

topical review of work in progress. Because its conceptual themes are of general concern it should be read with enthusiasm by evolutionary ecologists and geneticists of all stripes.

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## Books Received

- AIDS.** Public Policy Dimensions. John Griggs, Ed. United Hospital Fund of New York, New York, 1987. xxvi, 308 pp., illus. Paper, \$30. Based on a conference, New York, Jan. 1986.
- Algal Development.** Molecular and Cellular Aspects. W. Wiessner, D. G. Robinson, and R. C. Starr, Eds. Springer-Verlag, New York, 1987. viii, 188 pp., illus. \$52. Proceedings in Life Sciences. From a symposium, Göttingen, F.R.G., Sept. 1986.
- Animal Models of Dementia.** A Synaptic Neurochemical Perspective. Joseph T. Coyle, Ed. Liss, New York, 1987. xvi, 313 pp., illus. \$98. Neurology and Neurobiology, vol. 33.
- Biology of Stress in Farm Animals.** An Integrative Approach. P. R. Wiekema and P. W. M. van Andrichem, Eds. Nijhoff, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). viii, 198 pp., illus. \$62.90. Current Topics in Veterinary Medicine and Animal Science. From a seminar, Oosterbeek, The Netherlands, April 1986.
- Biotechnology.** The Biological Principles. M. D. Trevan *et al.* Open University Press, Milton Keynes, U.K., and Taylor and Francis, Philadelphia, 1987. xiv, 256 pp., illus. Paper. \$22. The Biotechnology Series.
- Biotechnology of Mammalian Cells.** Development for the Production of Biologicals. Makoto Umeda *et al.*, Eds. Japan Scientific Societies Press, Tokyo, and Springer-Verlag, New York, 1987. xviii, 190 pp., illus. \$55.
- The Birds of Israel.** Uzi Paz. Greene, Lexington, MA, 1987 (distributor, Viking Penguin, New York). viii, 264 pp., illus., + plates. \$26.95. Translated from the Hebrew edition (Tel Aviv, 1987).
- Circumstellar Matter.** I. Appenzeller and C. Jordan, Eds. Reidel, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). xxiv, 607 pp., illus. \$109. International Astronomical Union Symposium no. 122 (Heidelberg, F.R.G., June 1986).
- The Clinical Pharmacology of Anti-Inflammatory Agents.** Peter M. Brooks, Walter F. Kean, and W. Watson Buchanan. Taylor and Francis, Philadelphia, 1986. x, 152 pp., illus. \$29.
- The CO<sub>2</sub> Laser.** W. J. Witteman. Springer-Verlag, New York, 1987. xii, 309 pp., illus. \$59.50. Springer Series in Optical Sciences, vol. 53.
- Coal.** The Energy Source of the Past and Future. Harold H. Schobert. American Chemical Society, Washington, DC, 1987. xiv, 298 pp., illus. \$29.95; paper, \$19.95.
- Commercial Production of Monoclonal Antibodies.** A Guide for Scale-Up. Sally S. Seaver, Ed. Dekker, New York, 1987. xx, 327 pp., illus. \$99.75. Bioprocess Technology, vol. 2.
- Computability Theory, Semantics, and Logic Programming.** Melvin Fitting. Clarendon (Oxford University Press), New York, 1987. xii, 198 pp., illus. \$35. Oxford Logic Guides, 13.
- Conduction in Non-Crystalline Materials.** Nevill Mott. Clarendon (Oxford University Press), New York, 1987. viii, 128 pp., illus. \$32.50. Intended as "an introduction both for students of experiment and of theory," this primarily theoretical treatment of conduction in a variety of non-crystalline solids updates and extends Mott's earlier books.
- Design Considerations for Toxic Chemical and Explosives Facilities.** Ralph A. Scott, Jr., and Laurence J. Doemeny, Eds. American Chemical Society, Washington, DC, 1987. viii, 318 pp., illus. \$64.95. ACS Symposium Series, 345. Based on a symposium, New Orleans, LA, Aug.-Sept. 1987.
- Development of the Avian Embryo.** James Metcalfe, Michael K. Stock, and Rolf L. Ingberman, Eds. Liss, New York, 1987. xvi, 376 pp., illus. \$79.50. From a symposium, Victoria, British Columbia, July 1986.
- Discovering Mathematics.** The Art of Investigation. A. Gardiner. Clarendon (Oxford University Press), New York, 1987. xiv, 206 pp., illus. \$35; paper, \$19.95.
- Earthquakes.** Bruce A. Bolt. Freeman, New York, 1987. xx, 282 pp., illus. \$25.95; paper, \$13.95. Revision of *Earthquakes: A Primer*.
- The Edge of Fire.** Volcano and Earthquake Country in Western North America and Hawaii. Robert Wenkam. Sierra Club, San Francisco, 1987. xiv, 161 pp., illus. \$35.
- Edible Wild Plants of the Prairie.** An Ethnobotanical Guide. Kelly Kindscher. University Press of Kansas, Lawrence, KS, 1987. x, 276 pp., illus. \$25; paper, \$9.95.
- Einstein's Legacy.** The Unity of Space and Time. Julian Schwinger. Scientific American Books, New York, 1987 (distributor, Freeman, New York). xiv, 250 pp., illus. \$32.95. Scientific American Library, vol. 16.
- Fermentation Kinetics and Modelling.** C. G. Sinclair and B. Kristiansen. Open University Press, Milton Keynes, U.K., and Taylor and Francis, Philadelphia, 1987. xii, 113 pp., illus. Paper, \$22. The Biotechnology Series.
- A Field Guide to Seabirds of the World.** Peter Harrison. Greene, Lexington, MA, 1987 (distributor, Viking, New York). 317 pp., illus. \$24.95. Reprint, 1987 edition.
- Guide to China's Science and Technology Policy, 1986.** State Science and Technology Commission of the People's Republic of China. China Academic Publishers, Beijing, 1987 (U.S. distributor, Pergamon, Elmsford, NY). viii, 434 pp., illus. \$130. White Paper on Science and Technology, no. 1.
- Guidance and Control 1987.** Robert D. Culp and Terry J. Kelly, Eds. Published for the American Astronautical Society by Univelt, San Diego, CA, 1987. xvi, 622 pp., illus. \$75; Paper, \$60. Advances in the Astronautical Sciences, vol. 63. From a conference, Keystone, CO, Jan.-Feb. 1987.
- Health-Related Water Microbiology 1986.** W. O. K. Grabow, Ed. Pergamon, Elmsford, NY, 1986. x, 268 pp., illus. Paper, \$52. *Water Science and Technology*, vol. 18, no. 10 (1986). From a seminar, Rio de Janeiro, Aug. 1986.
- Heartwood and Tree Exudates.** W. E. Hillis. Springer-Verlag, New York, 1987. xiv, 268 pp., illus. \$89. Springer Series in Wood Science.
- Islands.** H. W. Menard. Scientific American Books, New York, 1987 (distributor, Freeman, New York). xvi, 230 pp., illus. \$32.95. Scientific American Library, vol. 17.
- Iwasawa Theory of Elliptic Curves with Complex Multiplication.**  $p$ -adic  $L$  Functions. Ehud de Shalit. Academic Press, Orlando, FL, 1987. x, 154 pp. \$19.50. Perspectives in Mathematics, vol. 3.
- Lattice Gauge Theory '86.** Helmut Satz, Isabel Harriety, and Jean Portvin, Eds. Plenum, New York, 1987. xii, 430 pp., illus. \$79.50. NATO Advanced Science Institutes Series B, vol. 159. From a workshop, Upton, NY, Sept. 1986.
- Liquid Membranes.** Theory and Applications. Richard D. Noble and J. Douglas Way, Eds. American Chemical Society, Washington, DC 1987. x, 196 pp., illus. \$49.95. ACS Symposium Series, 347. Based on a symposium, Denver, CO, June 1986.
- Lister Ward.** Martin Goldman. Hilger, Bristol, U.K., 1987 (U.S. distributor, Taylor and Francis, Philadelphia). xii, 167 pp., illus. \$28. First-hand accounts, with commentary, of "what it was like to be a patient in . . . the Edinburgh Royal Infirmary . . . when Joseph Lister was pioneering the use of antiseptics."
- The Mammals of Britain and Europe.** Anders Bjärvall and Staffan Ullström. Croom Helm, London, 1986 (U.S. distributor, Viking Penguin, New York). 240 pp., illus. \$39.95. Translated from the Swedish by David Christie.
- Metabolism and Action of Anti-Cancer Drugs.** Garth Powis and Russell A. Prough, Eds. Taylor and Francis, Philadelphia, 1987. xvi, 336 pp., illus. \$69.
- Methods for Studying Platelets and Megakaryocytes.** Robert W. Colman and J. Bryan Smith, Eds. Liss, New York, 1987. x, 308 pp., illus. \$70. Modern Methods in Pharmacology, vol. 4.
- Methods of Preparation for Electron Microscopy.** An Introduction for the Biomedical Sciences. D. G. Robinson *et al.* Springer-Verlag, New York, 1987. xviii, 190 pp., illus. Paper, \$39.50. Translated from the German.
- Modern Sedimentation in the Coastal and Near-shore Zones of China.** Ren Mei-c, Ed. China Ocean Press, Beijing, and Springer-Verlag, New York, 1986. vi, 466 pp., illus. \$136.
- Molecular Mechanisms in the Regulation of Cell Behavior.** Charity Waymouth, Ed. Liss, New York, 1987. xxvi, 331 pp., illus. \$49.50. Modern Cell Biology, vol. 5. From a conference, Hershey, PA, Sept. 1986.
- The Mute Swan.** Mike Birkhead and Christopher Perrins. Croom Helm, London, 1987 (U.S. distributor, Viking Penguin, New York). xiv, 157 pp., illus. \$36.95.
- Neurobiology and Behavior of Honeybees.** Randolph Menzel and Alison Mercer, Eds. Springer-Verlag, New York, 1987. xiv, 334 pp., illus. \$69.
- Neurotoxins and Their Pharmacological Implications.** A Biological Council Symposium. (London, April 1986.) Peter Jenner, Ed. Raven, New York, 1987. xviii, 297 pp., illus. \$45.
- Neurotrophic Activity of GABA During Development.** Dianna A. Redburn and Arne Schousboe, Eds. Liss, New York, 1987. xii, 277 pp., illus. \$66. Neurology and Neurobiology, vol. 32. Based on a symposium, Mexico City, July 1986.
- Nitrogen-Fixing Bacteria in Nonleguminous Crop Plants.** Johanna Döbereiner and Fábio O. Pedrosa. Science Tech, Madison, WI, and Springer-Verlag, New York, 1987. xii, 155 pp., illus. \$37. Brock/Springer Series in Contemporary Bioscience.
- Nuclear Blackmail and Nuclear Balance.** Richard K. Betts. Brookings Institution, Washington, DC, 1987. xii, 240 pp. \$28.95.
- Nucleic Acids and Molecular Biology.** Vol. 1. Fritz Eckstein and David M. J. Lilley, Eds. Springer-Verlag, New York, 1987.
- Oncology and Immunology of Down Syndrome.** Ernest E. McCoy and Charles J. Epstein, Eds. Liss, New York, 1987. xiv, 242 pp., illus. \$49.50. Progress in Clinical and Biological Research, vol. 246. From a symposium, New York, Dec. 1986.
- One-Dimensional Organometallic Materials.** An Analysis of Electronic Structure Effects. M. D. Böhm. Springer-Verlag, New York, 1987. iv, 181 pp., illus. Paper, \$22.90. Lecture Notes in Chemistry, 45.
- The Origin and Evolution of Neutron Stars.** D. J. Helfand and J.-H. Huang, Eds. Reidel, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). xxviii, 572 pp., illus. \$99. International Astronomical Union Symposium no. 125. (Nanjing, China, May 1986.)
- Palaeomagnetism and the Continental Crust.** J. D. A. Piper. Open University Press, Milton Keynes, U.K., and Halsted (Wiley), New York, 1987. xiv, 434 pp., illus. \$59.95.
- Pattern Recognition and Image Processing.** Fred Aminzadeh, Ed. Geophysical Press, London, 1987 (distributor, Expro Science Publications, Amsterdam). x, 568 pp., illus. \$75. Handbook of Geophysical Exploration, section 1, vol. 20.
- Pharmaceutical Technology.** Controlled Drug Release, Vol. 1. M. H. Rubinstein, Ed. Horwood, Chichester, U.K., and Halsted (Wiley), New York, 1987. 126 pp., illus. \$57.95. Ellis Horwood Books in Biological Sciences. Based on a conference, Harrogate, U.K., April 1986.
- Photomacrography.** An Introduction. William White, Ed. Focal, Stoneham, MA, 1987. xviii, 221 pp., illus. \$49.95.
- Physical Measurements.** Joel F. Liebman and Arthur Greenberg, Eds. VCH, New York, 1987. xiv, 388 pp., illus. \$77.50. Molecular Structure and Energetics, vol. 2.
- Physical Properties of Foods and Food Processing Systems.** M. J. Lewis. Horwood, Chichester, U.K., and VCH, New York, 1987. 465 pp., illus. \$106. Ellis Horwood Series in Food Science and Technology.
- Physicians Observed.** David R. Slavitt. Doubleday, Garden City, NY, 1987. xvi, 268 pp. \$17.95.
- Physics in Collision.** 6. M. Derrick, Ed. World Scientific, Singapore, 1987 (U.S. distributor, Taylor and Francis, Philadelphia). x, 542 pp., illus. \$79. From a meeting, Chicago, IL, Sept. 1986.
- Plastics Engineering.** R. J. Crawford. 2nd ed. Pergamon, Elmsford, NY, 1987. x, 354 pp., illus. \$63; paper, \$29.
- The Pleistocene Old World.** Regional Perspectives. Olga Soffer, Ed. Plenum, New York, 1987. xxii, 380 pp., illus. \$39.50. Interdisciplinary Contributions to Archaeology. Based on a symposium, Denver, CO, May 1985.
- Principles of Antennas.** Wire and Aperture. T. S. M. Maclean. Cambridge University Press, New York, 1986. xii, 360 pp., illus. \$79.50.
- Principles of Dynamics.** Donald T. Greenwood. 2nd ed. Prentice-Hall, Englewood Cliffs, NJ, 1988. viii, 552 pp., illus. \$48.95.
- Principles of Statistical Radiophysics.** Vol. 1, Elements of Random Process Theory. S. M. Rytov, Yu. A. Kravtsov, and V. I. Tatarskii. Springer-Verlag, New York, 1987. x, 253 pp. \$69. Translated from the Russian edition (Moscow, 1976).
- The Properties of Nuclei.** G. A. Jones. 2nd ed. Clarendon (Oxford University Press), New York, 1987. xii, 193 pp., illus. \$39.95; paper, \$19.95. Oxford Physics Series, 12.

**Proteins at Interfaces.** Physicochemical and Biochemical Studies. John L. Brash and Thomas A. Horbett, Eds. American Chemical Society, Washington, DC, 1987. x, 706 pp., illus. \$109.95. ACS Symposium Series, 343. From a symposium, Anaheim, CA, Sept. 1986.

**The Psychology of Illustration.** Vol. 2, Instructional Issues. Harvey A. Houghton and Dale M. Willows, Eds. Springer-Verlag, New York, 1987. xvi, 196 pp., illus. \$53.

**Pulmonary Endothelium in Health and Disease.** Una S. Ryan, Ed. Dekker, New York, 1987. xviii, 503 pp., illus. \$125. Lung Biology in Health and Disease, vol. 32.

**Receptors and Ion Channels.** Y. A. Ovchinnikov and F. Hucho, Eds. De Gruyter, Hawthorne, NY, 1987. xii, 351 pp., illus. DM 220. From a symposium, Tashkent, U.S.S.R., Oct. 1986.

**Relaxation Phenomena in Condensed Matter Physics.** Sushanta Dattagupta. Academic Press, Orlando, FL, 1987. xvi, 309 pp., illus. \$39.50.

**Remote Sensing Applications in Meteorology and Climatology.** Robin A. Vaughan, Ed. Reidel, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). xvi, 480 pp., illus. \$99. NATO Advanced Science Institutes Series C, vol. 21. From an institute, Dundee, Scotland, Aug.-Sept. 1986.

**Resonance Ionization Spectroscopy 1986.** G. S. Hurst and C. Grey Morgan, Eds. Institute of Physics, Bristol, U.K., 1987 (U.S. distributor, Taylor and Francis, Philadelphia). xii, 369 pp., illus. \$77. Institute of Physics Conference Series, no. 84. From a symposium, Swansea, Wales, Sept. 1986.

**Roads to Commensurability.** David Pearce. Reidel, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). xii, 253 pp. \$59. Synthese Library, vol. 187.

**Scholars' Guide to Washington, D.C., for Cartography and Remote Sensing Imagery.** Ralph E. Ehrenberg. Smithsonian Institution Press, Washington, DC, 1987. xx, 385 pp. \$29.95; paper, \$15. Scholars' Guide to Washington, DC, no. 12.

**Science Education and Information Transfer.** C. A. Taylor, Ed. Published for the ISCU Press by Pergamon, Elmsford, NY, 1987. x, 230 pp., illus. \$27.50; paper, \$16.95. Science and Technology Education and Future Human Needs, vol. 9. Based on a conference, Bangalore, India, Aug. 1985.

**Search for the Causes of Schizophrenia.** H. Häfner, W. F. Gattaz, and W. Janzarik, Eds. Springer-Verlag, New York, 1987. x, 389 pp., illus. \$78. From a symposium, Heidelberg, F.R.G., Sept. 1986.

**Silent Boundaries.** Cultural Constraints on Sickness and Diagnosis of Iranians in Israel. Karen L. Pliskin. Yale University Press, New Haven, CT, 1987. xii, 283 pp. \$25.

**Social Psychology.** Solomon E. Asch. Oxford University Press, New York, 1987. xxii, 646 pp., illus. Paper, \$39.95. Reprint, 1952 edition.

**Solid State Devices 1986.** D. F. Moore, Ed. Institute of Physics, Bristol, U.K., 1987 (U.S. distributor, Taylor and Francis, Philadelphia). viii, 201 pp., illus. \$50. Institute of Physics Conference Series, no. 82. From a conference, Cambridge, U.K., Sept. 1986.

**Solid State Science.** Past, Present and Predicted. D. L. Weaire and C. G. Windsor, Eds. Hilger, Bristol, U.K., 1987 (U.S. distributor, Taylor and Francis, Philadelphia). xviii, 308 pp., illus. Paper, \$33.

**Structure and Dynamics of Bipolymers.** C. Nicolini, Ed. Nijhoff, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). x, 268 pp., illus. \$74. NATO Advanced Science Institutes Series E, no. 133. From an institute, Erice, Italy, June-July 1986.

**Structure and Function of Eukaryotic Chromosomes.** W. Hennig, Ed. Springer-Verlag, New York, 1987. xiv, 325 pp., illus. \$120. Results and Problems in Cell Differentiation, vol. 14. Based on a symposium, Tübingen, 1986.

**Teichmüller Theory and Quadratic Differentials.** Frederick P. Gardiner. Wiley-Interscience, New York, 1987. xviii, 236 pp. \$46.95. Pure and Applied Mathematics.

**Telecommunications in Turmoil.** Technology and Public Policy. Gerald R. Faulhaber. Ballinger (Harper and Row), Cambridge, MA, 1987. xviii, 186 pp. \$26.95.

**Theory of Dielectrics.** Dielectric Constant and Dielectric Loss. H. Fröhlich. 2nd ed. Clarendon (Oxford University Press), New York, 1987. viii, 192 pp., illus. Paper, \$24.95. Monographs on the Physics and Chemistry of Materials. Reprint, 1958 edition.

**Thinking.** The Second International Conference. (Cambridge, MA, Aug. 1984.) D. N. Perkins, Jack Lochhead, and John Bishop, Eds. Erlbaum, Hillsdale, NJ, 1987. xvi, 555 pp., illus. \$59.95.

