

solar dynamo by Peter Gilman. This 65-page work contains a large number of references. It begins with the fundamental dynamic and magnetohydrodynamic equations relevant to the large-scale dynamo problem and leads the reader through discussions of the convection zone of the sun, including the various known convective scale sizes, and into an interesting essay on the observational and theoretical aspects of global circulation and differential rotation. There are interesting problems in this area that Gilman discusses in detail. This is followed by a thorough review of observations of solar magnetic fields, from small-scale structure of the fields to global patterns. Finally, there is a detailed discussion of dynamo theories, including their strengths and their weaknesses. Gilman presents thorough and balanced discussions of all these topics and leaves the assiduous reader with an understanding of the achievements and remaining problems in this important area.

A chapter by Rosner, Low, and Holzer discusses physical processes in the solar corona. It has become clear over the last decade or two that the corona is a magnificent plasma physics laboratory. In this laboratory the magnetic fields play a leading role in defining both transient events and the more stable "quiet-sun" phenomena. The fields are an important factor not only in the geometry of the structures we see but also in the physical processes at work. A number of these physical processes are treated in this excellent chapter, including energy and momentum transport, equilibrium magnetic fields, and time-dependent phenomena. This contribution is not a source for observational information on the corona, but it is a fine discussion of many of the theoretical aspects of coronal features and phenomena.

The work as a whole includes only a handful of references later than 1983, and a number of the chapters have none later than 1982. Another matter that should be mentioned is that the publisher apparently has left the proofreading almost entirely up to the authors (as it does with its journals), and the result is, as one might expect, very irregular in this regard. In places, typographical errors occur with annoying frequency.

These faults, however, do not detract significantly from the value of the work as a fundamental, authoritative reference and review for the broad field of solar physics. It was an ambitious project and it has been successful.

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Books Received

Advances in Animal Conservation. J. P. Hearn and J. K. Hodges, Eds. Clarendon (Oxford University Press), New York, 1985. xx, 282 pp., illus. \$69. Symposia of the Zoological Society of London, no. 54 (London, May 1984).

Advances in CAD/CAM Workstations. Case Studies. Peter C. C. Wang, Ed. Kluwer, Boston, 1986. x, 274 pp., illus. \$44.95. From a symposium, Monterey, CA, Feb. 1985.

Advances in Urban Pest Management. Gary W. Bennett and John M. Owens, Eds. Van Nostrand Reinhold, New York, 1986. xii, 399 pp. \$47.50.

Air Pollutants and Their Effects on the Terrestrial Ecosystem. Allan H. Legge and Sagar V. Krupa, Eds. Wiley-Interscience, New York, 1986. xx, 662 pp., illus. \$80. Advances in Environmental Science and Technology, vol. 18.

Anthropology as Cultural Critique. An Experimental Moment in the Human Sciences. George E. Marcus and Michael M. J. Fischer. University of Chicago Press, Chicago, 1986. xiv, 205 pp. \$22; paper, \$9.95.

Apple IIc and IIE Assembly Language. Jules H. Gilder. Chapman and Hall (Methuen), New York, 1986. x, 178 pp., illus. Paper, \$22.50.

Biotechnology and Its Application to Agriculture. Leonard G. Copping and Peter Rodgers, Eds. British Crop Protection Council, Croydon, England, 1985 (U.S. distributor, ISBS, Portland, OR). viii, 165 pp., illus. Paper, \$27.95. Monograph no. 32. From a symposium, Cambridge, England, Sept. 1985.

The Blood-Brain Barrier in Health and Disease. A. J. Suckling, M. G. Rumsby, and M. W. B. Bradbury, Eds. VCH, Deerfield Beach, FL, and Horwood, Chichester, England, 1986. 207 pp., illus. \$45. Ellis Horwood Health Science Series.

Bond and Structure Models. J. C. A. Boeyens *et al.* Springer-Verlag, New York, 1985. vi, 205 pp., illus. \$45. Structure and Bonding, 63.

