenance of several double-focusing mass spectrometers, the training of instrument operators, and didactic interaction with students, post-doctoral research associates, and faculty using the facility.

Requirements for the second position include a minimum of an M.S. in chemistry, physics, electrical engineering, or related field, and experience with state-of-the-art double focusing mass spectrometers, including a VG Instruments ZAB-SE, and a familiarity with modern mass spectrometry using ionization techniques such as EI, CI, FI, FD, and FAB. Experience in the maintenance of mass spectrometers and associated equipment is also desirable. Primary duties, under the minimal supervision of the Laboratory Director, will include the operation and routine maintenance of a VG Instruments ZAB-SE mass spectrometer, providing a variety of routine and non-routine mass spectrometric services such as low and high resolution FAB/MS and combined HPLC/FAB/MS.

Both positions are regular, full-time positions. The starting dates are 1 October 1988 but other starting dates can be negotiated. Starting salaries will be commensurate with experience. To apply for either position submit a résumé and three letters of recommendation, preferably by 1 September 1988 to:

**Dr. Richard Milberg**  
School of Chemical Sciences  
Box 51 Noyes Laboratory  
505 South Mathews  
Urbana, IL 61801  
Telephone: 217-333-2545

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

## POSITIONS OPEN

### RESEARCH MANAGER IN WETLANDS ECOLOGY

A full-time research administration position is available in the Division of Wetlands Ecology at the Savannah River Ecology Laboratory (SREL) of the University of Georgia in Aiken, South Carolina. The Research Manager reports to the Head of the Division of Wetlands Ecology and is responsible for the daily management of a large multidisciplinary wetlands research program, including project coordination, contract administration, and report preparation. The Division Head and Research Manager design and manage SREL wetlands research to achieve program goals. Frequent interaction with SREL research faculty and with university, federal, and state personnel is required. Knowledge of federal and state environmental regulations pertaining to wetlands and wildlife, project and personnel management, and contract supervision are essential. Supervisory and communication skills will be weighed heavily in evaluating applicants. Candidates must be U.S. citizens and have Ph.D. degrees and training in ecology or environmental science. Salary is commensurate with qualifications and experience. Applicants should send their résumés, reprints, and the names, and addresses, and telephone numbers of four references by 30 September 1988 to: **Dr. Rebecca R. Sharitz, Head, Division of Wetlands Ecology, Savannah River Ecology Laboratory, Drawer E, Aiken, SC 29802.**

*Equal Opportunity Employer*

Washington State University (WSU) seeks applications for two **STATISTICIAN** positions. These are tenure-track positions at the assistant professor level. Duties will include teaching, research and consulting. Teaching will include courses in applied statistics for graduate and undergraduate students principally in the biological and social sciences area. Providing statistical consulting for research and extension personnel primarily in the College of Agriculture and Home Economics is expected. Independent and/or collaborative research can be in the area of choice. Complete descriptions of the positions and application requirements can be obtained from: **Dr. J. K. Hillers, Program in Statistics, WSU, Pullman, WA 99164-6212. Telephone: 509-335-4022.** Preference will be given to applications received by 1 October 1988. *Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply.*

## COURSE

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## TRAINEESHIP

Applications sought for 3-year-NIH-funded **TRAINEESHIP** to begin 1 July 1989, in multidisciplinary research/studies on dental caries, leading to M.S. or Ph.D. Applicants must be U.S. citizens and hold dental, M.D. or Ph.D. degrees. Stipend range \$15,996 to \$30,000, depending on experience. *Equal Opportunity Employer. Women and minority applicants encouraged.* Contact: **Dr. L. Messer, 18:214 Moos Tower, University of Minnesota School of Dentistry, Minneapolis, MN 55455.**

## FELLOWSHIPS

**ALZHEIMER DISEASE—NEURODEGENERATIVE DISORDERS—POSTDOCTORAL FELLOWSHIP:** Positions (two), University of Rochester, starting August 1988 to Spring 1989; M.D.'s or Ph.D.'s in relevant disciplines including cell biology or molecular biology. Send curriculum vitae to: **Robert W. Hamill, M.D., Neurology Department, University of Rochester, 601 Elmwood Avenue, Rochester, NY 14642.**