**To Be or Not To Be Human.** The Traits of Human Nature. Ben Freedman. Vantage, New York, 1987. xii, 525 pp. \$20.

**Towards Holistic Agriculture.** A Scientific Approach. R. W. Widdowson. Pergamon, Elmsford, NY, 1987. xii, 187 pp., illus. \$22.95.

**Tributes to Paul Dirac.** J. G. Taylor, Ed. Hilger, Bristol, U.K., 1987 (U.S. distributor, Taylor and Francis, Philadelphia). x, 123 pp., illus. \$22. Based on a meeting, Cambridge, U.K., April 1985.

**USAN and the USP Dictionary of Drug Names.** Mary C. Griffiths, Ed. United States Pharmacopoeial Convention, Rockville, MD, 1987. 708 pp., illus. Paper, \$69.50.

**The Utilization of Secondary and Trace Elements in Agriculture.** United Nations Economic Commission for Europe and Food and Agriculture Organization. Nijhoff, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). vi, 299 pp., illus. \$69. Developments in Plant and Soil Sciences, vol. 29. From a symposium, Geneva, Jan. 1987.

**Vector Calculus.** Peter Baxandall and Hans Liebeck. Clarendon (Oxford University Press), New York, 1986. x, 550 pp., illus. \$49.95. Oxford Applied Mathematics and Computing Science Series.

**Vectors and Vector Operators.** P. G. Dawber. Hilger, Bristol, U.K., 1987 (U.S. distributor, Taylor and Francis, Philadelphia). viii, 56 pp., illus. Paper, \$8. Student Monographs in Physics.

**Wild Animals I Have Known.** Ernest Thompson Seton. Viking Penguin, New York, 1987. xxvi, 358 pp., illus. Paper, \$7.95. The Penguin Nature Library, Reprint, 1898 edition.

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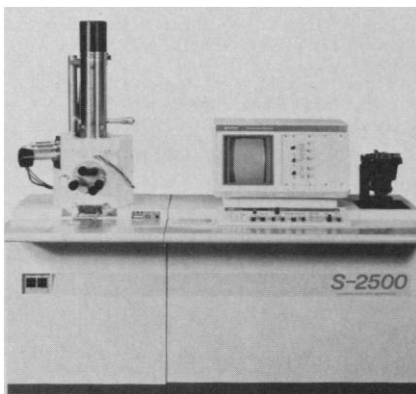
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*Laboratory Fluidized Baths* is a short catalog that explains the advantages of fluidized dry aluminum oxide powder over conventional liquids in laboratory baths. Technet. Circle 539.

*Eupergit* is a wall chart that describes a matrix for immobilization and applications as a carrier for covalent immobilization and as a derivative for biocatalysis and liquid chromatography. Accurate Chemical and Scientific. Circle 540.

*Minigam II* is a brochure about a software package that performs gamma-ray analysis of spectra acquired from a germanium detector. EG&G Ortec. Circle 541.

*Electrical Noise . . . Causes, Effects, Solutions* is a book that discusses characteristics of electrical noise, effects of high-voltage and low-voltage surges, and grounding, shielding, and filtering. Topaz. Circle 542.

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Send copy for all **Positions Wanted** ads and **Line Classified** ads less than 1/6 page in size (39 lines) to:

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1333 H Street, NW, Room 940  
Washington, DC 20005  
Telephone: 202-326-6555

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1333 H Street, NW  
Washington, DC 20005

## POSITIONS WANTED

**Cell/Molecular Biologist, Ph.D.** Interests in oncogenes, growth factors, gene expression, cell-cell adhesion and cell-matrix interactions. Extensive experience in tissue culture and cell growth and also in protein detection methods (antibodies, Western blots, etc.), Northern/Southern blots, DNA probes, screening libraries, in vitro translation. Seeks faculty level academic or appropriate industrial position. Will relocate. Box 192, **SCIENCE**.

**Clinical Research Associate—M.S.** Seven years of experience in medical research and Phase II-III pharmaceutical clinical trials. Experience in clinical trials methodology and administration, clinical data collection and data processing. Skills include statistics and SAS programming. Box 184, **SCIENCE**.

**D.V.M. (1980) M.Sc. (1987).** Reproductive physiology looking for an opportunity in industry or academia. Interested in toxicology. Box 193, **SCIENCE**.

## POSITIONS WANTED

**Environmental Toxicologist, Ph.D.** Managerial and research experience. Expertise in efficient biomonitoring and permitting, hazardous wastes, toxicity testing, water quality evaluation, environmental safety assessment and management of contract research. Seeking regulatory, industry, or contract lab position. Box 194, **SCIENCE**.

**Industrial Microbiologist/Protein Biochemist (Ph.D.)** in microbiology, B.S. in chemical engineering, 5 years of industrial experience in bacterial and fungal fermentation development and scale-up, protein purification and analysis, enzymology, assay development, process layout, and fermenter design. Seeks hands-on industrial position in process development of fermentation and/or protein purification systems. Prefers west coast location. Box 195, **SCIENCE**.

**Molecular Biologist, Ph.D. 1979.** Postdoctoral and 3 years of industrial research. Recombinant DNA and cloning experience. Seeks industrial research. Box 164, **SCIENCE**.

**Molecular Geneticist, Ph.D. (1984).** Just completed 3-year NIH postdoctoral fellowship. Seeks teaching/research (genetics, developmental biology), administrative or development (capital campaign) position. Trained to use Macintosh computer for word processing and desktop publishing. Box 196, **SCIENCE**.

**Ph.D. Biopsychology (1986);** 2 years of NRSA postdoctoral in biochemical pharmacology with teaching experience in neuroscience/psychology. Research in opioid, serotonin receptor pharmacology; neural/behavioral mechanisms of pain/analgesia; neural development and regeneration. Seeks assistant professorship with commitment to teaching and research. Box 197, **SCIENCE**.

**Ph.D. in Microbiology** seeks free-lance work editing medical or basic sciences textbooks. Box 198, **SCIENCE**.

**Virology/Immunology, Ph.D.** Thirty years of pharmaceutical industry R&D experience; developing human vaccines, other biological products. Planning, implementing clinical protocols to support licensing of new products, with statistical analysis, publication of results. Laboratory director, contract management. Seeking consultancy arrangement/professional assignments in areas of experience. Box 199, **SCIENCE**.

## POSITIONS OPEN

**ANATOMY—DEPARTMENT CHAIRMAN,** Dental School, University of Maryland at Baltimore: position available 1 July 1988. Applicant must have Ph.D. or Ph.D./D.D.S., extensive administrative and teaching experience, a record of externally funded research, substantial publications and a record of successful direction of M.S./Ph.D. candidates. *Equal Opportunity/Affirmative Action Employer.* Submit a letter of application, curriculum vitae, and three letters of references by 1 March 1988 to: **Dr. Charles B. Leonard, Jr., Chairman, Department of Biochemistry, Dental School, 666 West Baltimore Street, Baltimore, MD 21201.**

## ASSISTANT PROFESSOR ANIMAL VIROLOGIST

The Department of Microbiology and the College of Medicine at the University of Illinois, Champaign-Urbana campus are seeking a candidate for a full-time tenure-track position in animal virology at the assistant professor level. Starting date is August 1988. Applicants should have a Ph.D. or M.D. degree with extensive postdoctorate experience in molecular and cellular biology of viral infections. The successful candidate will be expected to develop a strong research program with external funding. Teaching responsibilities will be to medical and graduate students. Salary commensurate with qualifications. Submit curriculum vitae and three letters of recommendation to: **Dr. M. E. Reichmann, Department of Microbiology, University of Illinois, 131 Burrill Hall, 407 South Goodwin, Urbana, IL 61801. Telephone: 217-333-2196.** Deadline for applications is 1 February 1988. Interviews may be conducted prior to 1 February 1988, but all applications received by that date will be given full consideration. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### ARTHROPOD POPULATION GENETICIST

Tenure-track, 12-month, assistant professorship with research emphasis on ecological genetics of resistance to biocides and teaching responsibility for "Ecological Genetics" and "Genetics of Pest Management." Ph.D. in entomology or related field and experience in arthropod population genetics. 1 February 1988, closing date; 1 April 1988, availability. Forward curriculum vitae, details of professional interests, reprints, transcripts, and addresses of four references to: **Genetics Committee, Department of Entomology, P.O. Drawer EM, Mississippi State University, Mississippi State, MS 39762; telephone: 601-325-2085.** *Mississippi State University is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT/POSTGRADUATE RESEARCH PHYSIOLOGIST.** Ph.D. in biochemistry, physiology, or biology required. Experience in phosphoinositide metabolism, cytosolic  $Ca^{2+}$  or C-kinase to study their roles in the  $Cl^{-}$  secretory process in cultured epithelial cells. Salary set within UCSD research series salary scale. Apply by 1 February 1988 to: **Dr. Kiertisin Dharmasathaphorn, Department of Medicine, Division of Gastroenterology, H-811D, UCSD Medical Center, 225 Dickinson Street, San Diego, CA 92103.** *Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT PROFESSOR—**The Biology Department invites applications for a tenure-track position in plant ecology effective 1 July 1988. Teaching responsibilities include quantitative ecology, botany, participation in the department's core curriculum and involvement in the Colleges' general curriculum. Expertise in biostatistics and computer science is very desirable. An on-going research program that is amenable to majors is essential. Applicants must have the Ph.D. degree conferred by the starting date. Applications containing curriculum vitae, statements of teaching and scholarship goals and three letters of recommendation should be sent by 15 January 1988 to: **Dr. Valerie M. Kish, Biology Department, Hobart and William Smith Colleges, Geneva, NY 14456.**

*An Equal Opportunity/Affirmative Action Employer.*

### RENAL PHYSIOLOGY DEPARTMENT OF MEDICINE MEDICAL COLLEGE OF PENNSYLVANIA

Applications invited for a position in renal physiology, assistant or associate professor level. Candidates expected to maintain an active, independent research program, and engage in limited teaching of medical students. The department offers stimulating environment and well-equipped facilities. Submit curriculum vitae, statement of current research activities and future plans to: **Sandra P. Levison, M.D., Chief, Division of Nephrology and Hypertension, Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, PA 19129.**

**ASSISTANT PROFESSOR, IMMUNOLOGY.** Physician/scientist with strong research credentials in cytokines and allergic hypersensitivity reactions, M.D. and Ph.D., 3 years of postdoctoral training and ability to conduct independent research. Annual salary: approximately \$40,000. Send curriculum vitae, future research plans and three references to: **J. Andrew Grant, M.D., Adult Allergy, University of Texas Medical Branch, Galveston, TX 77550.** *An Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR OF BIOLOGY

The Colorado College seeks a terrestrial and/or aquatic plant ecologist with strength in field biology. This is a tenure-track position at the assistant professor level, starting 1 August 1988. Ph.D. required. Applicant will teach undergraduate courses in botany, organismic biology, ecology, and areas of specialization. Applicant is also expected to maintain an active, student-centered research program. The Colorado College is a private, undergraduate liberal arts institution enrolling approximately 1850 students. Send letter of application describing teaching and research interests, curriculum vitae, copies of publications, official transcripts, and three letters of recommendation to: **W. G. Heim, Chair, Department of Biology, Colorado College, Colorado Springs, CO 80903,** prior to 31 January 1988. *Colorado College is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

## POSITIONS OPEN

**1) ASSISTANT PROFESSOR AND 2) PROJECT COORDINATOR BOTH IN NUTRITIONAL SCIENCES:** The University of Wisconsin-Madison seeks two individuals with Ph.D.'s in nutritional sciences or closely related area with training in social science aspects of nutrition, especially economic policy, epidemiology, international programs, public health, nutrition assessment, or nutrition education. The individual sought for tenure-track faculty position will be responsible for teaching the social science aspects of nutrition, and establishing an independent research program. The other individual is sought to coordinate a large multidisciplinary project in nutrition education for 3 years. Applicants should send letter, curriculum vitae and three letters of recommendation to: **J. L. Greger, Department of Nutritional Sciences, 1415 Linden Drive, University of Wisconsin, Madison, WI 53706. Telephone: 608-262-2727.** Closing date: 1 February 1988 or until acceptable candidate is found. *An Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR CANCER PHARMACOLOGY

The Department of Pharmacology, University of Tennessee-Memphis College of Medicine, currently has available a tenure-track position at the assistant professor level for a basic scientist working in areas related to tumor biology, pharmacology, or biochemistry. Applications are invited from outstanding individuals with research interests and experience in the genetic control of resistance or other aspects of tumor resistance having potential therapeutic implication. Special consideration will be given to candidates who can apply modern constructs of molecular biology to their research approaches in these areas. Applicants must have a doctoral degree, have completed at least 2 years of postdoctoral training, and have a demonstrated record of productivity and the ability to conduct independent research. The candidate selected for this position will be expected to develop a strong laboratory program, to participate in departmental teaching activities, and to contribute interactively to the campus-wide Cancer Center program. Excellent laboratory space and start-up funds are available. The closing date for receipt of applications is 31 January 1988. To apply, send curriculum vitae, a statement of present research accomplishments and future plans, and three letters of recommendation to: **Dr. Murray Heimberg, Department of Pharmacology, University of Tennessee-Memphis, 874 Union Avenue, Memphis, TN 38163.**

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

**ASSISTANT PROFESSOR OF MICROBIOLOGY AND MOLECULAR GENETICS—**Applications are invited for a position at the rank of assistant professor in the Department of Microbiology and Molecular Genetics, Harvard Medical School. Applicants should plan to develop an active research program in some area of prokaryotic biology. Areas of interest include DNA metabolism, protein structure-function, pathogenesis, behavior, development, and regulation. The successful candidate will eventually be responsible for some teaching. Send curriculum vitae, summary of research interest, and three letters of recommendation to: **Search Committee Chairman, Department of Microbiology and Molecular Genetics, Building D-1, Harvard Medical School, 200 Longwood Avenue, Boston, MA 02115.** *Harvard Medical School is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT PROFESSOR, PHARMACOLOGY.** Tenure-track, full-time position. Applicants must have a Ph.D. in pharmacology or a related discipline, and 2 years of postdoctoral research experience with evidence of productivity. Training in pharmacology is required. The candidate will be expected to teach medical pharmacology, establish an independent, productive research program, serve on academic committees, and apply for external funding of research. Send curriculum vitae, list of publications, summary of teaching experience, statement of research goals and three letters of recommendation to: **Dr. James Pirch, Chairman, Department of Pharmacology, Kirksville College of Osteopathic Medicine, Kirksville, MO 63501.** Deadline for receipt of applications is 1 February 1988. *The Kirksville College of Osteopathic Medicine is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**ASSISTANT PROFESSOR.** Tenure-track position in fisheries starting fall 1988. We want to recruit someone who can integrate fisheries research with cell biology, genetics, or population biology. Development of a research program is essential. Research faculty are assigned one course/semester during their first year, and three assignments (courses or seminars)/year during subsequent years. Specific teaching assignments are flexible. *OSU is an Equal Opportunity/Affirmative Action Employer.* Send statement of teaching and research interests, résumé, transcripts, and names of three references to: **Dr. James Blankemeyer, Department of Zoology, Oklahoma State University, Stillwater, OK 74078** before 1 February 1988.

**ASSISTANT PROFESSOR—BIOTECHNOLOGY:** Biotechnology Center, University of Colorado at Colorado Springs, invites applications for tenure-track appointment. Major responsibility is to conduct research on molecular biology of industrial yeasts. Initial research funding is provided. Teaching in the biotechnology program required. Postdoctoral experience preferred. Send curriculum vitae, reprints and three reference letters to: **Dr. James R. Mattoon, Biotechnology Center, University of Colorado, Colorado Springs, CO 80933-7150.** Closing date 15 January 1988. *An Equal Opportunity Employer.*

**ASSISTANT PROFESSOR—EVOLUTIONARY ECOLOGY** (tenure-track). Department of 17 with Ph.D. program seeks biologist to teach undergraduate and graduate evolutionary ecology and to develop a strong research program in any area of modern population/evolutionary biology. Departmental resources include a lake-side field station and equipment for DNA/RNA evolutionary studies. Send curriculum vitae, a statement of research and teaching interests, and three letters of recommendation by 22 January 1988 (September 1988 appointment) to: **R. V. Dimock, Chair, Department of Biology, Wake Forest University, Winston-Salem, NC 27109-7325.** *Equal Opportunity/Affirmative Action.*

**ASSISTANT PROFESSOR, PHYSIOLOGY.** Full-time, tenure-track. The Department of Basic Science, California College of Podiatric Medicine, seeks Ph.D. to coordinate and teach human physiology. Ph.D. in physiology desirable; however, candidates with background in endocrinology or neurosciences are also welcome to apply. Applicants must have a strong commitment to teaching. Starting salary commensurate with experience. A complete curriculum vitae and three references should be sent by 15 January to: **Barbara M. Kriz, Ph.D., Chair, Search Committee, Department of Basic Science, California College of Podiatric Medicine, 1210 Scott Street, San Francisco, CA 94115.** *An Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT PROFESSOR (WILDLIFE)**—Nine-month tenure-track to begin September 1988. Person with a strong record of research and ability to publish; to teach undergraduate and graduate courses in population dynamics, non-game and endangered wildlife, and wetlands wildlife; to conduct research in wetland and endangered/threatened wildlife; and to participate in extension activities. A proven record of cooperative research with state and federal agencies is preferred. A Ph.D. degree is required. Appropriate experience is essential. Salary commensurate with qualifications. Send letter of application, curriculum vitae, names of three references, and reprints of published works to: **Dr. Donald R. Progulski, Chair, Search Committee, Department of Forestry and Wildlife Management, University of Massachusetts, Amherst, MA 01003** by 1 February 1988. Telephone: 413-545-2757. *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT/ASSOCIATE PROFESSOR OF BIOLOGY.** Applications invited for anticipated position beginning fall 1988. Ph.D. required. Applicants should have a strong commitment to teaching and research. The abilities and potential of the applicant are more important than the area of expertise. Closing date 1 February 1988. Send curriculum vitae, statement of research goals, and three letters of recommendation to: **Dr. Roger H. Lumb, Department of Biology, Western Carolina University, Cullowhee, NC 28723.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**ASSISTANT PROFESSORS.** Applications are invited from outstanding candidates for tenure-track positions with training in cell physiology or regulatory biology. We are particularly interested in individuals who plan to develop an independent research program involving neurobiology, angiogenesis or growth factors, but outstanding candidates in other fields will definitely be considered. Applicants should submit curriculum vitae, description of future research program, and have three letters of reference sent to: **Dr. James T. Stull, Chairman, Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040** (formerly The University of Texas Health Science Center at Dallas). *An Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT RESEARCH SCIENTIST—MEDICAL.** Independent basic/applied research in area of gastrointestinal physiology with emphasis on motility studies in which existing theory or methods may be limited or lacking. Responsibility for identifying and selecting research problems, determining methods used to obtain research results, and data collection and statistical analysis of research results. Responsible for preparation of grant proposals and follow-up: coordinate gastrointestinal research; responsible for publication of research results. Surgical experience on lab animals. Research experience in the areas of manometry, myoelectric activity, and gastric acid secretion is required. Some refereed publication and scientific presentations. M.D. or Ph.D. in health sciences. \$24,500 per year. Contact: **Dennis Domsic, Administrator, Department of Surgery, University of Iowa, Iowa City, IA 52242.** *The University of Iowa is an Affirmative Action/Equal Opportunity Employer.*

### ASSOCIATE DIRECTOR, CENTER FOR THEORETICAL AND APPLIED GENETICS RUTGERS UNIVERSITY

Cook College, the land-grant college of Rutgers, invites applications for a tenured, senior-level position in **POPULATION GENETICS.** The Associate Director will help develop a new research unit focusing on population and quantitative genetic studies of natural and domesticated plants and animals. Preference will be given to candidates who have demonstrated expertise in theoretical and statistical approaches to molecular population genetics or quantitative genetics. Faculty associated with the Center are expected to maintain independently funded research programs, and to collaborate with scientists in one or more of the following programs: marine sciences, entomology, animal sciences, forestry, horticulture, agricultural biotechnology. Appointments to the Center will be made jointly with an appropriate academic unit, and participation in a graduate program is expected. Applicants should send their curriculum vitae and the names of at least three references to: **R. C. Vrijenhoek, Chairman, Population Genetics Search Committee, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903.**

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

The School of Medicine at Case Western Reserve University invites applications from outstanding individuals to participate in developing a program in human virology. This person should be an independent and established investigator, preferably with a strong background in retrovirology, and a strong interest in developing a program in AIDS research. The individual sought would work together with an interdisciplinary group of basic science and clinical investigators. Ample space, initial funding and resources would be provided. The person we are seeking would be based in the Department of Medicine in the Medical School and would receive an appointment at the **ASSOCIATE PROFESSOR OR PROFESSOR** level.