The Botanists. A History of the Botanical Society of the British Isles through a Hundred and Fifty Years. David Elliston Allen. St. Paul's Bibliographies, Winchester, England, 1986 (U.S. distributor, University Press of Virginia, Charlottesville). xvi, 232 pp., illus., + plates. \$25.

The Environment of the Workplace and Human Values. Sheldon W. Samuels, Ed. Liss, New York, 1986. viii, 188 pp. \$24.50. From a conference, Williamsburg, VA, May 1982. Also published as *American Journal of Industrial Medicine*, vol. 9, no. 1, 1986.

Epidemiology of Malignant Melanoma. R. P. Gallagher, Ed. Springer-Verlag, New York, 1986. x, 169 pp., illus. \$47. Recent Results in Cancer Research, vol. 102. Based on a meeting, Vancouver, 1984.

Essential Papers on Depression. James C. Coyne, Ed. New York University Press, New York, 1986. xii, 507 pp., illus. \$50; paper, \$22.50. Essential Papers in Psychoanalysis.

Essential Papers on Narcissism. Andrew P. Morrison, Ed. New York University Press, New York, 1986. viii, 491 pp. \$50; paper, \$22.50. Essential Papers in Psychoanalysis.

Evoked Potentials. Roger Q. Cracco and Ivan Bodis-Wollner, Eds. Liss, New York, 1986. xiv, 551 pp., illus. \$96. Frontiers of Clinical Neuroscience, vol. 3.

Evolution from Molecules to Men. D. S. Bendall, Ed. Cambridge University Press, New York, 1986. xiv, 594 pp., illus. Paper, \$19.95. Based on a conference, Cambridge, England, June 1982. Reprint, 1983 edition.

Female Strategies. Evelyn Shaw and Joan Darling. Simon and Schuster, New York, 1986. x, 164 pp. Paper, \$6.95. A Touchstone Book. Reprint, 1985 edition.

The Hare and the Tortoise. Culture, Biology, and Human Nature. David P. Barash. Viking, New York, 1986. xii, 353 pp. \$18.95.

Hemoglobin. Molecular, Genetic and Clinical Aspects. H. Franklin Bunn and Bernard G. Forget. Saunders, Philadelphia, 1986. viii, 690 pp., illus. \$99.

High Resolution and High Voltage Electron Microscopy. John E. Johnson, Jr. *et al.*, Eds. Liss, New York, 1986. viii, 158 pp., illus. \$35. Also published in the *Journal of Electron Microscopy Technique*, vol. 3, no. 1 (1986).

Hospital Life in Enlightenment Scotland. Care and Teaching at the Royal Infirmary of Edinburgh. Guenter B. Risse. Cambridge University Press, New York, 1986. xiv, 450 pp., illus. \$49.50.

Insect Aging. Strategies and Mechanisms. K.-G. Colatz and R. S. Sohal, Eds. Springer-Verlag, New York, 1986. x, 240 pp., illus. \$56. Based on a symposium, Hamburg, FRG, Aug. 1984.

Intellectual Mastery of Nature. Theoretical Physics from Ohm to Einstein. Vol. 1, The Torch of Mathematics, 1800-1870. Christa Jungnickel and Russell McCormmach. University of Chicago Press, Chicago, 1986. xxviii, 350 pp. \$55.

Interaction of Steroid Hormone Receptors with DNA. M. Sluyser, Ed. VCH, Deerfield Beach, FL, and Horwood, Chichester, England, 1985. 242 pp., illus. \$46.50. Ellis Horwood Health Science Series.

Interactions of Food Components. G. G. Birch and M. G. Lindley, Eds. Elsevier, New York, 1986. xii, 343 pp., illus. \$69.50. From a symposium, Reading, England, April 1985.

Interactions of Soil Minerals with Natural Organisms and Microbes. P. M. Huang and M. Schnitzer, Eds. Soil Science Society of America, Madison, WI, 1986. xiv, 606 pp., illus. Paper, \$30. SSSA Special Publication no. 17. From a symposium, Washington, DC, Aug. 1983.

Introduction to Experimental Particle Physics. Richard C. Fernow. Cambridge University Press, New York, 1986. x, 421 pp., illus. \$44.50.