## POSITIONS OPEN

**VETERINARY PATHOLOGISTS.** The Department of Veterinary Microbiology and Pathology, Washington State University, seeks two veterinary pathologists for full-time tenure-track appointments. Both positions offer 50% time for research, and the successful candidates will be expected to develop extramurally-supported research programs in areas compatible with existing departmental programs in infectious diseases, host-parasite interactions, and animal models of human disease. One position carries a 50% classroom teaching commitment. The other has a 50% pathology service appointment to the Washington Animal Disease Diagnostic Laboratory. D.V.M. and Ph.D. degrees are required. ACVP certification is desired, and intention to pursue ACVP certification is required. Rank and salary commensurate with training and experience. Applicants should submit curriculum vitae and names and addresses of three references to: **Dr. L. E. Perryman, Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, WA 99164-7040, by 15 November 1988.**

*WSU is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply. WSU employs only citizens and lawfully authorized non United States citizens. All new employees must show employment eligibility verification as required by the United States Immigration and Naturalization Service.*

## FELLOWSHIPS

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Positions are immediately available and are funded through a national research training program. Applicants must have U.S. citizenship or permanent residency and have completed a Ph.D. degree or equivalent. Candidates should send curriculum vitae and three letters of recommendation to: **Dr. Peter J. Stambrook, Department of Anatomy and Cell Biology, University of Cincinnati College of Medicine, Cincinnati, OH 45267. An Equal Opportunity/Affirmative Action Employer.**

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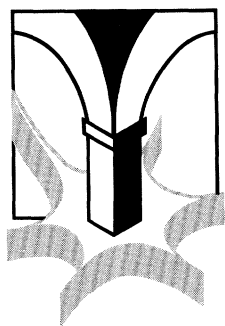
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Additional information about applications and travel grants can be obtained from L. Linzi - P.O.B. 818 - 35100 Padova-Italy

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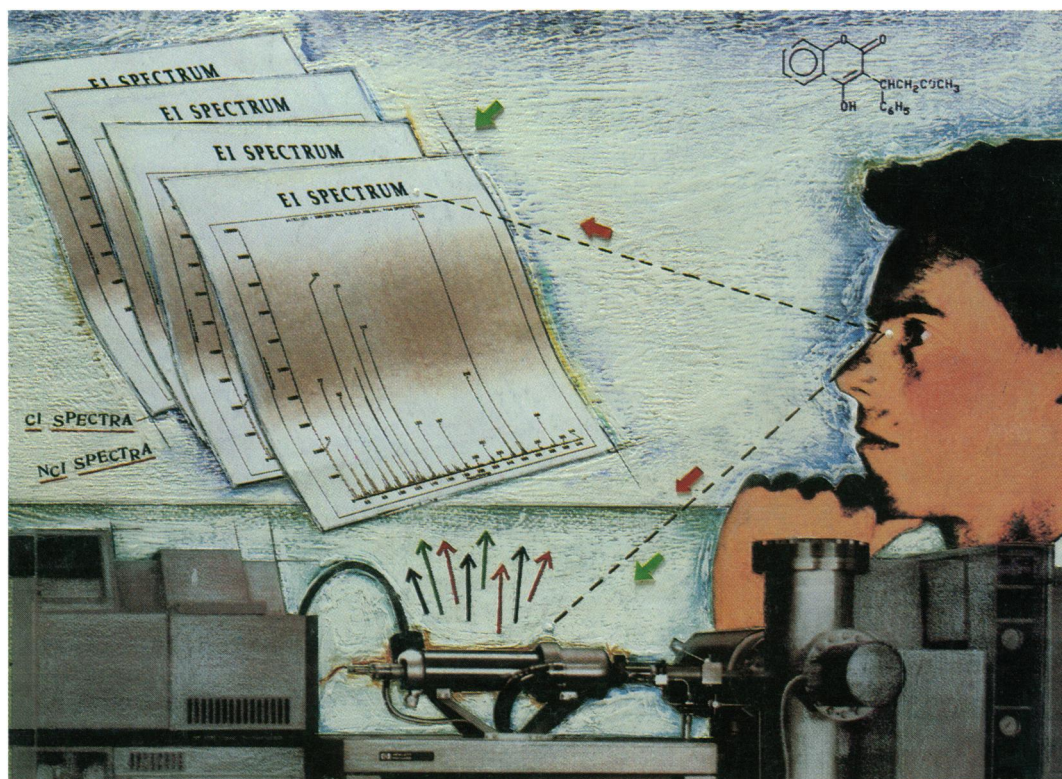
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