Interested individuals should contact:

**Neil S. Cherniack, M.D.**  
Vice Chairman, Department of Medicine  
Associate Dean for Academic Programs  
School of Medicine  
Case Western Reserve University  
2119 Abington Road  
Cleveland, OH 44106

*Applications from minorities and from women are especially encouraged.*



# Associate Senior Investigator

## Department of Biomolecular Discovery

This new department of Smith Kline & French Laboratories, located in a state-of-the-art research facility near Valley Forge, PA, is seeking an Associate Senior Investigator to participate in the detection, isolation and purification of natural compounds; collaborate with physical chemists in determining the structure of novel natural products; and chemically modify lead compounds either as part of their structural elucidation or for S/A studies.

Candidates are required to have:

- a Ph.D. in Organic Chemistry with at least 2 years postdoctoral experience in natural product chemistry.
- extensive knowledge of modern isolation and separation techniques and the ability to interpret spectral data.
- demonstrated productivity as evidenced by publications in the scientific literature.

Publication of research findings in leading journals and full interaction with the scientific community are strongly encouraged. For confidential consideration, send your C.V. and the names of three references to Robert F. Obst, Manager, Personnel Relations, RO117, Smith Kline & French Laboratories, Research and Development Division, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

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## ASSOCIATE EDITOR SCIENCE MAGAZINE

Editorial position available for a PhD biochemist or molecular biologist with two or three years of research experience and specific capability in one or more of the following areas: protein structure and function, enzymology, cell biology, or immunology. We are seeking someone with wide general interest in quantitative aspects of the life sciences and publications in the refereed literature. Editors have wide responsibilities in manuscript selection ranging from solicitation to editing for clarity. Previous editorial experience is not required. This is a full-time position in our Washington offices.

Please send resume with cover letter including salary requirements to:

**Ms. Carolyn Bell**  
AAAS  
1333 H Street, NW  
Washington, DC 20005

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# STRATAGENE

Stratagene, a rapidly growing molecular biology supply company, seeks experienced molecular biologists to act as technical representatives in the New York and Washington, D.C. areas. Successful candidates need to have a B.S. to M.S. in the Biological Sciences, two to three years experience at the bench performing DNA manipulations, and excellent communication skills. Stratagene offers a complete benefit program and is an equal opportunity employer.

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## POSITIONS OPEN

**ASSOCIATE RESEARCH SCIENTIST** available immediately to work on a project involving the development of monoclonal antibodies to lymphocyte differentiation antigens. The candidate should have experience and knowledge of murine or human monoclonal antibody technology. Research skills of particular interest include cDNA cloning and expression, and protein biochemistry. Send résumé, outline of research experience, reprints, list of references, and date when available to: **Dr. Nicole Suciu-Foca, Director of Immunogenetics, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity Employer.**

**BIOCHEMISTRY, ASSISTANT/ASSOCIATE PROFESSOR** (tenure-track, search reopened) fall 1988. The successful candidate will have a Ph.D., post-doctoral experience, and expertise in nucleic acid biochemistry or a closely related area. Evidence indicating ability to establish and maintain a vigorous research program and ability to teach graduate and undergraduate courses in biochemistry is required. Applications will be reviewed beginning 8 February 1988, but the position will remain open until filled. Send curriculum vitae, a proposed research program, and three letters of recommendation to: **The Biochemistry Search Committee, Department of Chemistry, University of Montana, Missoula, MT 59812. The University of Montana is an Affirmative Action/Equal Opportunity Employer.**

**BIOLOGIST:** cell/molecular/microbial, fall 1988. Rank negotiable, tenurable position, Ph.D. required. Applicants with expertise in cell/molecular/microbial biology and interest in assuming responsibility for these areas of a quality undergraduate program in biology at a church-related liberal arts college. Submit curriculum vitae and three letters of recommendation by 29 February 1988, to: **Biology Search Committee, Personnel Office, Whitworth College, Spokane, WA 99251. Equal Opportunity Employer/IX/504.**

**BIOLOGY, CHAIR.** Department with 17 full-time faculty, 400 undergraduate majors and 25 graduate students seeks applications for Chair, 12-month appointment, beginning July 1988. Department offers B.A., B.S., M.S., and M.A. degrees. Faculty teach and conduct research in a broad range of traditional fields and participate in multidisciplinary programs such as biotechnology, medical technology, and cooperative education in association with hospitals, research centers, ecological reserves, and field stations. Candidates must have: earned doctorate, capability of providing strong leadership in research and undergraduate/graduate education, qualifications for appointment as associate professor or professor, and administrative experience. Salary and teaching load competitive. Teaching and research areas open. Send letter, résumé, names of three references to: **Dr. Frederik N. Smith, Chair, Biology Search Committee, College of Arts and Sciences, University of North Carolina at Charlotte, Charlotte, NC 28223. Deadline for application: 1 February 1988, or until suitable candidate is found. Equal Opportunity/Affirmative Action Employer.**

The Department of Biology at the University of San Diego (USD) is seeking a **BOTANIST** to fill a tenure-track position at the assistant or associate professor level beginning 1 September 1988. We are seeking a candidate with a broad background in the anatomy, physiology, and ecology of vascular plants. Teaching responsibilities include participation in introductory biology and development of an upper division course in botany.

USD is a Catholic university whose primary aim is teaching excellence. Active scholarship by the faculty is considered essential to this aim. The candidate is expected to maintain an active research program which has the potential for undergraduate involvement. Teaching experience is desirable. *Women are particularly encouraged to apply.* Application materials consisting of curriculum vitae, a description of teaching philosophy and research interests, and names and addresses of three professional references must be received before 15 February 1988. Address all correspondence to:

**Dr. Louis E. Burnett  
Chair, Search Committee  
Department of Biology  
University of San Diego  
Alcala Park  
San Diego, CA 92110**

## POSITIONS OPEN

**BIOLOGIST.** Applications are invited for tenure-track position at assistant professor rank with major interest in developmental biology, comparative anatomy, and secondary background in parasitology. Ph.D. required. Position available September 1988. Send résumé and names of three references by 1 February 1988 to: **F. M. Knapp, Head, Department of Biology, Stetson University, DeLand, FL 32720. An Equal Opportunity/Affirmative Action Employer.**

### CARBOHYDRATE SCIENCE FACULTY SPECIALIZING IN PLANTS AND MICROBES

The University of Georgia/Department of Energy Complex Carbohydrate Research Center (CCRC) will hire three to five tenure-track faculty in plants and/or microbes over the next 2 to 3 years. Most appointments will be at assistant professor level, but senior appointments considered. Appointees expected to develop own research team in fundamental carbohydrate science. The CCRC is seeking scientists with demonstrated knowledge of complex carbohydrates of higher plants or microbes, especially microbes that interact with higher plants or fermentative microbes (those useful in utilization of renewable resources). Prefer candidates with strong background in molecular biology, molecular genetics, developmental biology, or immunology. Salary negotiable. Applications received by 1 February 1988 considered then; later applications considered as received. Send letter of application, proposed research, and complete curriculum vitae to: **Drs. Peter Albersheim or Alan Darvill, Directors, UGA/DOE Complex Carbohydrate Research Center, P.O. Box 5677, Russell Lab, Athens, GA 30613. An Affirmative Action/Equal Employment Opportunity Institution.**

**ASSISTANT OR ASSOCIATE PROFESSOR:** A tenure-track position will open at the University of Virginia for an established **CARDIOVASCULAR INVESTIGATOR** in the fall of 1988. The primary appointment will be in cardiology with a joint appointment available in physiology where cardiovascular research is emphasized. Special consideration will be given to applicants applying state-of-the-art electrophysiological or molecular biological techniques to the study of cardiac or vascular function. Candidates should send curriculum vitae and a one-page statement of anticipated research directions to: **Dr. George Beller, University of Virginia Medical Center, Box 158, Charlottesville, VA 22908. An Affirmative Action/Equal Opportunity Employer.**

### CHAIRPERSON DEPARTMENT OF PHARMACEUTICAL SCIENCES UNIVERSITY OF NEBRASKA COLLEGE OF PHARMACY (SEARCH CONTINUED)

Applications are invited for the position of Chairperson of the Department of Pharmaceutical Sciences at the University of Nebraska College of Pharmacy. Candidates should possess a Ph.D. degree in one of the pharmaceutical or related sciences, e.g., medicinal or pharmaceutical chemistry, pharmaceuticals, biopharmaceutics, or pharmacokinetics, as well as a demonstrated record of teaching excellence, research productivity, and an ability to secure external funding. Evidence of effective administrative skills is also important. Salary and rank are negotiable. The successful candidate will be expected to continue a productive research program, and provide effective academic and research leadership for the department.

The College is located on the Medical Center campus, and offers programs leading to professional (Pharm.D.), and graduate (M.S. and Ph.D.) degrees. The Medical Center is committed to a major emphasis in research, and the College of Pharmacy is in an excellent position to grow in this environment. The faculty is enthusiastic and committed to programs of excellence.

A letter of application, a current curriculum vitae, and the names, addresses and phone numbers of three references should be submitted to:

**Edward B. Roche, Ph.D.  
College of Pharmacy  
University of Nebraska Medical Center  
42nd and Dewey Avenue  
Omaha, NE 68105-1065**

Applications will be received until the position is filled. *The University of Nebraska is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**CELL BIOLOGIST.** Applications are invited for a position at the assistant professor and assistant in the Agricultural Experiment Station level in the Department of Zoology, University of California, Davis, effective 1 July 1988. Ph.D. required. Position involves research, teaching at the undergraduate and graduate levels, and advising undergraduate and graduate students. The candidate's research should deal with control of eukaryotic gene expression. Suitable interests include, but are not limited to, cell differentiation and transformation, cell-mediated immune response, and receptor biology.

By 1 February 1988, applicants should send curriculum vitae, reprints of published work, statements of research and teaching interests, and have three letters of recommendation sent to: **Chairperson, Cell Biologist Search Committee, Department of Zoology, University of California, Davis, CA 95616. The University of California is an Affirmative Action/Equal Opportunity Employer.**

**CELLULAR IMMUNOLOGIST:** Small biotechnology company in northern New Jersey desires to recruit cellular immunologist for research and development programs and to direct biological response modification program at research institute. Experience with cytofluorography helpful but not mandatory. Will work with M.D./Ph.D. in all areas. Unlimited potential. Curriculum vitae required. Send to: **Chairperson, Institute for Diagnostic Medicine, 444 John F. Kennedy Drive North, Bloomfield, NJ 07003.**

The University of Michigan School of Nursing invites applications for **CHAIRPERSON OF MEDICAL SURGICAL NURSING**. Qualifications include: doctoral degree in nursing or related field; graduate preparation in medical and/or surgical nursing; eligibility for licensure as an R.N. in Michigan; eligibility for faculty appointment as an associate or full professor; and experience in medical and/or surgical nursing practice and education. Send letter of application and curriculum vitae by 1 February 1988 to: **Violet H. Barkauskas, Ph.D., R.N., Associate Dean for Administration, The University of Michigan School of Nursing, 1325 Catherine Road, Ann Arbor, MI 48109-0604. Telephone: 313-936-3631. The University of Michigan is an Affirmative Action/Equal Opportunity Employer.**

### DIRECTOR CENTER FOR OCCUPATIONAL DISEASE RESEARCH THE OREGON HEALTH SCIENCES UNIVERSITY

The Oregon Health Sciences University, the state's only academic health center, seeks a director for a new Center for Occupational Disease Research. The Center's primary mission will be to explore, at the molecular level, the mechanisms through which occupational exposures to toxic agents produce medical damage to workers. Its driving force will be research into occupational diseases at the "basic mechanism level" through the expanding window of molecular biology. Its work will interrelate with a wide range of molecular research especially in the neurosciences and with graduate and clinical University programs. Funding from state sources will be approximately \$2.5 million annually.

Preference will be given to an active investigator of national/international stature with a record of accomplishment in applicable areas, such as occupational neurotoxicology or the molecular basis of nervous system function. The director must have a doctoral degree, and be a leader in his/her field. The director will have responsibility for program planning, staffing the new Center and encouraging the career growth of its faculty, and maintaining his/her own scientific productivity.

This position is a unique opportunity to create a research center dedicated to advancing our knowledge of the basic mechanisms of occupational disease.

Applications should be submitted by 11 January 1988. Late applications may be considered until the position is filled. Send applications and nominations to:

**Dr. Jules V. Hallum, Chair  
CODR Director Search Committee  
The Oregon Health Sciences University, L-220  
3181 S.W. Sam Jackson Park Road  
Portland, OR 97201**

*The Oregon Health Sciences University is an Equal Opportunity/Affirmative Action Employer.*

## SCIENTIFIC EXCHANGES

### NAS Scientific Exchange Program with the U.S.S.R. and Eastern Europe

The National Academy of Sciences (NAS) invites applications from American scientists who wish to make visits beginning during the period January 1, 1989 through December 31, 1989 to the U.S.S.R., Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, and Yugoslavia. Long-term research visits of 3 to 12 months duration are encouraged, particularly if contact with colleagues in the other country has already been established. The minimum length of visits is one month in one country.

Applicants must be U.S. citizens and have a doctoral degree or its equivalent by June 1988 in physics; chemistry; mathematics and computer sciences; earth, atmospheric, and oceanographic sciences; agricultural, forestry, fishery, and plant sciences; biological sciences; environmental sciences; engineering; archaeology and anthropology; geography; or psychology. Also included are science and technology policy and those aspects of the economic and social sciences that involve quantitative analysis as a primary consideration. Other scientific disciplines not explicitly mentioned will be considered on a case-by-case basis. Necessary expenses will be met by the NAS and the foreign academy, including reimbursement for long-term visitors for salary lost up to a predetermined maximum and expenses for accompanying family members for visits exceeding 5 months.

Requests for applications should reach the National Academy of Sciences not later than February 15, 1988. Applications must be postmarked by February 29, 1988. Address application requests to:

National Academy of Sciences  
Office of International Affairs  
Soviet and East European Affairs (GF-166)  
2101 Constitution Avenue, NW  
Washington, D.C. 20418  
Telephone (202) 334-2644

### DIRECTOR MOLECULAR BIOLOGY COMPUTER FACILITY THE UNIVERSITY OF MINNESOTA

The College of Biological Sciences at the University of Minnesota seeks an individual for the position of Director of Biocomputing to direct the Molecular Biology Computing Facility. The Facility (a satellite Bionet) consists of a SUN 3/160 (time-sharing system) with links to other SUN computers and supercomputers. The Facility has the Intelligenetics and other software packages. The Director must have a Ph.D. in Molecular Biology or Biochemistry, a strong background (formal instruction) in computer science, and experience with applications of Artificial Intelligence to Biocomputing, the use of UNIX, Fortran, C, LISP, and Expert System Shells. Experience with supercomputers, AI machines, and Neural Networking is desirable.

The position involves directing and maintaining the Facility, acquiring new hardware and software, and teaching Biocomputing courses. The director must have excellent oral and written communication skills, be able to work with researchers to develop new applications of Biocomputing, and to direct a staff of user consultants. The salary range is \$33,000-37,000 per year. Applicants must submit a curriculum vitae, university transcripts, three letters of recommendation, and a 1-2 page statement of experience and research interests in Biocomputing, by January 31, 1988, to:

Perry B. Hackett  
Department of Genetics and Cell Biology  
250 Biological Sciences Center  
1445 Gortner Avenue  
St. Paul, MN 55108-1095

The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.

# Research Opportunities In Molecular Immunology

Genentech, Inc. has the following positions available in the area of hybridoma technologies:

## Hybridoma Group Leader

Responsibilities will include establishing a group responsible for developing monoclonal antibodies for a variety of new and novel proteins. In addition, the position will involve interfacing the group with the molecular biology, immunopharmacology, protein biochemistry and cell biology groups that support these efforts. The successful candidate should have at least five years' postdoctoral experience and a proven track record of innovative and productive research in this area.

## Postdoctoral Fellow

We are searching for an individual with experience in Molecular Immunology to investigate the molecular basis of cytokine and growth factor interactions in the development of specific immune responses.

## Research Assistants/Associates

Research assistants and associates with experience in all aspects involved in the generation of polyclonal and monoclonal antibodies may qualify for this new Hybridoma Team. A BS or MS in Molecular Biology, Protein Biochemistry, or Cell Biology and 1-4 years' experience or equivalent will be required.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send resume to Sherrie P. Wilkins, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

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Genentech, Inc.

## RESEARCH SCIENTIST DNA HYBRIDIZATION

Becton Dickinson and Company, a leader in the development and manufacture of healthcare products, has an immediate opening for an innovative scientist to join our research staff at the Corporate Research Center. We are currently expanding research activity to include the use of nucleic acid probes for infectious disease diagnosis. We are seeking a nucleic acid chemist to develop nucleic acid hybridization diagnostics and non-isotopic detection methodology.

The successful candidate must have a Ph.D. degree in nucleic acid chemistry or organic chemistry with a minimum of 3 years' post-doctoral experience in the area of nucleic acid chemistry and hybridization with a published record of accomplishment in this area. Experience with the derivatization of nucleic acids for use in non-isotopic detection is desirable.

The Corporate Research Center, located in Research Triangle Park, North Carolina, offers competitive salaries, relocation expenses, comprehensive benefits, and a stimulating environment for the individual who wishes to contribute to a dynamic organization. Please send your resume and salary history to: Mr F. Richard Wilson, Manager Human Resources, BECTON DICKINSON RESEARCH CENTER, P.O. Box 12016, Research Triangle Park, N.C. 27709.

**BECTON  
DICKINSON**

AA/EEO Employer



## POSITIONS OPEN

**DEPARTMENT HEAD.** The Department of Medicinal Chemistry and Pharmacognosy, School of Pharmacy, Purdue University, solicits nominations and applications for Professor and Department Head. We seek a person with a distinguished chemical or biochemical research program in one of the pharmaceutical sciences; a commitment to undergraduate and graduate education; and demonstrated leadership qualities. Inquiries, nominations, and applications should be sent to: **Professor Marc Loudon, School of Pharmacy, Purdue University, West Lafayette, IN 47907.** Applicants should send a letter expressing their interest in the position, along with curriculum vitae. Review of applications will commence on 15 January 1988, and will continue until the position is filled. *Purdue is an Affirmative Action/Equal Opportunity Employer.*

The American University. **DEVELOPMENTAL NEUROBIOLOGIST OF VERTEBRATE SYSTEMS.** Assistant professor, beginning fall 1988. Tenure-track position. Responsibilities: teach graduate and undergraduate courses, establish an externally funded research program, and participate in program development, student advising, and University service. Qualifications: Ph.D. required; postdoctoral experience preferred. Preference will be given to candidates who examine cell-cell interactions and cell-extracellular matrix interactions in the developing nervous system, but exceptional candidates in other areas will be considered. Competitive salary, depending on qualifications and experience. Position subject to final budgetary approval. Send curriculum vitae, reprints of representative papers, and three letters of reference by 30 January 1988 to: **Dr. David C. Culver, Chair, Department of Biology, The American University, 4400 Massachusetts Avenue, NW, Washington, DC 20016.** *Equal Employment Opportunity/Affirmative Action University: minority and women candidates are encouraged to apply.*

### DIRECTOR OF TOXICOLOGICAL SCIENCES THE JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIENE AND PUBLIC HEALTH

The Johns Hopkins University School of Hygiene and Public Health is seeking a Director for the faculty in Toxicological Sciences. Such an individual should have an outstanding record of academic and professional accomplishment in the toxicological sciences. This young, talented, and dynamic faculty has recently been relocated into new research facilities and has pre- and postdoctoral training programs. Currently there are 4 postdoctoral and 11 predoctoral fellows. The expertise of the eight full-time faculty is in the areas of biochemical, molecular, oxygen radical, and metal toxicology; immunotoxicology; lung toxicology; chemical carcinogenesis. Extensive interaction with units in chemistry, biochemistry, medicine, physiology, and pathology within the University is also ongoing. Direct inquiries including curriculum vitae should be made to: **Dr. Robert Fitzgerald, Associate Chairman, Department of Environmental Health Sciences, School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, MD 21205.** *An Equal Opportunity/Affirmative Action Employer.*

### DIRECTOR WATER RESOURCES LABORATORY UNIVERSITY OF LOUISVILLE

The Director of the Water Resources Laboratory of the College of Arts and Sciences will be a tenured faculty member in the Department of Biology beginning summer 1988, and will manage the laboratory, which conducts research in aquatic science, primarily aquatic biology and water chemistry. The Director will be an aquatic biologist, preferably with expertise in a suitable subdiscipline (i.e., invertebrate zoology, limnology, toxicology, etc.). The ability to obtain grants and contracts for research is essential. Teaching responsibilities will include one course per semester and supervision of graduate (M.S. and Ph.D.) students in the Department of Biology. Applications must be received by 20 January 1988. Submit curriculum vitae, list of publications, and names, addresses, and telephone numbers of at least four persons from whom letters of reference may be obtained to: **Dr. Burt L. Monroe, Jr., Chair, Search Committee, Department of Biology, University of Louisville, Louisville, KY 40292.** *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**DEVELOPMENTAL BIOLOGIST—TENURE TRACK**—Pan American University, Edinburg, Texas. Nine-month appointment to start 1 September 1988. Salary negotiable. Position subject to funding. Ph.D. qualified to teach embryology, comparative anatomy, general biology, and/or human anatomy-physiology, and to develop research programs with B.S. and M.S. students. Twelve credit hour per semester work load. Curriculum vitae, recent publications and three letters of recommendation should be submitted to: **N. Savage, Department of Biology, Pan American University, Edinburg, TX 78539-2999** by 31 January 1988. *Pan American University is an Equal Opportunity/Affirmative Action Employer.*

*The Immigration Reform and Control Act of 1986 requires all prospective employees of Pan American University to provide proof of identity and eligibility to work in the United States before any offer of employment can be extended.*

### DIRECTOR—AMES LABORATORY

Iowa State University seeks to fill the position Director of the Ames Laboratory, a national laboratory operated by the University for the U.S. Department of Energy. There are 13 scientific programs consisting of 70 research groups with a budget of \$17 million. The Director is responsible for developing new research activities, stimulating cross-disciplinary interactions, and maintaining and improving program quality. The Director represents the Laboratory in scientific and technical programs development with Department of Energy officials, and also with officials of other federal and state agencies. The Director also interacts with Iowa State University concerning shared staff members including many of the scientific group leaders, postdoctorals, and graduate assistants. Strong interaction is also expected with several research centers. Opportunities exist for continuation of an independent research program and for a joint senior faculty appointment.

Candidates must have an earned doctorate or equivalent experience, and an outstanding record of research accomplishment, leadership, and management experience. A professional specialty in physics or basic materials or chemical sciences is preferred. Familiarity with the Department of Energy national laboratory system and/or large university operations are also desirable attributes. Salary will be competitive.

Send a résumé and the names of three references, by 31 January 1988 to:

**Dr. Edward S. Yeung, Chair  
Ames Laboratory Director Search Committee  
Department of Chemistry  
Iowa State University  
Ames, IA 50011**

*Iowa State University and the Ames Laboratory are Affirmative Action/Equal Opportunity Employers. Women and members of all other protected groups are urged to apply.*

### U.S. DEPARTMENT OF ENERGY DIRECTOR HIGH ENERGY PHYSICS DIVISION

The Department of Energy (DOE) is seeking applicants for Director of its High Energy Physics Division, who serves as executive agent for the U.S. High Energy Physics Program. Responsibilities involve overall planning and management of DOE's high energy research activities, including coordinating research among U.S. laboratories who are exploring the basic constituents of matter and the fundamental forces of nature, and promoting international cooperation agreements with other countries conducting similar research.

The preferred candidate will be a U.S. citizen with a Ph.D. in an appropriate physical science. He or she will have had research experience in high energy physics; managerial experience that included formulating research strategies, developing long-range plans for complex scientific research programs, and directing large-scale research activities; and experience with institutional budgeting processes and planning for the financial resources required to establish and operate research and development projects or programs. Salary range is \$64,700 to \$73,400 and the position is located at the DOE facility at Germantown, Maryland.

Direct inquiries to and obtain application materials from: **Ms. Rosalee Williams, MA-204.1, Office of Personnel, U.S. DOE, 1000 Independence Avenue, SW, Washington, DC 20585,** or telephone: 202-586-8461. Completed applications must be postmarked no later than 31 January 1988.

*U.S. DOE is an Equal Opportunity Employer.*

## POSITIONS OPEN

### DEVELOPMENTAL GENETICS WESLEYAN UNIVERSITY

A tenure-track position, at the assistant professor level, is available for a **DEVELOPMENTAL GENETICIST** working at the molecular level. Applicants should have postdoctoral experience and a demonstrated ability to attract outside funding. The successful candidate is expected to develop an active research program, participate in the Ph.D. graduate program, and teach in genetics. To facilitate these activities the university offers generous start-up funds. Please send curriculum vitae, a statement of future research plans, and three letters of recommendation to: **Search Committee, Biology Department, Wesleyan University, Middletown, CT 06457.** Applications should be received by 15 January 1988.

*Wesleyan is an Equal Opportunity/Affirmative Action Institution. We encourage applications from minority candidates and women.*

### DREXEL UNIVERSITY ENDOWED BETZ CHAIR BIOSCIENCE AND BIOTECHNOLOGY

Nominations and applications are sought for an outstanding scientist to occupy an endowed chair in the College of Science named in honor of L. Drew Betz, Drexel alumnus and founder of Betz Laboratories, Inc. We seek an individual who will provide a focus of excellence for outstanding research, instruction and interaction with students in areas related to ecology and the environment. Interests of the occupant of the Chair should complement ongoing and expanding programs in the Department which include: biochemistry, microbial and organismal ecology, environmental ecology, and molecular biology. Opportunities exist for interactions with the University's Institute for Environmental Engineering and Science.

Appointment will be at the full professor level and includes funds for support of research. The search will continue until a suitable candidate is found. Submit nominations, inquiries, curriculum vitae, statement of interests, and names of at least three references to:

**Dr. Wayne E. Magee, Head  
Department of Bioscience and Biotechnology  
118 Stratton Hall, Drexel University  
Philadelphia, PA 19104**

*Drexel University is an Equal Opportunity/Affirmative Action Institution and invites applications from women and minorities.*

**ENDOWED CHAIR**—Urban/Public Health Entomology, Focal Position for TAMU Urban/Public Health IPM Research and Education Program. Ph.D. in entomology or related area of biology. Ten years of research experience on urban pests. Highly published. Nationally and internationally recognized with established record of grantsmanship. Teaching experience. Capable of effectively interacting and communicating with Pest Control Industry and general public. Send résumé, transcripts, and a minimum of four letters of recommendation by 1 May 1988 to: **Dr. Fowden G. Maxwell, Department of Entomology, Texas A&M University, College Station, TX 77843-2475.**

*An Equal Opportunity Employer*

The American University. **EVOLUTIONARY BIOLOGIST.** Assistant professor, beginning fall 1988. Tenure-track position. Responsibilities: teach graduate and undergraduate courses, establish an externally funded research program, and participate in program development, student advising and University service. Qualifications: Ph.D. required; postdoctoral experience preferred. Preference will be given to candidates who use molecular techniques, but exceptional candidates in other areas will be considered. Competitive salary, depending on qualifications and experience. Position subject to final budgetary approval. Send curriculum vitae, reprints of representative papers, and three letters of reference by 30 January 1988 to: **Dr. David C. Culver, Chair, Department of Biology, The American University, 4400 Massachusetts Avenue, NW, Washington, DC 20016.** *Equal Employment Opportunity/Affirmative Action University. Minority and women candidates are encouraged to apply.*

### **Project Deputy Director Of Experimental Systems**

Reporting to the Project Director of the Advanced Light Source, the Project Deputy Director of Experimental Systems bears primary scientific/technical responsibility for the design and specification for the initial complement of insertion devices, photon systems and associated components for the Advanced Light Source and planning for future insertion devices and photon systems for the facility. The incumbent will ensure that the physics design criteria are properly translated into engineering designs and components. Will direct appropriate R&D activities associated with experimental facilities, ensure that R&D objectives are defined and accomplished and develop plans for operational modes of the experimental program. Will recruit, develop and manage scientific and technical personnel and organize the staff required for support and operations of the experimental facilities. Will plan, develop and manage a modest size in-house research and development group. Will organize and participate in scientific and technical reviews, workshops and seminars. The successful candidate must have a proven record of substantial managerial responsibility and excellent scientific and technical judgment. Must have demonstrated success in the recruitment, development and management of scientific/technical personnel within a project environment. Must have ability to translate user requirements into specifications and design criteria for experimental facilities and must be able to effectively interact with potential users. Knowledge of the technology of insertion devices and optical systems as applied to the generation and exploitation of synchrotron radiation, as well as an understanding of the environment in which user-based synchrotron radiation research is carried out (equivalent experience at other user-based facilities may be appropriate) are desirable. Prefer a Ph.D. in the physical sciences, engineering or other related fields. To apply send two copies of resume to:

Lawrence Berkeley Laboratory, #1 Cyclotron Rd,  
Employment Office 90-1042, Berkeley, CA 94720.  
Refer to Job #A/4432. An Equal Opportunity Employer M/F/H.



LAWRENCE  
BERKELEY  
LABORATORY

### **Postdoctoral Positions**

New project involving cell biology, developmental biology, and polymer chemistry with potential clinical applications in transplantation and regeneration.

Candidates to have experience in one or more of the following areas: cell biology, developmental biology, hepatology, neuroscience, chemistry, chemical engineering, biomedical engineering. Interested individuals should submit current curriculum vitae together with three references to one of the following: **Dr. Joseph P. Vacanti, Harvard Medical School, The Children's Hospital, 300 Longwood, Fegan 5, Boston MA 02115** or **Prof. Robert S. Langer, Dept. of Applied Biological Sciences, M.I.T., 77 Mass. Avenue, Bldg. E-25, Cambridge, MA 02139**. An equal opportunity/affirmative action employer m/f.

**W**e are offering a unique and exciting opportunity to join us at an early stage of research and development, on the frontiers of immunology. ImmuLogic employs immunology, genetic engineering and protein engineering in novel and creative ways to alter the immune response. You can work with leading scientists from industry and research institutions and can contribute to the building of a company which is at the forefront of creating new therapeutic approaches to vaccines, allergies, and immune disorders. We are seeking outstanding scientific and technical personnel with the following expertise:

### ***Immunology:***

MD/PhD or PhD with experience in basic cellular or molecular immunology to guide a research team in independent and collaborative research. Experience in the study of antibody responses and T cell response in humans is a plus.

Master's degree or Bachelor's with a minimum of five years' laboratory experience in cellular biology or immunology to participate as a senior technical member of a research team. Tissue culture skills and the ability to train and oversee junior technical personnel are required.

### ***Biochemistry/Protein Chemistry:***

PhD in Chemistry or Biochemistry with background and experience in protein and peptide chemistry, purification techniques, and derivation and modification of proteins and peptides, to participate in collaborative and independent projects.

Master's degree or Bachelor's with minimum of five years' experience in purification and characterization of proteins or polypeptides to serve as a senior technical member of a research team. Proficiency in HPLC, column chromatography and gel electrophoresis is required. Experience in protein sequencing, chemical modification, and biophysical techniques is a plus.

### ***Molecular Biology:***

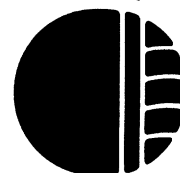
PhD in Molecular Biology with minimum of three years' experience in industrial or academic setting to conduct independent and collaborative research. Experience in construction, expression and manipulation of DNA is required. A background in the control of gene expression is a plus.

ImmuLogic provides a challenging and creative work environment in attractive, newly built laboratory and office facilities within walking distance of public transportation and MIT. We offer competitive salary and benefits as well as an incentive stock option program.

Please send curriculum vitae and list of publications and/or resume to:

**ImmuLogic Pharmaceutical Corporation**  
**One Kendall Square**  
**Cambridge, MA 02139**  
**Attn: Human Resources Department**  
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**IMMULOGIC**  
Pharmaceutical Corporation





## Evolutionary Biology

The Department of Biology is engaged in building an interdisciplinary program in the evolutionary sciences and invites applications for positions at the senior and junior levels. While outstanding scientists working in any area of evolution will be considered, areas of particular interest to our faculty include molecular approaches to population biology or phylogeny, developmental approaches to evolution, evolution of genome organization, and quantitative approaches to evolutionary problems.

We seek individuals with a strong interdisciplinary inclination, who might profit from interaction with the Department's strong programs in molecular, cell, developmental, and organismal biology.

Send curriculum vitae, description of research interests and names and addresses of at least three references by January 25, 1988, to:

**Evolutionary Biology Search Committee  
c/o The Chairman  
Department of Biology  
Yale University  
PO Box 6666  
New Haven, CT 06511**

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

## BIOTECHNOLOGY R&D MANAGER

Southern Research Institute has an immediate opportunity for a candidate with a proven record of productive, high-quality research activities to direct an expanding industrial microbiology and biotechnology group. Candidate must have a Ph.D. with postdoctoral training in microbiology, molecular biology, or biochemistry and a minimum of five years' managerial experience in directing industrial biotechnology research operations. Qualified applicant must be thoroughly familiar with various biotechnology markets and skilled at formulating plans to meet the specific needs for advanced biotechnology research. Target markets include such areas as health care products and pharmaceuticals, environmental and bioprocess technology.

Duties include direct supervision of approximately 15 professional and technical staff members, aggressive project development efforts, proposal preparation, project implementation, preparation of reports and publications, and staffing and direction of multidisciplinary research teams.

Located in a 20-acre complex and with a staff of over 700, Southern Research Institute is a diversified contract research organization in its fifth decade of operation. The Birmingham metropolitan area, with a population of approximately one million, offers a mild, seasonal climate; abundant recreational and cultural opportunities; below average living costs and taxes; and a variety of convenient and attractive housing alternatives. To apply, send c.v. to Denise Johnson, Personnel Administrator:



SOUTHERN RESEARCH INSTITUTE  
Personnel Office, Dept. B-252  
P.O. Box 55305  
Birmingham, AL 35255-5305

An Affirmative Action/Equal Opportunity Employer

## Postdoctoral Fellowships Pfizer Pharmaceuticals

Postdoctoral (PhD) fellowships in New Drug Development in New York City are now available in the department of Clinical and Scientific Affairs in the areas of Pharmacology, Pharmacokinetics and Toxicology. These fellowships are for a 1-2 year period. As a member of a multidisciplinary project team, we offer a unique opportunity in applying pharmacologic, pharmacokinetic and toxicologic principles to the clinical development of new drugs. Individuals must have completed all requirements for the doctoral degree (PhD) and have no more than one year of postdoctoral experience. Interested candidates should address their questions and/or resumes to: Ms. Marjorie Feld, Senior Personnel Associate, Pfizer Pharmaceuticals, 235 East 42nd Street, New York, NY 10017. (212) 573-3259



An equal opportunity employer

## AAAS MASS MEDIA SCIENCE AND ENGINEERING FELLOWS PROGRAM

The American Association for the Advancement of Science (AAAS) invites outstanding students in the natural and social sciences and engineering, preferably those at the graduate level, to apply for the 1988 Mass Media Science and Engineering Fellows Program. Students majoring in English, journalism, or other nontechnical fields are not eligible for these fellowships.

Fellows will work as reporters, researchers, production assistants, and script consultants for 10 weeks during the summer at newspapers, news magazines, and radio and television stations across the country. Fellows will have the opportunity to participate in the news making process, to increase their understanding of editorial decision making, and to develop skill in conveying to the public a better understanding and appreciation of science and technology.

AAAS pays a \$300 weekly stipend and travel expenses. Deadline for receipt of applications is 1 February 1988. *Minorities and persons with disabilities are especially encouraged to apply.*

For further information and applications, write:

**Mass Media Science and Engineering  
Fellows Program  
AAAS  
1333 H Street, NW  
Washington, D.C. 20005**

# Scientist Biological Chemistry

Genentech, Inc., a leader in the field of biotechnology is seeking a protein biochemist to investigate the basic mechanisms of action of hormones involved with linear growth at the molecular and cellular level. The primary focus of the project will be the purification and characterization of membrane receptors and investigation into their role in trans-membrane signaling events.

The successful candidate should have a PhD in biochemistry and several years' experience in protein chemistry. Experience with G-protein linked receptors would be highly desirable.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send resume to: Eric Mankuta, Dept. 1238, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

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**Genentech, Inc.**  
Genentech, Inc.

## Coagulation Chemist

Sigma Chemical Company, a world renowned manufacturer of biochemicals and diagnostic reagents, is seeking a MS/PhD Biochemist or Clinical Chemist to add to its coagulation staff. The successful candidate will have at least two years' experience in clinical coagulation. Industrial experience in the development of diagnostic reagents preferred. Excellent opportunity for a Chemist with a desire to grow into a supervisory position. Full company paid benefits. Send resume to:

**Personnel Department  
Sigma Chemical Co.  
3500 Dekalb  
St. Louis, Missouri 63118**

Equal Opportunity Employer M/F



**SIGMA**  
CHEMICAL COMPANY

**RU  
Leiden**

LEIDEN UNIVERSITY

**Department of Astronomy and Physics.**

**Applications are invited for the position of**

### **full professor of astronomy (f/m)**

(area: active galaxies, clusters of galaxies, quasars and cosmology)

*vacancynumber: 7-291/2491*

Tenure position from January 1988.

The University of Leiden expects to appoint a professor of astronomy at its Observatory. The appointee will be charged with leading the research effort that includes study of active galaxies, clusters of galaxies, quasars and cosmology. Current research activities in this area involve use of the Westerbork and VLA radio telescopes, optical telescopes of the European Southern Observatory and the joint Dutch/British Observatory on the Canary Islands, as well as programs based on IRAS-data.

The appointee will be expected to give guidance to staff and research students working in the field of far-extragalactic astronomy; to participate in the teaching curriculum including supervision of graduate students; to take part in the local, national and international administrative duties of the Observatory; and to seek financial support from public funds.

The University of Leiden was founded in 1575 and is the oldest academic institution in the Netherlands. The total student body numbers over 17000.

Leiden is a historical city, 10 miles from The Hague (the seat of government and a cultural centre of repute) and 20 miles from Amsterdam and Rotterdam.

For further information and suggestions for suitable candidates call Professor W.B. Burton, chairman nominations committee, tel. 071-275891.

Gross salary is subject to state employment scales. Participation in the State pensionfund is obligatory. In exceptional cases a higher stipend can be attained.

Applications accompanied by a detailed curriculum vitae and bibliography should be sent to the Chairman of the Appointment Committee, Dr W.B. Burton, Leiden University Observatory, P.O. Box 9513, 2300 RA LEIDEN, The Netherlands.

## POSITIONS OPEN

### ECOTOXICOLOGIST

Exxon Biomedical Sciences, Inc. has an immediate opening for a qualified individual specializing in ecotoxicology and environmental hazard assessment. The successful candidate will have a Ph.D. in ecotoxicology or in an environmentally related field, with 0 to 2 years of postdoctoral experience. Experience in or a knowledge of the application of both effects and fate data to real-world concerns, as well as knowledge of regulatory requirements (TSCA/PMN) would be desired. Exxon Biomedical performs both consulting and laboratory toxicology for affiliates around the world. Its resources include state-of-the-art aquatic toxicology, environmental chemistry, and mammalian toxicology laboratories. The candidate will perform as a study monitor and internal consulting toxicologist. Client interactions are an important aspect of our work, and thus, we are also seeking an individual who has excellent communication skills. Please forward résumé to:

Human Resources  
Exxon Biomedical Sciences, Inc.  
CN 2350, Mettlers Road  
East Millstone, NJ 08875-2350  
Equal Opportunity Employer M/F/H/V

### FACULTY POSITIONS DEPARTMENT OF BIOLOGICAL SCIENCES WELLESLEY COLLEGE

The Department of Biological Sciences at Wellesley College, a liberal arts institution located 10 miles west of Boston with a student body of 2200 women, invites applications for several full-time positions to be filled by September 1988.

Two tenure-track appointments will be made at the level of assistant professor, one for a developmental plant biologist, and the other for an ecologist. Successful applicants for both these positions should be qualified to teach in the introductory biology program, as well as a variety of upper level courses in their areas of expertise. The developmental plant biologist should have a solid background in botany and the ability to use molecular and/or genetic approaches in the study of plant development. Ecologists with training in marine biology and/or physiological ecology are particularly encouraged to apply.

An opening also exists for an animal biologist to be appointed as a non-tenured, assistant professor for a 3-year term. This position requires teaching in several of the following courses: Human biology for non-majors; comparative anatomy and physiology; cellular physiology; vertebrate physiology, depending upon qualifications.

For all these positions, we are seeking applicants who demonstrate a genuine commitment to both undergraduate teaching and maintaining a productive research program that will involve undergraduate students. The Department is housed in a Science Center complex with superb, modern facilities for effectively integrating teaching and research. Applicants for assistant professorships should have completed their Ph.D. and preferably have had at least two years of postdoctoral experience.

Credentials will be reviewed when complete. Applicants should send their curriculum vitae, graduate transcript, a brief outline of research plans, one letter of recommendation and the names of two additional referees to: **Dr. Andrew C. Webb, Chairman, Department of Biological Sciences, Wellesley College, Wellesley, MA 02181**, no later than 29 January 1988.

*Wellesley College is an Equal Opportunity/Affirmative Action Employer.*

The University of Kentucky Medical Center has **FACULTY POSITIONS** available for basic scientists to work in the following clinical divisions: Neurosurgery, cardiothoracic surgery and general surgery.

Send curriculum vitae to:

Byron Young, M.D.  
Johnston-Wright Chair of Surgery  
Department of Surgery  
University of Kentucky Medical Center  
800 Rose Street  
Lexington, KY 40536

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

## POSITIONS OPEN

**ENVIRONMENTAL PHYSIOLOGIST.** Applications are invited for a position at the assistant professor and assistant in the Agricultural Experiment Station level in the Department of Zoology, University of California, Davis, effective 1 July 1988. Ph.D. required. Position involves research, teaching at the undergraduate and graduate levels, and advising undergraduate and graduate students. The candidate's research should deal with major issues in environmental physiology at the organismic level from an evolutionary perspective. Applications are also strongly encouraged from researchers in the closely related discipline of biomechanics.

By 15 February 1988, applicants should send curriculum vitae, reprints of published work, statements of research and teaching interests, and have three letters of recommendation sent to: **Chairperson, Environmental Physiologist Search Committee, Department of Zoology, University of California, Davis, CA 95616.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION THEORETICAL ATOMIC, MOLECULAR, AND OPTICAL PHYSICS

The Department of Physics of the University of Colorado at Boulder together with the Joint Institute for Laboratory Astrophysics (of the National Bureau of Standards and the University of Colorado) are seeking to fill a faculty position starting September 1988. This position is in the area of theoretical atomic, molecular and optical physics. It will be rostered in the Physics Department, will have membership and offices in JILA, and will offer the possibility of collaboration with the CU Center for Optoelectronic Computing Systems. The position will require, in addition to regular teaching duties, independent leadership of an aggressive and creative research program and scientific interaction with colleagues in both JILA and the Department. Preference will be given to candidates at the assistant professor level, but candidates will be considered at all levels.

Applicants should send a current curriculum vitae and a summary of current and proposed research by 1 February 1988. They should also arrange for three letters of recommendation to be submitted by the same date. All inquiries and application materials should be addressed to: **Dr. D. W. Norcross, Chairman of Search Committee, JILA, Campus Box 440, University of Colorado, Boulder, CO 80309-0440.**

*The University of Colorado has a strong institutional commitment to the principle of diversity. In that spirit, we are particularly interested in receiving applications from women, ethnic minorities, and disabled individuals.*

University of New Brunswick, Department of Biology—Fredericton requires a **GENETICIST** who will teach introductory genetics and upper year courses in his/her area of expertise. The successful candidate will be expected to carry out a rigorous research program. Preference will be given to candidates who can contribute to our botany program on the undergraduate and graduate level. However, all suitable applicants will be considered. Applicants should submit a letter of application, a statement of their research interests, and curriculum vitae with names of three potential referees to: **Richard T. Riding, Chairman, Department of Biology, University of New Brunswick, Bag Service No. 45111, Fredericton, N.B. E3B 6E1.** Closing date is 1 March 1988 or as soon as the appointment is filled. The position begins 1 July 1988. The position is contingent upon budgetary approval. *In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.*

**GENETICIST, Ph.D.,** The Department of Biology, Swarthmore College is seeking a 1-year leave replacement position starting September 1988. Applicants should have research experience and a strong commitment to undergraduate education. The candidate will participate in an introductory biology course, teach a one-semester course in general genetics, and offer a one-semester advanced course in the area of evolutionary genetics. Interested persons should submit curriculum vitae, a statement of teaching and research interests, and three letters of recommendation by 31 January 1988 to: **Dr. John B. Jenkins, Department of Biology, Swarthmore College, Swarthmore, PA 19081.** *An Equal Opportunity Employer.*

## TRANSPLANTATION IMMUNOLOGIST

The Cleveland Clinic Foundation invites applications for a full-time position involving a primary appointment in the Department of Immunology & Cancer and a joint clinical appointment. Interested applicants must have an M.D. and/or Ph.D. degree with experience in basic transplantation immunology. Essential qualities of the successful applicant are the ability to develop a research program bridging basic laboratory investigation with relevant problems in transplantation science, and a willingness to interact with basic scientists as well as transplant clinicians. Please submit a letter of application, curriculum vitae, and research interests to:

**Andrew C. Novick, M.D.**  
Chairman, Department of Urology



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*The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer*

## DIRECTOR INSTITUTE OF ANIMAL BEHAVIOR

THE STATE UNIVERSITY OF NEW JERSEY

**RUTGERS**  
Campus at Newark

Rutgers University is seeking a Director for the Institute of Animal Behavior on its Campus in Newark.

The Institute of Animal Behavior was founded by the late Daniel S. Lehrman over 25 years ago. Its seven faculty members maintain a broad, interdisciplinary training program for approximately 20 graduate students and five post-doctoral fellows. The Campus also houses strong research and doctoral programs in related fields such as chemistry, biology and the neurosciences.

We invite nominations of, and applications from, individuals with an earned doctorate and a record of distinguished achievement in scholarship and research who can provide leadership for the continued development of the Institute. Candidates for a broad spectrum of disciplines are sought.

Please send curriculum vitae and a brief description of current research activities to:

**Dr. M.-F. Cheng, Chair of Search Committee**  
Rutgers, The State University of New Jersey  
Institute of Animal Behavior  
101 Warren Street  
Newark, New Jersey 07102

Search Committee members are: C. Beer, S. Lening-ton, and J. Morrell, of the IAB; D. Kelley, Columbia University, and P. Marler, Rockefeller University.

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



### **CARLSON ENDOWED CHAIR in CHEMISTRY**

Clark University invites nomination and applications for the Carl Julius and Anna (Kranz) Carlson Endowed Chair in Chemistry. The chair endowment exceeds one million dollars, and the recipient of the chair must have outstanding academic credentials and the ability to make major research contributions. Both junior and senior individuals will be considered from all areas of chemistry, though individuals in the areas of physical chemistry, polymer science, biochemistry or magnetic resonance are preferred. Significant support facilities such as equipment and laboratory space will be provided.

Nominations and applications should be sent to:

**Professor K. L. Erickson  
Chair, Search Committee  
Department of Chemistry  
Clark University  
950 Main Street  
Worcester, MA 01610**

*AA/EDE.  
Minorities and women are  
encouraged to apply.*

## **LABORATORY DIRECTOR**

SRI INTERNATIONAL's Physical Sciences Division is seeking a Manager for its Materials Research Laboratory, comprised of 22 professionals. Candidates must have a doctoral degree, demonstrated excellence in some aspect of materials research, experience managing research programs, and the ability to provide leadership for development and growth. A specialty in ceramics, composites, metallurgy or coatings would complement the discipline of the current staff.

Candidates should send their vitae to George Abrahamson, Vice President, Physical Sciences Division, AH 240, SRI INTERNATIONAL, 333 Ravenswood Ave., Menlo Park, CA 94025.

SRI is a non-profit organization that provides research and consulting services to commercial and governmental clients throughout the world. As an affirmative action employer, it welcomes applications from minorities, women and other protected class members.



## **DIRECTOR, JOHN E. FOGARTY INTERNATIONAL CENTER FOR ADVANCED STUDY IN THE HEALTH SCIENCES NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE DEPARTMENT OF HEALTH AND HUMAN SERVICES**

The National Institutes of Health invites nominations and applications for the position of Director, John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC). The Center provides the facility for the assembly of scientists and leaders in the biomedical, behavioral, and related fields for discussion, study, and research in the health sciences at an international level; conceives, designs, develops, and conducts studies on current and emerging international health issues; awards scholarships to outstanding individuals for the purpose of encouraging creative, speculative thought and contributions to advanced study; awards fellowships for collaborative research in the United States and abroad; facilitates and coordinates NIH activities and functions concerned generally with the health sciences at the international level; provides a central point for receiving, assisting, and/or briefing special foreign visitors to NIH; provides administrative support to the NIH Visiting Program; and provides interface between NIH and other agencies and international organizations.

This is a Civil Service position in the Senior Executive Service (SES), with an authorized salary range from \$64,700 to \$73,400 per annum (currently limited to \$99,500) depending on qualifications. Candidates may be eligible for Physicians Comparability Allowance up to \$20,000 per year. Alternately, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service. The SES individual selected, if not presently in the SES, must serve a one-year probationary period.

The mandatory qualifications are: (1) meet the minimum educational requirements for Medical Officer, GS-602, or Health Scientist Administrator, GS-601 (or equivalent combination of experience and education), as defined in the U.S. Office of Personnel Management Handbook X-118, Qualification Standards for Positions under the General Schedule, which is available in Federal Personnel Offices and Federal Job Information Centers; and (2) have knowledge of research programs in the biomedical sciences and international health activities. In addition, candidates must meet the following managerial/executive qualifications: Demonstrated competence to assume leadership responsibilities in: (1) assuring that key national and agency goals, priorities, and values are considered in making program decisions; (2) establishing effective external communications by being a representative spokesperson for the organization, and maintaining working relationships within the organization and with outside key individuals and groups; (3) developing policy, directing and guiding programs and projects, including establishing short-term and long-term goals and priorities, and the structure and processes necessary to carry them out; (4) obtaining and allocating the fiscal and material resources necessary to support program or policy implementation; (5) developing processes and overseeing activities to assure that people are appropriately employed, effectively and efficiently utilized, and dealt with in a fair and equitable manner; and (6) developing activities and procedures to assure that program and policy are being executed, adjusted as necessary, and that the appropriate results are being achieved.

Candidates who meet the mandatory requirements will be further evaluated by the Search Committee on the following factors: communications and interpersonal skills, education; honors and awards; and the degree to which they exceed the minimally qualified level of the mandatory managerial/executive qualifications. Information on any of the above requirements may be obtained by calling Mrs. Helen C. Stafford, Executive Secretary, Search Committee for Director, FIC, at (301) 496-4197.

Applications for Federal Employment, (SF-171) are to be sent to Mrs. Helen C. Stafford, Executive Secretary, Search Committee for Director, FIC, National Institutes of Health, Building 1, Room 22, 9000 Rockville Pike, Bethesda, Maryland 20892. A current curriculum vitae and bibliography must accompany all applications. Applications of women and/or minority group members are especially solicited.



**NATIONAL INSTITUTES OF HEALTH  
AN EQUAL OPPORTUNITY EMPLOYER**

## POSITIONS OPEN

### HEAD, ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCHOOL OF PUBLIC HEALTH UNIVERSITY OF MINNESOTA

The Division of Environmental and Occupational Health, School of Public Health at the University of Minnesota, invites applications for the position of Head. This is a tenured position at the professor or associate professor level.

Candidates must have an earned doctorate, an outstanding and active record in basic, applied and/or policy research bearing on environmental and occupational health, a commitment to quality teaching and strong leadership capability to enhance the research and teaching programs of the Division. Seven years of experience is required for associate professor level; 10 years for professor level. Administrative experience, not necessarily as a titled administrator, is desirable.

Applicants should send a résumé and names of three references by 1 March 1988 to:

Marcus O. Kjelsberg, Ph.D.  
Chair, Search Committee  
Box 197 Mayo Memorial Building  
University of Minnesota  
Minneapolis, MN 55455

*The University of Minnesota is an Equal Opportunity Employer and Educator and specifically invites the applications of women and minorities.*

### IMMUNOLOGIST

Tenure-track assistant/associate professor in the Department of Life Sciences. Ph.D. with 2 years of postdoctoral experience required. The candidate is expected to establish a research program and participate in undergraduate and graduate teaching. Applicants in any area of immunology will be considered; individuals with expertise in molecular immunology, immunogenetics and mechanism of pathogenesis or immunoregulation are encouraged to apply. Position available as early as June 1988. In order to receive full consideration, curriculum vitae, three letters of reference, and a summary of current and planned research interests should be sent by 18 January 1988 to: Dr. William J. Brett, Chairperson, Department of Life Sciences, Indiana State University, Terre Haute, IN 47809. *Indiana State University is an Equal Opportunity/Affirmative Action Employer.*

### DREW UNIVERSITY DEPARTMENT OF CHEMISTRY MADISON, NJ 07940

**INORGANIC CHEMIST** and biochemist, Drew University. Assistant professor level, tenure-track, beginning August 1988. Ph.D. required for both positions. College level teaching experience desirable. Opportunity to participate in active undergraduate research program. Send curriculum vitae, a short research proposal and names/addresses of three references by 31 January 1988 to: Dr. Baldwin King, Department of Chemistry, Drew University, Madison, NJ 07940. *Drew University complies with Equal Opportunity standards and pursues Affirmative Action goals. Qualified women and minorities are encouraged to apply.*

**MOLECULAR TUMOR BIOLOGISTS:** Tenure-track faculty positions (two), at the assistant and associate professor rank, are available for Ph.D. molecular biologists with two or more years of postdoctoral experience in recombinant DNA technology. Candidates should have interests in gene structure/function and expression in cancer cells, and have demonstrated skills in constructing cDNA and genomic DNA libraries, molecular cloning, DNA sequencing, preparing prokaryotic and eukaryotic expression vectors, restriction enzyme mapping and oncogenes. Major responsibilities will be to develop an independent research program and to collaborate on research projects with other faculty members. The department is undergoing a major growth phase, with a focus on cancer research, offering the successful candidates excellent incentives, including competitive salaries, research space and state-of-the-art equipment. Please send curriculum vitae, three letters of reference and a description of your cancer research interests to: George L. Wright, Jr., Ph.D., Professor and Chairman, Department of Microbiology and Immunology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501. *An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**MAST CELL BIOLOGIST**—Junior faculty member willing and able to develop the field of ocular mast cells for our Institute. Joint appointment in Department of Ophthalmology, Harvard Medical School, possible. Send curriculum vitae to: Mathea R. Allansmith, M.D., Eye Research Institute, 20 Staniford Street, Boston, MA 02114.

### MEMBRANE TRANSPORT

A **POSTDOCTORAL POSITION** is available immediately for an individual interested in pursuing studies on the structure and mechanism of ion-translocating ATPases. The ATPase in the plasma membrane of *Neurospora* is an electrogenic proton pump that operates via a phosphoryl-enzyme intermediate identical to those of the animal cell transport ATPases. Research will involve investigation of the biochemistry of this ATPase with the goal of elucidating its molecular mechanism. Send curriculum vitae to: Dr. Gene A. Scarborough, Department of Pharmacology, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC 27514. *Equal Opportunity Employer.*

The U.S. Department of Agriculture, Agricultural Research Service, is seeking applications for two postdoctoral positions, **MICROBIOLOGIST/MOLECULAR BIOLOGIST**, for the National Animal Disease Center, Brucellosis Research Unit, in Ames, Iowa. The positions are temporary, full-time. Responsibilities include the application of recombinant DNA technology and isolation and characterization of *Brucella* proteins and lipopolysaccharides for use in the development of improved subunit vaccines and diagnostic tests for bovine brucellosis.

Salary is commensurate with experience (\$27,172 to \$42,341). For program and position information, contact: Dr. George Lambert on 515-239-8204. For information on application procedures/forms, contact: Janie Carr on 301-344-2756. Applications in response to this ad should be marked 8N001. Applications must be received no later than 1 January 1988.

Mail applications to:

Janie Carr, USDA-ARS-PD  
Personnel Operations Branch  
Northern Section  
Building 419, BARC-East  
Beltsville, MD 20705  
*An Equal Opportunity Employer*

Northeast Missouri State University invites applications for three tenure-track positions, beginning August 1988: **MOLECULAR BIOLOGIST** (with preference given to applicants with experience in virology or microbiology); **MAMMALIAN BIOLOGIST** (with preference to anatomy and physiology); and **ECOLOGIST** (with preference to animal/plant interactions). Teaching will include courses in general biology for majors and non-majors as well as advanced courses. These individuals will also be expected to involve undergraduate and graduate students in research. Laboratory space, basic instruments, and initial support will be provided. Northeast Missouri State University is a state-wide public liberal arts and science institution which is nationally recognized for its value-added approach to education. Please send letter of application indicating teaching and research goals, curriculum vitae, official undergraduate and graduate transcripts, and three letters of recommendation to: Dr. W. J. Magruder, Head, Division of Science, Northeast Missouri State University, Kirksville, MO 63501.

**NEUROBIOLOGIST**—A tenure-track assistant professorship to begin on 15 August 1988 is open for a Ph.D., preferably with a molecular orientation and postdoctoral experience. Teaching courses in neurophysiology at both the graduate and undergraduate level as well as participation in our general introductory biology course program will be expected, along with a program of productive research and extramural grant funding. To apply send curriculum vitae, three letters of recommendation, reprints of publications, transcripts, and statement of future research plans by 15 February 1988 to: Chairman, Neurobiology Search Committee, Department of Biological Sciences, c/o Office of Human Resource Management, Duquesne University, Pittsburgh, PA 15282. *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### MOLECULAR GENETICIST

Ph.D. or M.D. and 3 years or more of relevant postdoctoral experience. To direct laboratory of molecular genetics in the Pediatric Leukemia Research Program at the University of Texas System Cancer Center (UTSCC), M.D. Anderson Hospital and Tumor Institute. For more details please contact: Donald Pinkel, M.D., 713-792-3326 or send curriculum vitae to: Department of Pediatrics, Box 87, UTSCC, M. D. Anderson Hospital and Tumor Institute, 1515 Holcombe Boulevard, Houston, TX 77030. *We are an Equal Employment Opportunity/Affirmative Action Employer.*

**NATURAL RESOURCES SUPERVISOR**—Assists the Director with environmental permitting, and supervision of artificial reef construction. Master's degree in ecology or related field, 2 to 3 years of experience, and 1 year of supervision or equivalent. Range: \$27,592 to \$38,628. Send résumés to: Collier County Government, Human Resources, Department NRD, 3301 East Tamiami Trail, Naples, FL 33962. *Equal Opportunity Employer.*

**NUTRITION—INFECTIOUS DISEASES—INTERNATIONAL HEALTH.** Tenure-track position available at the **ASSISTANT PROFESSOR** level. Responsibilities will include teaching and establishing independent research program in nutrition and infectious diseases with emphasis in international health. Laboratory and epidemiological/field background required. Two years of postdoctoral experience or equivalent required. Spanish or French proficiency desirable. Send curriculum vitae and names of three references to: Dr. Jose O. Alvarez, School of Public Health, University of Alabama at Birmingham (UAB), Birmingham, AL 35294. *UAB is an Equal Opportunity/Affirmative Action Employer.*

### OB/GYN FACULTY POSITION

The Department of Obstetrics and Gynecology, University of Oklahoma Health Sciences Center in Oklahoma City is seeking an individual with research interests in reproductive biology. The candidate must have academic training in reproductive biology, early gamete physiology, and andrology. Ph.D. required. Preference will be given to (i) individuals familiar with in vitro fertilization techniques, especially in nonhuman primates, and (ii) individuals with at least a peripheral interest in reproductive immunology. The individual should be prepared to participate in student and resident teaching and assisting in research projects of students and residents. Candidates should be capable of interdigitating research efforts with clinical faculty as well as working independently on more basic projects.

Send curriculum vitae and bibliography to:

John I. Fishburne, Jr., M.D.  
Professor and Chairman  
Department of Obstetrics and Gynecology  
University of Oklahoma College of Medicine  
P.O. Box 26901, 45P 700  
Oklahoma City, OK 73190  
*An Equal Opportunity Employer*

Connecticut—**PEDIATRIC DENTISTRY.** Full-time tenure-track position available. Responsibilities include research, undergraduate, postgraduate, and graduate teaching. Formal training in pediatric dentistry is preferred but not essential and research training in relevant biomedical, especially in the area of human genetics and/or molecular biology, or, clinical sciences and ability to successfully compete for research funds is highly desirable. Salary and academic rank commensurate with training and experience. Send inquiries and curriculum vitae to: Dr. B. H. Clarkson, Chairman, Department of Pediatric Dentistry, The Dean's Office, University of Connecticut Health Center, Farmington, CT 06032.

*An Affirmative Action/Equal Opportunity Employer M/W/H.*

**Ph.D. BIOCHEMIST/IMMUNOLOGIST** with minimum of 5 years of work experience in protein purification, HPLC and SDS-PAGE chromatography, Ab product, and characterization (poly and mono) for RIA and ELISA, plus additional experience with DNA probe techniques for Dx assay development. Entrepreneurial spirit essential and rewarded accordingly by this New York Company. Send curriculum vitae, list of publications, and list of references to: Box 185, SCIENCE.

**NATIONAL INSTITUTE OF  
DIABETES AND DIGESTIVE  
AND KIDNEY DISEASES**  
National Institutes of Health  
Public Health Service

The Clinical Diabetes and Nutrition Section of the Phoenix Epidemiology and Clinical Research Branch is seeking a well trained biochemist interested in investigating the mechanisms of insulin action and insulin resistance in man. The Branch is located in Phoenix, Arizona, in a 25-bed clinical research center with well-equipped laboratories and adequate technical support. The major research interest is the pathogenesis of insulin resistance and noninsulin-dependent diabetes mellitus. Applicants should have an M.D., Ph.D., or equivalent degree, at least three years postdoctoral training, and experience in the biochemistry of insulin action. The successful candidate will, in time, have the possibility to acquire tenure. Qualified applicants should send a curriculum vitae, bibliography, short statement of research interests, and the names of three references to Clifton Bogardus, M.D., Chief, Clinical Diabetes and Nutrition Section, NIDDK, 4212 North 16th Street, Room 5H, Phoenix, Arizona 85016 (Telephone 602-263-1556).

U.S. Citizenship Required  
NIH IS AN EQUAL OPPORTUNITY EMPLOYER

## Research Scientist

Triton Biosciences Inc., an entrepreneurial subsidiary of Shell Oil Company, is an emerging force in the development of diagnostics and therapeutics for human health care. Our company is built upon a strong base of research expertise, solid support, and responsive management.

An excellent opportunity exists for an innovative researcher in our Biochemical Development department. The qualified candidate should have a Ph.D. in Chemistry/Biochemistry, or a related field, and at least 3-5 years of combined post-doctoral studies and/or industrial experience.

The successful candidate is expected to design and execute projects on the scale-up of protein purification processes. In addition to a strong background in biochemistry, you should have a good working knowledge of modern techniques in protein purification and analysis, including HPLC. Prior experiences with recombinant derived products and GMP's desirable.

**Additional opportunities exist for BS/MS level Research Associates.**

Triton is located in the San Francisco Bay Area and offers competitive salaries and benefits, including relocation assistance. For prompt consideration, please forward your C.V. along with salary requirements and the names of three references to: Triton Biosciences Inc., 1501 Harbor Bay Parkway, Alameda, CA 94501. All candidates must have U.S. citizenship or permanent resident visa status. Triton is an Equal Opportunity Employer.



Triton Biosciences Inc.



Committed  
To Scientific  
Excellence

## Opportunities in Cardiovascular and Immunopharmacology

The Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Inc., is committed to excellence in pharmaceutical research and development. Our largest research and development center is located near Albany, New York.

We are currently strengthening our pharmacology sections devoted to the discovery of new therapeutic agents in cardiovascular and immunopharmacology.

We have several major pharmacology programs which involve the aggressive pursuit of novel therapeutic entities.

Opportunities currently exist for Ph.D. scientists to play major roles in cardiovascular and immunopharmacology:

**Section Head - Immunopharmacology** - Ph.D. degree and a minimum of five years of relevant research experience.

**Sr. Research Biologist - Immunopharmacology** - entry-level position requiring a Ph.D. degree and relevant training.

**Group Leader - Cardiovascular** - Ph.D. degree and a minimum of three to five years industrial research experience in subcellular/biochemical regulation of smooth muscle.

**Sr. Research Biologist - Cardiovascular** - entry-level position requiring a Ph.D. degree and relevant training in at least one area of cardiovascular disease.

If you have an advanced degree in pharmacology or a related biological science and would like to learn more about available opportunities, please send your resume to:

Mr. William F. Sheldon, Employment Manager,  
Sterling-Winthrop Research Institute, Sterling  
Research Group, A Division of Sterling Drug Inc.,  
Columbia Turnpike, Rensselaer, New York 12144

An Equal Opportunity Employer M/F/H/V

**NATIONAL CANCER INSTITUTE**  
**National Institutes of Health, Public Health Service**  
**CANCER PREVENTION FELLOWSHIP PROGRAM, CPFP**

The DIVISION OF CANCER PREVENTION AND CONTROL is accepting applications for CPFP. The primary purpose of this program is to attract individuals from a multiplicity of health science disciplines into the field of cancer prevention and control research. The program provides for: participation in DCPC Cancer Control Academic Program (a formal four-month course in cancer prevention and control); 20 months at NCI working directly with individual preceptors on ongoing cancer prevention and control projects and the NCI Year 2000 Goals; one year at a DCPC-approved cancer control program or State Health Department (may be optional). Funding permitting, up to 10 Fellows will be accepted for up to three years of training, beginning on August 28, 1988.

**APPLICANTS MUST (BY THE DEADLINE):** (1) Possess an M.D. or D.O. degree from an accredited medical school in the U.S., Puerto Rico, or Canada. (Foreign medical graduates—American citizens or Resident Aliens who have received their medical degree from a medical school outside the U.S., Puerto Rico and Canada and that is listed in the World Health Organization's *World Directory of Medical Schools*—must be certified by the Educational Commission for Foreign Medical Graduates [ECFMG]. Current certification, ECFMG or Foreign Medical Graduate Examination in the Medical Sciences [FMGEMS], is required for all foreign medical graduates.) Must have satisfactorily completed an internship (PG1) approved by the Council on Medical Education. (However, application will be accepted when internship is an integral part of medical school curriculum or incorporated as part of residency training.) —OR— Possess other accredited U.S., Puerto Rican, or Canadian doctoral degree (Ph.D., Dr. P.H., D.D.S., etc.) in a discipline related to cancer prevention and control research; biomedical, medical, nutritional, public health or behavioral sciences. (Foreign doctoral graduates must provide documented evidence that the foreign education is comparable to doctoral education received in accredited institutions noted above.); (2) Possess U.S. citizenship or be a resident alien eligible for citizenship within four years; (3) Complete and return the application packet by the deadline (including arranging for official academic transcripts and four, current, original letters of reference to be sent directly by the academic institutions and referees to the CPFP Coordinator).

For questions concerning the program's scientific or administrative aspects, please call Dr. David Poskanzer or Ms. Nancy Garner, respectively. Application packets may be obtained by sending a *POSTCARD* with your name and home address to **CPFP Coordinator, NIH/NCI/DCPC/CCAB, Blair Building, Room 4A05, 9000 Rockville Pike, Bethesda, MD 20892-4200**, or call (301) 427-8788. Please do not send any material until after you have read the instructions in the application packet.

*DEADLINE FOR RECEIPT OF APPLICATIONS: JANUARY 15, 1988*  
*(The NIH is an Equal Opportunity Employer)*

**Postdoctoral Fellow**  
**Molecular Oncology/  
Tumor Cell Biology**  
**Genentech, Inc.**

The Department of Pharmacological Sciences has an immediate opening for a postdoctoral fellow to work in the area of modulation of growth factor receptor function. The focus of the project will be the role of growth factors and their receptors in human breast cancer.

The successful candidate will have a strong background in molecular and cellular biology and a keen interest in understanding the mechanisms of tumorigenesis.

Please send your CV and letter of interest to: Dr. Michael Shepard, Department of Pharmacological Sciences, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

**Genentech, Inc.**  
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**PROJECT MANAGER**

Nelson Research, a wholly-owned subsidiary of Ethyl Corporation, situated on the campus of the University of California at Irvine, is a pharmaceutical research company committed to the discovery and development of new drugs.

A prime component of the organizational strategy for Nelson Research is to increase the effectiveness of the Product Development Project System. For this purpose, we have created the role of Project Managers, whose major responsibility will be the planning and coordination of the work of multidisciplinary project teams.

Reporting to the Vice President, Development, you will be responsible for ensuring the formulation of project strategy, tactics and plans, monitoring progress, and ensuring that corrective action is taken when necessary.

You will be a graduate, and preferably a postdoctoral scientist, with demonstrated success in the application of your specialism to the R&D process within the pharmaceutical industry. You will bring a breadth of knowledge and experience in the drug development process to enable you to initiate, manage, and coordinate projects according to commercial, regulatory, scientific, medical, and ethical criteria. Above all, you will possess the skill in communication and in personal presentation to lead a multidisciplinary team of specialists outside your formal line control and to influence senior management in line and service departments in order to facilitate the attainment of project objectives.

Nelson Research offers a professional environment and competitive salary and benefits. Interested candidates may send their resume with salary history to:

**Personnel Manager**  
**Nelson Research**  
**1001 Health Sciences Road West**  
**Irvine, California 92715**

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**1515 BROADWAY**  
**NEW YORK, N.Y. 10036**

# Associate Senior Investigator Molecular Genetics/ Biology

The Department of Cell Biology at Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania, in a new state-of-the-art research complex, has an immediate opening for an Associate Senior Investigator to join a research team investigating the role of polypeptide growth factors and other therapeutic agents in the treatment of colon cancer and other proliferative diseases.

Responsibilities will include directing and performing mutagenesis studies of transforming growth factors to elucidate the structure-activity relationships, cloning and expressing novel epithelial transforming growth factors and developing strategies for exploring therapeutic potential of growth factor agonists/antagonists in various proliferative diseases.

Candidates are required to have a Ph.D. in Molecular Genetics/Biology with a minimum of two years relevant experience in random and site directed mutagenesis, cloning and expression of biologically active proteins in various expression systems and excellent communication skills, including a good publication record. Experience in polypeptide growth factors is preferred.

We offer an excellent compensation and benefits package and an attractive relocation policy as well as opportunities for personal and professional growth. Publication of research data is encouraged and supported.

For confidential consideration, send your curriculum vitae and the names of three references to Robert F. Obst, Manager, Personnel Relations, R0105, Smith Kline & French Laboratories, Research and Development Division, P. O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer. M/F/H/V.

**SK&F**  
A SmithKline Beckman Company

## Biostatistician

The Dade Division of Fortune 100 Baxter Healthcare Corporation is a leading supplier of diagnostic products and instrumentation for clinical laboratories, with facilities in the U.S., Europe, and Puerto Rico. We currently have an exceptional opportunity for a Biostatistician in our Clinical Affairs Department.

The selected candidate will plan the statistical design and develop statistical analysis programs for clinical investigations of *in vitro* diagnostics product lines. The preferred technical background includes an M.S. or Ph.D. in Biostatistics or related discipline with 3 years practical experience in advanced statistical analysis or clinical/diagnostic test data. The successful candidate will be part of a team of clinical research associates conducting diagnostic product investigations. The position requires a combination of scientific/technical knowledge, advanced computer programming capabilities and excellent interpersonal and communication skills.

The Dade Division is based on the beautiful east coast of South Florida where, in addition to paying no state or local income taxes, you will enjoy a year-round quality lifestyle which attracts new residents and visitors from around the world.

As a Baxter employee, you will enjoy a competitive salary and benefit package, along with career growth opportunities. If you feel you have the talent, drive and determination to make a positive contribution to our highly motivated, progressive team, please send your resume in confidence to: **Professional Staffing, Baxter Healthcare Corporation, Dade Division, P.O. Box 140520, Coral Gables, FL 33114.** Equal Opportunity Employer.

Dade Division

**Baxter**

Applied Biosystems manufactures and markets automated instruments, a wide range of chromatography columns and components, and several hundred associated chemicals for biotechnology research and related applications.

*At its Foster City location immediate openings are available:*

### Senior Scientist/Scientist, Peptide Chemistry (101)

This individual will be responsible for the continued development of our peptide synthesizers, including design and commercialization of new products. The successful candidate should possess a Ph.D. with 6-8 years post-graduate experience and a track record of high productivity and research excellence. In-depth knowledge of tBoc and Fmoc chemistries, cleavage chemistries and purification methods necessary.

### Associate Scientist, Molecular Biology (102)

A Ph.D. in Molecular Biology or a related field with one or more years of post-doctoral experience in recombinant DNA technology is required for this position. Candidates should be interested in methods development for DNA separation systems and have demonstrated skills in molecular cloning, preparing and screening genomic and cDNA libraries, site-directed mutagenesis and restriction mapping.

### Senior Product Specialist, Protein Sequencing (103)

An individual with 5 or more years in protein sequencing, purification methodologies and sequence data analysis is required for this position. Primary responsibilities will be technical liaison between Sales/Marketing and R&D for sequencing products, as well as acting as the customer interface to these groups. Duties will also include training and support of sales personnel and customers, conducting consulting with customers, seminars and distribution of technical applications information. Degree in Life Science required.

### Software Engineers (104)

Several positions are currently available which require individuals with BS/MS degrees in either Biochemistry/Molecular Biology and/or Computer Science/Electrical Engineering. A minimum of 3 years of programming microprocessor-based systems necessary. Responsibilities will include prototyping, designing, implementation of new products, or developing software for data acquisition, management, analysis, display and instrument control. Familiarity with PC, DOS and C language required.

The ideal candidates are innovative, self-motivated, and possess good communication skills to work with multi-disciplinary teams. Applied Biosystems offers attractive compensation, benefits and growth opportunity.

**Send resume, indicating position identification number to:**

Human Resources Department, Applied Biosystems  
850 Lincoln Centre, Foster City, CA 94404  
*An Equal Opportunity Employer*

 **Applied  
Biosystems**

Foster City Biosystems Division



## POSITIONS OPEN

### PERMANENT POSITION RESEARCH ASSOCIATE

Section Head, (immuno)histochemistry, at university Hospital. Academic appointment if desired (Northwestern University). Bench work experience required, doctorate preferred. Original work on aspects of human carcinoma cell membranes. Outstanding salary and excellent benefits. Send curriculum vitae, details on expertise and bibliography to: **G. F. Springer, M.D., Director, Immunohistochemistry Research Department, Evanston Hospital, 2650 Ridge Avenue, Evanston, IL 60201.** *Equal Opportunity Employer M/F*

**Ph.D.—SURGERY:** Surgical laboratory in University-based surgical department seeks basic science researcher with Ph.D. in biochemistry, immunology, or physiology. Must be qualified for academic appointment with specific interest and experience in wound healing, elastin and/or collagen metabolism. Competitive salary. Send curriculum vitae with salary history to: **Marie Murtha, Employment Representative, Long Island Jewish Medical Center, New Hyde Park, NY 11042.** *An Equal Opportunity Employer.*

### PHYSIOLOGICAL ECOLOGIST

Applications are invited for a tenure-track position in physiological ecology at the University of California, Los Angeles (UCLA). We are seeking an outstanding and innovative scientist who has recently received the Ph.D. degree, but applications from more established investigators will be considered. Individuals doing modern and imaginative ecophysiological research on adaptations of animals or plants to their habitats are encouraged to apply. The candidate should complement the existing research interests in the Department. Teaching responsibilities are participation in an undergraduate "core" course, an undergraduate or graduate specialty course, and a graduate seminar annually. Applications are due by 31 January 1988, and should include curriculum vitae, bibliography, copies of recent publications, a description of research and teaching goals, and the names and addresses of four people from whom we may request letters of evaluation. Send materials to:

**Dr. Ken Nagy, Chair  
Physiological Ecologist Search Committee  
Department of Biology  
University of California, Los Angeles  
Los Angeles, CA 90024**

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

### PLANT BIOLOGIST FOR WAKSMAN INSTITUTE, RUTGERS UNIVERSITY

The Waksman Institute at Rutgers has been provided with new resources from the State of New Jersey as part of a major initiative to strengthen public supported science and technology. The Institute is being greatly expanded. Four new faculty members were added in 1985 to 1987. Construction of a new research wing was completed in 1985, and of new plant growth facilities, including a 7,000-square-foot greenhouse/growth chamber complex in 1987. Moreover, construction is underway of an x-ray diffraction lab, an advanced computational facility, and a fermentation/cell fractionation facility. Eight or more additional faculty members will be sought over the next several years.

Applications are invited for one or more plant biologist positions to be filled within the next year at the assistant to full professor levels. Successful candidates are expected to have or develop a strong, vigorous program of high quality research, and to participate in graduate level teaching. Appropriate funds are available to help ensure the initiation and continued success of the candidate's research program.

Interested persons should submit curriculum vitae and a description of current and proposed research, and have three or more letters of references sent to: **Dr. David Pramer, Chair, Plant Biologist Search Committee, Waksman Institute, Rutgers, the State University of New Jersey, P.O. Box 759, Piscataway, NJ 08854.**

A parallel search for two senior plant molecular biologists is being conducted by **Dr. Peter Day, Director of the Rutgers Center for Agricultural Molecular Biology.** Successful candidates of both searches will be located initially in the Waksman Institute.

*Rutgers is an Equal Opportunity Employer.*

## POSITIONS OPEN

**POSTDOCTORAL ASSOCIATE** needed immediately to determine the repertoire and structures of immunoglobulin genes used in the immune response to a protein antigen. Techniques include hybridoma production, mRNA and DNA sequencing, and gene cloning. A background in molecular biology is required. Submit résumé and the names of three referees to: **Dr. Ronald Jemmerson, Department of Microbiology, Box 196 UMHC, University of Minnesota, Minneapolis, MN 55455.** *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

**POSTDOCTORAL ASSOCIATE** available immediately to study the cellular mediators of acquired antituberculous immunity within the chronically infected mouse lung. Experience in cloning and cellular immunology is desirable.

The Trudeau Institute is a private, not-for-profit basic medical research institution located on the shore of Lower Saranac Lake and 10 miles from Lake Placid, New York. Subsidized housing and liberal fringe benefits are available.

Send curriculum vitae and names of three references to:

**Dr. Frank M. Collins  
Trudeau Institute  
P.O. Box 59  
Saranac Lake, NY 12983**

### POSTDOCTORAL FELLOWS

Several openings are available immediately for postdoctoral fellows and assistant scientists (B.S., M.S.) in a variety of research areas. These areas include studies of the origin of variation in HIV and development of new retroviral vectors; receptors, cellular signals, and transduction mechanisms; tumor associated antigens; interferon structure and function; new sequencing technology; cellular immunology. Experience in cloning and DNA sequencing and/or protein purification and enzymology would be useful. Salary: \$19,000 to \$24,000 per year, depending on experience. Qualified individuals should send a résumé and names of three references to: **Sidney Pestka, Professor and Chairman, Department of Molecular Genetics and Microbiology, UMDNJ—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854–5635.** *Equal Opportunity/Affirmative Action Employer M/F/H/V.*

**POSTDOCTORAL POSITION** available immediately to study biosynthesis, post-translational processing and cellular targeting of lysosomal enzymes using cell culture, cDNA cloning, site-directed mutagenesis and gene expression. Send curriculum vitae and names of three references to: **Dr. Ann Erickson, Department of Biochemistry, School of Medicine, University of North Carolina, Chapel Hill, NC 27599–7260.** *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** for individual interested in molecular and cellular biology of myelination and demyelination. Potential for faculty status. Send curriculum vitae and two letters of recommendation to: **Dr. Bruce D. Trapp, Department of Neurology, Johns Hopkins University School of Medicine, Meyer 6-181, Baltimore, MD 21205.**

**POSTDOCTORAL POSITION** for research on transgenic mice carrying new genes which modify nervous system function. Apply with curriculum vitae to: **Dr. R. L. Brinster, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA 19104.**

### POSTDOCTORAL POSITION

Position available to study the structural and functional domains of proteins specified by herpes simplex virus and human cytomegalovirus. Preference will be given to applicants with a strong background in molecular biology. Interested candidates should submit curriculum vitae and three letters of reference to:

**Dr. Lenore Pereira, School of Dentistry,  
Division of Oral Biology  
University of California, San Francisco, HWS–604  
San Francisco, CA 94143–0512**

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

## POSITIONS OPEN

### POSTDOCTORAL POSITION CELL AND MOLECULAR BIOLOGY CENTER THE PENNSYLVANIA STATE UNIVERSITY

A postdoctoral position is available immediately to study the structure and function of the mammalian brain spectrin isoforms: brain spectrin(240/235) and brain spectrin(240/235E) [*J. Cell Biol.* 102, 2088 (1986); *J. Neurosci.* 6, 2977 (1987); *J. Neurosci.* 7, 864 (1987)]. The ideal candidate would have a strong background in molecular and cellular neurobiology. The position is funded through an NIH grant and is available for 3 to 4 years. Send curriculum vitae and three letters of recommendation to:

**Dr. Steven R. Goodman  
Director  
The Cell and Molecular Biology Center  
The Pennsylvania State University  
College of Medicine  
P.O. Box 850  
Hershey, PA 17033**

*An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION.** Available immediately to study B lymphocyte differentiation and the development of the immune repertoire. Experience in cellular immunology and molecular biology desirable. Send curriculum vitae and names of three references to: **Dr. Judy Teale, Department of Microbiology, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284.** *The UTHSCSA is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** research associate in developmental cerebrovascular physiology. A position is available immediately for a Ph.D. interested in the study of ischemic neuronal damage and adenosine. A strong background in autoradiography, electron microscopy and HPLC is required. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. T. S. Park, Department of Neurosurgery, University of Virginia, Box 212, Charlottesville, VA 22908.**

*University of Virginia Hospital is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately for a recent Ph.D. in biochemistry/pharmacology to participate in cardiovascular research involving drug metabolism and hypertension. Experience with enzyme and drug assays using modern analytical techniques including HPLC required. Send résumé and names of three references to: **K. Venkataraman, M.D., Director of Cardiology, City of Hope National Medical Center, 1500 East Duarte Road, Duarte, CA 91010.**

**POSTDOCTORAL POSITION** available to study DNA replication, cell cycle regulation by protein phosphorylation, and cellular aging in yeast. Experience in yeast genetics and recombinant DNA techniques is desirable. Send curriculum vitae, including bibliography, and have three letters of reference sent to: **Dr. S. M. Jazwinski, 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.*

### POSTDOCTORAL POSITION UNIVERSITY OF SOUTHERN CALIFORNIA

Postdoctoral position available immediately to work on mechanisms of induction of Parkinson's disease by MPTP. Applicant must be interested in exploring mechanisms of bioactivation in the brain. Send curriculum vitae, research interests, and three references to: **James D. Adams, Ph.D., School of Pharmacy, 1985 Zonal Avenue, Los Angeles, CA 90033.** *Equal Opportunity Employer M/F/H.*

**POSTDOCTORAL POSITION** available immediately to study expression of intermediate filament proteins. Prior background in molecular biological techniques preferred. Please send curriculum vitae and letters of recommendation to: **Dr. P. V. Sarthy, Department of Ophthalmology, RJ-10, University of Washington, Seattle, WA 98195.** *University of Washington is an Affirmative Action/Equal Opportunity Employer.*

# Research Associates

Maimonides Medical Center, a progressive 700 bed teaching hospital, has POST DOCTORAL RESEARCH ASSOCIATE positions available in the following areas:

## MOLECULAR BIOLOGY

The selected candidate will perform recombinant DNA techniques in the fields of virology, and immunology. Research will involve viral gene amplification and detection (in situ hybridization).

## IMMUNOLOGY

The successful candidate will study cellular and humoral immune mechanisms in the area of autoimmune diseases at the CNS. Experience in Protein Purification, T Cell Cloning, and/or Suppressor T Cell Assay desirable.

*The above positions will be available beginning January 1st, 1988 and offer salaries in the \$28K to \$35K range, excellent fringe benefits, and an attractive Brooklyn location just 20 minutes from midtown New York City.*

Please send C.V. and letters of reference to:

**DR. F. MOKHTARIAN**  
Associate Professor and Director,  
Division of Virology/Immunology  
DEPARTMENT OF MEDICINE



## Maimonides Medical Center

4802 Tenth Avenue  
Brooklyn, New York 11219

We are an equal opportunity Employer M/F

## The University of Pittsburgh

### Vice Provost for Research and Graduate Studies

The Vice Provost for Research and Graduate Studies is a senior administrator with responsibilities both for research and graduate education at the University, and serves in the following capacities:

- as principal advocate for research and graduate education and, as such, helps to initiate, formulate, review, and implement policies concerning research and graduate education;
- as the administrator who oversees graduate programs and assists in the recruitment of graduate students to the University; and
- as the administrator who oversees the Office of Research.

The Vice Provost for Research and Graduate Studies is charged with the task of stimulating, developing, facilitating, and nurturing research and graduate education throughout the University.

Candidates must have experience in research, qualify for a faculty appointment, and have relevant administrative experience. The position is available July 1, 1988.

Applications and nominations should be addressed to:

Professor James V. Maher, Chair  
Vice Provost Search Committee  
University of Pittsburgh  
826 Cathedral of Learning  
Pittsburgh, PA 15260

Deadline: January 30, 1988

The University of Pittsburgh is an affirmative action, equal opportunity employer. Minority applications are actively sought.

## U.S. Department of Energy POSTGRADUATE RESEARCH PROGRAMS

Toxicology	Engineering
Fossil Energy	Physical Sciences
Hazardous Wastes	Environmental Sciences
Economics/ Energy Policy	Life Sciences
Artificial Intelligence	Computer Sciences

- Research at national laboratories
- Stipends \$19–35,000 depending on degree, program, research area
- Recent graduate degree
- U.S. citizens or PRAs eligible
- Information



Postgraduate Research Programs  
University Programs Division  
Oak Ridge Associated Universities  
P.O. Box 117  
Oak Ridge, TN 37831-0117  
(615) 576-3190

## PROJECT MANAGERS Pharmaceuticals

**Adria Laboratories**, a rapidly expanding pharmaceutical company, is moving aggressively to meet R&D challenges in the development of human pharmaceuticals. As we undertake major research expansions, we seek project management professionals to oversee multidisciplinary project teams.

You will play a vital role in managing team members from Adria's R&D regulatory and marketing divisions in the planning, implementation, and completion of projects which will produce ANDA's and NDA's. Position qualifications include advanced degree or comparable experience, proven record of leadership accomplishments in a similar position within the pharmaceutical industry, with additional experience in R&D, regulatory affairs, or marketing.

This unique opportunity will position you for visibility and advancement on a management team that turns good ideas into reality, while Adria's Columbus, Ohio location surrounds you with an affordable and enviable quality of life. Adria's extreme financial strength allows us to offer an excellent salary and benefits package. To investigate Adria's growth and your ability to grow with us, send resume which must include current salary level to: **Adria Laboratories, Staffing—JWK, P.O. Box 16529, Columbus, OH 43216.** An Equal Opportunity Employer M/F/H/V.



ADRIA LABORATORIES

## POSITIONS OPEN

### POSTDOCTORAL POSITION IN VASCULAR PLANT SYSTEMATICS

The Harvard University Herbaria has a 1-year appointment available to qualified individual with Ph.D. working in vascular plant systematics. Applicants should provide statement of purpose which describes proposed use of the Herbaria and its Libraries, and project(s) planned to undertake. Cover letter with above information, curriculum vitae, and three letters of recommendation should be sent by 1 May 1988 to:

Donald H. Pfister  
Harvard University Herbaria  
22 Divinity Avenue  
Cambridge, MA 02138

### POSTDOCTORAL POSITIONS

Available immediately for recent Ph.D.'s with strong background in cell and molecular biology/biochemistry. Research will involve studies on in vivo/in vitro regulation of mouse mammary tumor virus/human immunodeficiency virus gene expression. Related areas of research include investigations into the mechanism by which nutrients modulate mammary tumorigenesis and mammary tumor metastasis. Technical help is available. Successful candidates will be encouraged to develop independent programs. At least one position could lead to a nontenure-track faculty position within 12 months. Salary is negotiable. Please send curriculum vitae and names of three references to: **Dr. Nurul H. Sarkar, Department of Cell and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-3331. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITIONS—MOLECULAR VIROLOGY.** The Lineberger Cancer Research Center of the University of North Carolina at Chapel Hill. A coordinated program for the study of viruses associated with cancer and with AIDS at the Lineberger Cancer Research Center has openings, with training for qualified applicants. Fellows benefit from collaborations among these laboratories plus organized Core Facilities and interactions with other programs and virologists. Write for brochure sending brief statement of interests to: **Director, Lineberger Cancer Research Center, CB# 7295, University of North Carolina, Chapel Hill, NC 27514. Affirmative Action/Equal Opportunity Employer.**

**Eng-Shang Huang:** Mechanisms of transformation by human cytomegalovirus, transactivation of human immunodeficiency virus (HIV), antiviral drugs.

**Shannon Kenney:** Regulation of Epstein-Barr virus promoters, study of EBV transactivating proteins.

**Joseph S. Pagano:** Molecular basis of Epstein-Barr viral latency, interactions with HIV, antiviral drugs.

**Nancy Raab-Traub:** Transformation by Epstein-Barr virus, oncogene activation and molecular pathobiology; EBV transcription.

**Ronald Swanson:** HIV replication; interaction between retroviruses and the host genome.

**POSTDOCTORAL RESEARCH POSITION** is available beginning 1 February 1988 for study of marine biopolymers with initial concentration on chitin, chitosan, and related polysaccharides. The successful applicant will join a Sea Grant-supported program that includes both basic and applications-oriented work in the College of Marine Studies of the University of Delaware. A strong base in organic chemical research is required with supplemental background in biophysics physical chemistry. Polymer experience would be desirable but not imperative. Please submit a letter of application, a résumé, and names of three references by 15 January 1988 to: **Dr. Herbert Waite, University of Delaware, College of Marine Studies, 700 Pilottown Road, Lewes, DE 19958. The University of Delaware is an Affirmative Action/Equal Opportunity Employer.**

**RESEARCH ASSISTANT PROFESSOR.** Department of Pathology, University of Cincinnati Medical Center to direct tissue culture/monoclonal antibody production laboratory. Successful candidate must have Ph.D. or equivalent degree, experience in tissue culture and background in immunochemistry with proven capabilities for independent research. Send résumé and three letters of recommendation by 15 January 1988, to: **Roger D. Smith, M.D., University of Cincinnati Medical Center, Department of Pathology, M.L. 529, Cincinnati, OH 45267. An Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

**POSTDOCTORAL/RESEARCH ASSOCIATE POSITION** available to study immunochemical and cellular aspects of mucosal immunity. Experience in molecular or cellular immunology preferred. Send curriculum vitae, and names of three references to: **Dr. Paul C. Montgomery, Professor and Chair, Department of Immunology and Microbiology, Wayne State University Medical School, 540 East Canfield Avenue, Detroit, MI 48201. Equal Opportunity/Affirmative Action Employer.**

Five **POSTDOCTORAL RESEARCH FELLOW POSITIONS** immediately available for persons with an interest in environmental toxicology and with Ph.D. training and research interests as follows:

1) Training in biochemistry and xenobiotic metabolism for research on metabolic interactions of pesticides, **Dr. Sheldon D. Murphy.**

2) Training in biochemistry, pharmacology or molecular biology for research on biochemical, immunochemical and genetic characterization of heme and porphyrin regulation and its modification by environmental toxicants, **Dr. James S. Woods.**

3) Training in biochemistry, neurochemistry, pharmacology for research on the characterization and validation of blood cells as markers for nervous tissue, **Dr. Lucio G. Costa.**

4) Training in biochemistry, toxicology or pharmacology for research on genetic, dietary and environmental factors which modify glutathione and glutathione S-transfers, **Dr. David Eaton.**

5) Training appropriate to pursue research on cytochrome P-450 gene expression; experience in drug biotransformation and/or molecular biology desirable, **Dr. Curtis J. Omiecinski.**

Salary range \$17,000 to \$24,000. Please send statement of research interests, curriculum vitae, and names and addresses of three references by 15 January 1988, to appropriate persons named above: **Department of Environmental Health, SC-34, University of Washington, Seattle, WA 98195.**

*The State of Washington and the University of Washington are Equal Opportunity/Affirmative Action Employers.*

**EPA Environmental Research Laboratory (ERL)—Duluth, Minnesota. POSTDOCTORATE POSITION IN EFFLUENT TOXICITY IDENTIFICATION AND EVALUATION.** ERL-Duluth is accepting applications for a 2-year postdoctorate position in the National Effluent Toxicity Assessment Center (NETAC). The mission of chemicals in effluents that are toxic to aquatic life. EPA recently issued a policy on the control of toxic chemicals and one of the key elements is the use of effluent toxicity testing. To further assist in the control of the toxics ERL-Duluth is developing protocols on toxicity-directed chemical characterization to aid in the identification of the toxic components. In this research effort toxicity testing is combined with analytical chemistry to aid in the confirmation of the toxicant.

Requirements include a Ph.D., with a major in aquatic toxicology, aquatic biology, or chemistry, and a minor or experience in a supporting field. The position is available immediately with a salary of \$27,172 per year in Duluth, Minnesota. Further information may be obtained by contacting: **Nelson Thomas at 218-720-5702; Donald Mount at 218-720-5528.**

Write: **U.S. EPA, 6201 Congdon Boulevard, Duluth, MN 55804, Attention: Sherry Linder**, to request application forms. Application forms must be requested and returned to the Duluth Laboratory with a postmark date no later than 9 January 1988.

*Position only open to U.S. citizens  
The U.S. EPA is an Equal Opportunity Employer*

### SAN DIEGO STATE UNIVERSITY SAN DIEGO, CALIFORNIA 92182

**TENURE-TRACK POSITION** beginning fall 1988 in applied statistics, biostatistics, or statistical computing. Rank open, assistant professor candidates preferred. Ph.D. in statistics or biostatistics required by time of appointment. Must have equally strong commitments to pursuing own research program, and to teaching undergraduate and graduate students. Help build program in applied statistics. Closing date: 1 February 1988. Send curriculum vitae and have three references sent to: **Statistics Search Committee, Department of Mathematical Sciences, San Diego State University, San Diego, CA 92182. Affirmative Action/Equal Opportunity Employer. We do not discriminate against the handicapped.**

## POSITIONS OPEN

**RESEARCH ASSOCIATE POSITION** for in vitro study of factors regulating normal and leukemic human hemopoietic stem cell proliferation and differentiation, assessing recombinant growth factor/receptor interactions, message transduction, gene expression. Background in cell biology, immunology, and/or biochemistry desirable. Available now. Send curriculum vitae and names of three references to: **Dr. Peter Greenberg, Department of Medicine, Stanford University Medical Center, Stanford, CA 94305.**

**RESEARCH ASSOCIATE (POSTDOCTORAL):** The successful applicant will be responsible for analyzing, interpreting and modeling measurements obtained during recent upper ocean experiments. This is a 2-year fixed-term appointment (possible renewal for a third year). Qualifications include a Ph.D. in physical oceanography, physics, or engineering; strong background in fluid dynamics; interest in upper ocean dynamics. Salary: \$24,000 to \$28,000 depending on qualifications. Résumé and names, addresses, telephone numbers of three references must be received by 28 February 1988. Send to: **Dean D. R. Caldwell, College of Oceanography, CODE 005, Oregon State University, Corvallis, OR 97331. Oregon State University, an Affirmative Action/Equal Opportunity Employer, complies with section 504, Rehabilitation Act of 1973. Oregon State University has a policy of being responsive to the needs of dual-career couples.**

**RESEARCH INVESTIGATOR** position available to characterize neurotransmitter receptors, investigate acetylcholine biosynthetic mechanisms, and analyze structure activity relationships of pharmacologic agents. A Ph.D. in biochemistry, training in neurochemistry or neuropharmacology, and publications in peer-reviewed journals are required. The applicant should have expertise in enzyme kinetics, structure activity relationships, physiological studies involving neuromuscular transmission using both in vivo and in vitro bioassay, electrophysiological studies using voltage clamp and computer analysis. Salary is \$22,100 per year; 40 hours per week. Send curriculum vitae and three letters of reference to: **Iowa Job Service, 1810 Lower Muscatine Road, Iowa City, IA 52240. Job Order Number IA 1622700. This is an employer-paid ad. An Equal Opportunity/Affirmative Action Employer.**

**SCIENTIST, ASSISTANT RESEARCH.** Research related to the effects of hyperthermia and radiation on the mammalian system, particularly bone marrow obtained from mice or humans. Must have at least 2 years of postdoctoral radiobiological research related to the effects of hyperthermia and radiation in bone marrow progenitors; must be skilled in monoclonal antibody production techniques, including Western blot analysis and ELISA technique; and must be skilled in growth techniques of human and mouse bone marrow progenitors in culture. Requires Ph.D. in radiation biology. \$36,500 per year. Full-time. Job site: Duarte, California. Send résumé and copy of ad to: **Job Order #DN12399, P.O. Box 9560, Sacramento, CA 95823-0560 not later than 2 January 1988.**

### SENIOR RESEARCH ASSOCIATE

Assist in initiation and development of a major series of surveys on causes of mortality in the People's Republic of China. Seek research funding as part of a larger collaborative program. Ph.D. with training in epidemiology, statistics, nutrition, toxicology, public health, and biochemistry. Direct research experience in a developing country. Good administrative skills, strong quantitative data analysis, and microcomputing skills. Travel required. Send curriculum vitae, transcripts, and letters of reference to: **Dr. T. Colin Campbell, Division of Nutritional Sciences, N204 MVR, Cornell University, Ithaca, NY 14853. Equal Opportunity Employer/Affirmative Action.**

### SENSORY PHYSIOLOGY

**SENIOR RESEARCH ASSOCIATE—Opportunity** exists for mature individual interested in pursuing independent research with anatomical, electrophysiological, behavioral methods. First 3 years supported by NIH. Initial project deals with interaction of auditory and visual responses in the cerebellum. Must have proven experience in electrophysiology of vision. Send résumé and three letters of reference to: **C. Huang, Division of Structural and Systems Biology, School of Basic Life Sciences, University of Missouri, Kansas City, MO 64110-2499. Equal Opportunity Employer.**

## POSITIONS OPEN

### RESEARCH ASSISTANT— IMMUNOGENETICS

The Jackson Laboratory, a non-profit research institution located on the coast of Maine, has an immediate opening for a research assistant with an M.S./M.A. in the biological sciences or a B.S./B.A. with relevant experience. This position offers an opportunity for active and original participation in a research program directed at understanding the roles of specific genes and gene products in normal and abnormal (immunodeficiency and autoimmunity) lymphocyte development and function. Laboratory duties include DNA/RNA preparations, Northern/Southern/in situ hybridization, gene cloning in plasmids and phage, and tissue culture. Please send curriculum vitae, transcripts, and three letters of reference to: **Harold Wheeler, Employment Manager, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609. Telephone: 207-288-3371. Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

### STRATIGRAPHER—PALEONTOLOGIST, NEW YORK STATE GEOLOGICAL SURVEY

The New York State Geological Survey invites applications for a permanent research position as stratigrapher-paleontologist to specialize in the Paleozoic of New York. Applicants must have a Ph.D. or equivalent experience that demonstrates a strong commitment to research. Starting salary is \$32,515. Facilities include modern laboratories, darkroom facilities, the State Library, and the excellent paleontological collections of the State Museum.

Curriculum vitae, list of publications, and names of three references should be sent to: **Department S, New York State Geological Survey, Albany, NY 12230. Deadline is 30 January 1988.**

*New York State is an Equal Opportunity/Affirmative Action employer and encourages applications from all qualified scientists.*

## POSITIONS OPEN

### RESEARCH TOXICOLOGIST

Chemical Industry Institute of Toxicology (CIIT), an innovative leader in toxicology research has a position open for a toxicologist with research interests in metabolism and pharmacokinetics. Candidates should have a Ph.D. in biochemistry, toxicology, or a related area and 3 or more years of postdoctoral research experience with an excellent publication record. Experience in in vivo and in vitro metabolism, isolation, and identification of metabolites, analytical techniques including HPLC, GC, and MS, and pharmacokinetics is highly desirable. Reply in confidence to:

**Employment Office  
CIIT**

**P.O. Box 12137**

**Research Triangle Park, NC 27709**

*An Equal Opportunity/Affirmative Action Employer*

### VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (VPI&SU) SOIL ORGANIC CHEMIST/BIOCHEMIST— ASSISTANT PROFESSOR

This is a new position to develop a research (75%) and teaching (25%) program related to the environmental fate of agrochemicals (principally pesticides) and other organic toxins. Teaching responsibilities will include a graduate level course in the incumbent's area of expertise, which is expected to include environmental aspects of the utilization and degradation of synthetic organic materials in soil. An interest in undergraduate teaching would be advantageous.

Qualification required is Ph.D. in soil organic chemistry or soil biochemistry, preferably including training in pesticide biodegradation, microbiology, and analytical chemistry.

Salary will be commensurate with training and experience.

Applications will be accepted until 10 January 1988 or until a suitable applicant is identified, should that be later than the stated date.

Applicants should send a letter of application, a résumé, and the names and addresses of three references to:

**Dr. R. Q. Cannell  
Professor and Head  
Department of Agronomy  
VPI&SU  
Blacksburg, VA 24061  
Telephone: 703-961-6305**

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### STAFF MEMBER, ASSISTANT PROFESSOR—

The Helene W. Toolan Institute is recruiting two positions in the area of tumor biology, cell, and/or molecular biology. These individuals will have a joint appointment, assistant professor, in the Basic Science Programs at the Albany Medical Center. Applicants will be expected to have or establish a peer-reviewed research program, and participate in graduate student training. Send applications and three references to: **The Helene W. Toolan Institute for Medical Research, 110 Hospital Drive, Bennington, VT 05201.**

**TOXICOLOGIST:** The University of New Mexico, Office of the Medical Investigator (OMI), and the State Health Department, Scientific Laboratory Division (SLD), invite applications for a toxicologist to participate in a conjoint forensic, environmental, and clinical toxicology program with a faculty appointment in the Department of Pathology. Applicants should enjoy the challenge of combining service, teaching and research activities in toxicology. Service responsibilities will include lectures to medical students, pathology residents, and medical technology students. It is expected that the applicant will develop an independently funded research program in conjunction with other interested faculty. Salary and academic rank will be based upon experience. Starting date: 1 February 1988. Application deadline: 18 January 1988. Send curriculum vitae, three references to: **Robert E. Anderson, M.D., Professor and Chairman, Pathology Department, University of New Mexico, Albuquerque, NM 87131.**

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## POSITIONS OPEN



### UNIVERSITY HOSPITAL AND ROBARTS RESEARCH INSTITUTE

The transplant unit and Immunology Group have immediate openings for **SCIENTISTS** in the following areas:

- 1) The molecular basis of lymphocyte activation
- 2) Genetic reconstruction of hormone production
- 3) Lymphokines and cellular growth factors
- 4) Cellular transplantation (including pancreatic islet cell transplantation).

Candidates holding a Ph.D. and/or M.D. with experience in molecular biology should apply. Include a current curriculum vitae. This offers the potential to work in an ideal research environment (with university appointment) in association with a dynamic clinical group.

Apply to:

**Dr. C. Stiller**  
Chief, Multi-Organ Transplant Service  
University Hospital  
P.O. Box 5339, Station A  
London, Canada  
N6A 5A5

The USDA Agricultural Research Service invites applications for the position of **VETERINARY PATHOLOGIST** within the Food Safety Research Unit, Albany, California. The successful candidate will develop an independent research program related to the health effects of agricultural products and will provide pathology support for the location's ongoing food safety research program. He/she will supervise the animal care staff and histopathology laboratory, and will be responsible for laboratory animal resources available to the Western Regional Research Center and the newly formed Plant Gene Expression Center. Board-certification by the American College of Veterinary Pathologists, and demonstrated research and management experience, are desired. Must be a U.S. citizen. Appointment will be at the GM-14 level (\$45,763 to \$59,488). Salary commensurate with qualifications. For applications and information, contact: **Rita Millard, ARS Personnel Division, Beltsville, MD 20705. Telephone: 301-344-3138.** Applications in response to this advertisement should be marked 8W0001. *The USDA is an Equal Opportunity Employer.*

## CALL FOR PAPERS

### CALL FOR PAPERS FOR THE INTERNATIONAL CONGRESS ON RELATIVITY AND GRAVITATION To be held in Hanover, West Germany 22 to 24 April 1988

The purpose of the Congress is to provide a forum to present ideas concerning basic issues and problems in space-time physics and current research results. The recent experiments of Silvertooth-Marinov measuring the absolute velocity of the solar system without any moving equipment (they succeeded where Michelson-Morley failed 100 years ago) helps to indicate the need for such an international Congress to examine carefully the facts without being necessarily restricted by the dogmas of the past. Participants are requested to submit a one- or two-page summary of the material they wish to present to: **Emil A. Maco, Georgstrasse 31-33, D-3000 Hanover 1, West Germany (telephone: 0511/326251).**

## INTERNSHIP

**NASA PLANETARY BIOLOGY INTERNSHIPS.** The Marine Biological Laboratory, Woods Hole, MA, invites applications from graduate students and seniors accepted in graduate programs for \$2000 awards plus travel to participate in research at NASA centers and collaborating institutions for approximately 8 weeks. Application deadline: 1 March 1988. For information and applications, contact: **Michael Enzien, Planetary Biology Intern Program, Department of Biology, Boston University, 2 Cummington Street, Boston, MA 02215. An Equal Opportunity/Affirmative Action Institution.**

## ASSISTANTSHIPS

**GRADUATE TRAINING PROGRAM IN NEUROSCIENCE**—The Neuroscience Program at The Milton S. Hershey Medical Center of The Pennsylvania State University has assistantships available in August 1988. This interdepartmental program is designed to confer a Ph.D. degree with a major in neuroscience after 4 years of study. Participating faculty have established research programs in molecular biology of the nervous system, neurophysiology, neuroendocrinology, behavioral science, neuropharmacology, neurovirology, and cerebral blood flow and metabolism. Interested candidates are invited to apply to: **Dr. Robert Page, Chairman, Neuroscience Program, The Milton S. Hershey Medical Center, The Pennsylvania State University, P.O. Box 850, Hershey, PA 17033. An Equal Opportunity/Affirmative Action Employer.**

## REQUEST FOR PROPOSALS

### REQUEST FOR PROPOSAL

The Suffolk County Department of Health Services (SCDHS) is undertaking a project entitled: **"BROWN TIDE—COMPREHENSIVE ASSESSMENT AND MANAGEMENT PROGRAM."** This 2-year project, scheduled to begin April 1988, will be conducted to determine the cause of a massive algal bloom ("brown tide") and to identify practicable measures for its control. The workplan includes a comprehensive assessment of several marine ecosystems, within which other problems and their causes also will be studied, and the best means of mitigation specified.

The SCDHS seeks the assistance of a consulting firm with extensive experience in marine resource investigations and computer modeling to help with the formation of a data collection program; examination of problems/causes; evaluation of management alternatives; and preparation of a management plan and final report. Approximately \$300,000 has been budgeted for consulting services.

Interested parties may obtain a copy of the detailed Request for Proposals (RFP) by contacting: **Aldo Andreoli, P.E., Director, Division of Environmental Quality, Suffolk County Department of Health Services, 225 Rabro Drive East, Hauppauge, NY 11788. Telephone: 516-348-2782.** Proposals will be accepted until Friday, 5 February 1988.

## TRAINING PROGRAMS

### POSTDOCTORAL TRAINEESHIPS PREDOCTORAL TRAINEESHIPS IN ENVIRONMENTAL TOXICOLOGY

Positions available to selected qualified persons in an NIEHS-funded interdisciplinary program. Research training is provided in biochemical toxicology in four focal areas:

toxicant metabolism  
cellular and genetic toxicology  
immunotoxicology  
neurotoxicology

Names and research interests of participating professors and application information are available from: **Director, Environmental Toxicology Center, 309 Infirmary, University of Wisconsin, Madison, WI 53706. Telephone: 608-263-4580. U.S. citizenship or permanent residence required. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.**

## FELLOWSHIPS

The Institute of Ecosystem Studies of The New York Botanical Garden is accepting applications for a 2-year **POSTDOCTORAL FELLOWSHIP.** The successful applicant will be expected to interact with a diverse staff of terrestrial and aquatic ecosystem ecologists. Annual salary is \$20,000. Send statement of research interests, curriculum vitae, and names of three references by 8 February 1988 to: **Dr. Michael L. Pace, Institute of Ecosystem Studies, Box AB, Millbrook, NY 12545. An Equal Opportunity Employer M/F.**

## FELLOWSHIPS

**POSTDOCTORAL FELLOWSHIP—PHARMACEUTICS/DRUG TRANSPORT RESEARCH.** Position available for Ph.D. in pharmaceuticals, pharmacology, biochemistry, or related area to work on an exciting, newly funded NIH project involving the effect of protein binding/organ perfusion on renal drug transport using an isolated perfused rat kidney. Prior experience with bioanalytical methodology and/or small animal surgery is desired. Applications received by 1 February 1988 will receive priority consideration. Send curriculum vitae and names of three references to: **Dr. David E. Smith, College of Pharmacy, The University of Michigan, Ann Arbor, MI 48109-1065. An Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL FELLOWSHIP

There is an opening for a postdoctoral fellowship in the Banting and Best Department of Medical Research. The project deals with the investigation at the molecular level of the mechanisms of protein biosynthesis with special emphasis on the initiation process. Specifically factors that regulate translation are being cloned and sequenced and a computationally derived structure of mRNA is being probed by site-specific mutagenesis. Good research facilities and interaction with basic science departments are available.

Applicants with interest in molecular biology and biochemistry, particularly sequencing and mutagenic techniques, protein separation and molecular mechanisms of translation should send curriculum vitae and three references to: **Dr. M. C. Ganoza, C. H. Best Institute, University of Toronto, 112 College Street, Toronto, Ontario, M5G 1L6, Canada.**

**POSTDOCTORAL RESEARCH FELLOWSHIP** (M.D. or Ph.D.) in the Cancer Pharmacology Program of the Oncology Research Center. Research explores biochemical pharmacology of folate antagonists, nucleoside transport, DNA-damaging drugs, and membrane lipid chemistry. Background in nucleic acid chemistry, and other facets of biochemical pharmacology of antineoplastic agents would be desirable. Address correspondence to: **Robert L. Capizzi, M.D., Director of the Oncology Research Center, Bowman Gray School of Medicine, Wake Forest University, 300 South Hawthorne Road, Winston-Salem, NC 27103. Affirmative Action/Equal Opportunity Employer.**

### UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE

A 2-year **POSTDOCTORAL FELLOWSHIP** is available for conducting studies in cholesterol, lipoprotein and bile acid metabolism. Applications including curriculum vitae and three letters of reference should be submitted by 29 February 1988 to: **Dr. Ajit Sanghvi, Vice Chairman for Administration, c/o A. Roman-Koller, University of Pittsburgh, School of Medicine, Department of Pathology, 776 Scaife Hall, Pittsburgh, PA 15261.**

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## MARKETPLACE



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# BIOLOGY RESEARCH SCIENTISTS

THE LILLY RESEARCH LABORATORIES, A Division of Eli Lilly and Company is expanding its effort in Connective Tissue, Pulmonary and Leukotriene Research.

In keeping with our long-standing commitment to research excellence, it is our intent to attract PhD. Scientists with post-doctoral experience and demonstrated research accomplishments. Senior Scientists would be expected to develop their own research programs that would complement the endeavors of other scientists. Opportunities are present for collaboration with pharmacologists, biochemists, cell biologists, molecular biologists, immunologists, pathologists and medicinal chemists.

## Connective Tissue Research

(Bone Biology and Inflammatory Disease)

Bone Biology (Osteoporis) (N<sub>1</sub>)—We are seeking a Senior Scientist with a PhD. in Pharmacology/Cellular and Developmental Biology/Biochemistry to study factors influencing bone/cartilage differentiation, and to seek new therapeutics in osteoporis, associated bone disorders and osteoarthritis. Experience with *in vivo* models is essential. The scientist would join others expert in biochemistry, cellular and molecular biology and pathology.

Inflammatory Disease (N<sub>2</sub>)—A Senior Scientist with a PhD. in Pharmacology/Cell Biology/Biochemistry is needed to participate in a research program directed toward the understanding of inflammatory disease mechanisms and the development of novel agents for therapeutic intervention. Expertise in the role of macrophages and/or polymorphonuclear leucocytes in the inflammatory process is essential and will complement existing expertise in pharmacology, immunology, biochemistry, and pathology.

## Pulmonary and Leukotriene Research

(Phospholipid & Biochemical Pharmacology)

Phospholipid Biochemistry (N<sub>3</sub>)—A Senior Scientist with a PhD. in Pharmacology/Cell Biology/Biochemistry will participate in a research program directed toward understanding the roles of cellular phospholipids in the generation of disease associated mediators (e.g. leukotrienes, thromboxanes, prostalandins, and platelet activating factor) and the development of novel inhibitors of the generation of these mediators. Experience with whole cell enzyme assays is desirable. Disease targets include asthma, allergy and inflammation.

Biochemical Pharmacology (N<sub>4</sub>)—A Senior Scientist with a PhD. in Pharmacology/Biochemistry/Cell Biology experienced in cellular aspects of the arachidonic acid cascade is needed to study the role of leukotrienes in pulmonary diseases. This individual will collaborate with scientists studying the role of leukotrienes in myocardial infarction and ischemia, stroke, GI disease, inflammatory disease, skin diseases and their role in immune function.

Scientists with a doctoral degree and post-doctoral experience in the aforementioned research areas are encouraged to send a curriculum vitae and indication of their specific area of interest [phospholipid (N<sub>3</sub>), bone biology (N<sub>1</sub>), etc.] to:



**John W. Crooks, Manager, College Relations (SBR)  
Eli Lilly and Company, Lilly Corporate Center  
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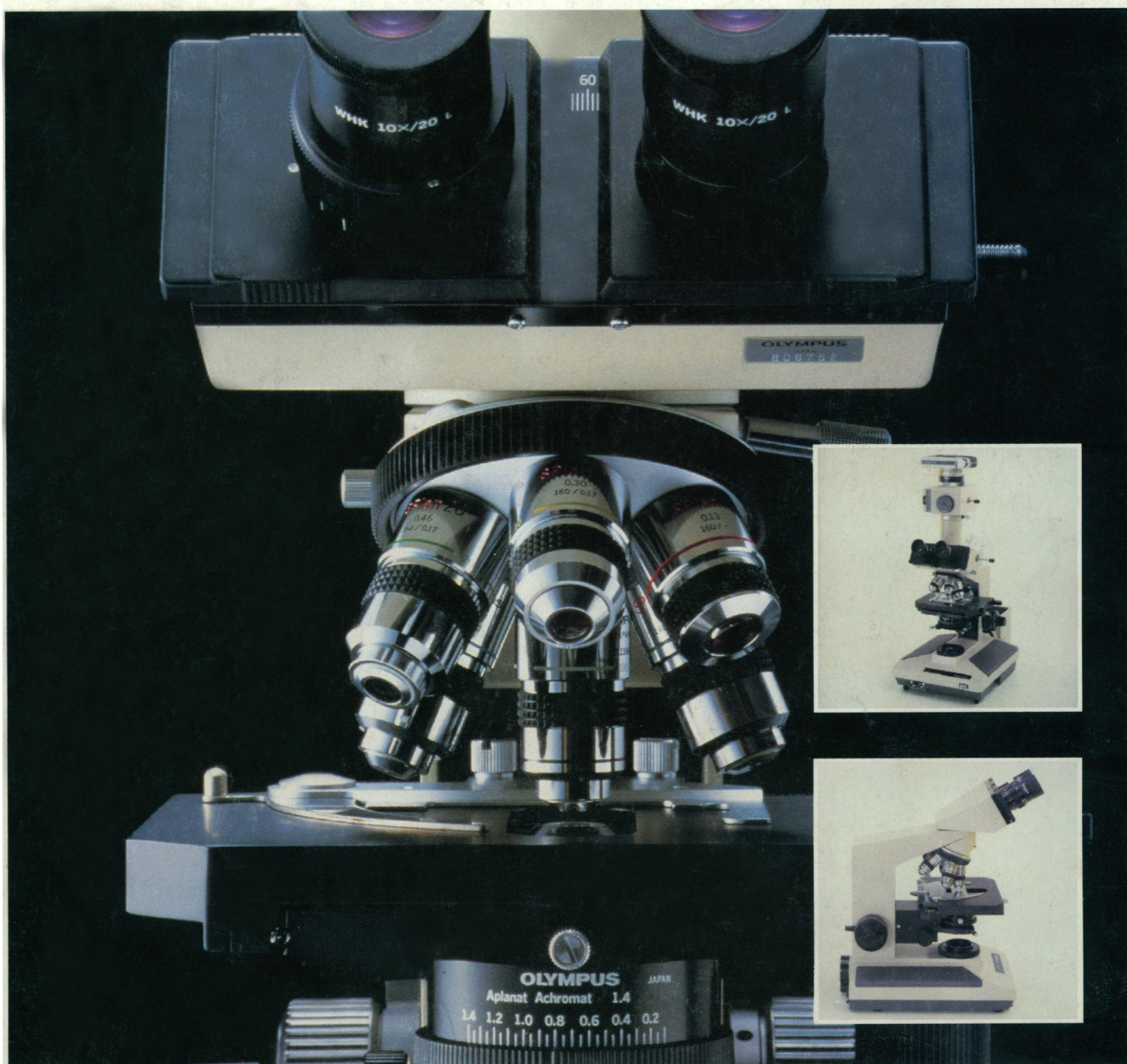
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