Introduction to Human Immunology. Teresa L. Huffer, Dorothy J. Kanapa, and George W. Stevenson. Jones and Bartlett, Boston, 1986. viii, 184 pp., illus. Paper, \$17.50.

Introduction to Medical Immunology. Gabriel Virgela *et al.*, Eds. Dekker, New York, 1986. xiv, 541 pp., illus. \$29.75. Immunology Series, 28.

Introductory Microbiology. Frederick C. Ross. 2nd ed. Scott, Foresman, Chicago, 1986. xx, 551 pp., illus. \$37.95.

Inventing the NIH. Federal Biomedical Research Policy, 1887-1937. Victoria A. Harden. Johns Hopkins University Press, Baltimore, 1986. xiv, 274 pp., illus. \$32.50.

Ion Channels in Neural Membranes. J. Murdoch Ritchie, Richard D. Keynes, and Liana Bolis, Eds. Liss, New York, 1986. xviii, 449 pp., illus. \$120. Neurology and Neurobiology, vol. 20. From a conference, Crans-sur-Sierre, Switzerland, June 1985.

Islamic Medicine. Muhammad Salim Khan. Routledge and Kegan Paul (Methuen), New York, 1986. xii, 108 pp., illus. \$29.

Jero Tapakan. Balinese Healer. Linda Conner, Patsy Asch, and Timothy Asch. Cambridge University Press, New York, 1986. xii, 284 pp., illus. \$42.50. An Ethnographic Film Monograph.

Laboratory Animal Husbandry. Ethology, Welfare and Experimental Variables. Michael W. Fox. State University of New York Press, Albany, 1986. xvi, 267 pp., illus. \$39.50; paper, \$9.95.

Land in Tropical America. A Guide to Climate, Landscapes, and Soils for Agronomists in Amazonia, the Andean Piedmont, Central Brazil and Orinoco. T. T. Cochrane *et al.*, Eds. Centro Internacional de Agricultura Tropical, Cali, Colombia, and Empresa Brasileira de Pesquisa Agropecuária dos Cerrados, Planaltina, Brazil, 1985. Paper. In four parts, with loose map. Vol. 1, xviii, 144 pp., illus. Vol. 2, in two parts: Part 1, xiv, 63 pp., illus. Part 2, unpagged. Vol. 3, unpagged. Text in English, Spanish, and Portuguese.

Language Processing in Children and Adults. An Introduction. Margaret Harris and Max Coltheart. Routledge and Kegan Paul (Methuen), New York, 1986. viii, 274 pp., illus. \$29.95; paper, \$19.95.

Memoir of a Thinking Radish. An Autobiography. Peter Medawar. Oxford University Press, New York, 1986. xii, 209 pp. + plates. \$17.95.

Mental Maps. Peter Gould and Rodney White. 2nd ed. Allen and Unwin, Boston, 1986. xii, 172 pp., illus. \$24.95; paper, \$7.95.

Metamorphosis. Michael Balls and Mary Bownes, Eds. Clarendon (Oxford University Press), New York, 1985. xii, 439 pp., illus. \$65. British Society for Developmental Biology Symposium 8 (Nottingham, England, April 1983).

Methodology in Medical Genetics. An Introduction to Statistical Methods. Alan E. H. Emery. 2nd ed. Churchill Livingstone, New York, 1986 (distributor, Longman, White Plains, NY). x, 197 pp., illus. \$40.

Microbial Lectins and Agglutinins. Properties and Biological Activity. David Mirelman, Ed. Wiley-Interscience, New York, 1986. xviii, 443 pp., illus. \$57.50. Wiley Series in Ecological and Applied Microbiology.

Microfauna Marina. Vol. 2. Peter Ax, Ed. Published for the Akademie der Wissenschaften und der Literatur, Mainz, FRG, by Fischer, New York, 1985. 410 pp., illus. DM98. Text in German and English.

The Murals of Bonampak. Mary Ellen Miller. Princeton University Press, Princeton, NJ, 1986. xviii, 176 pp., illus. + plates. \$67.50.

(Continued on page 486)

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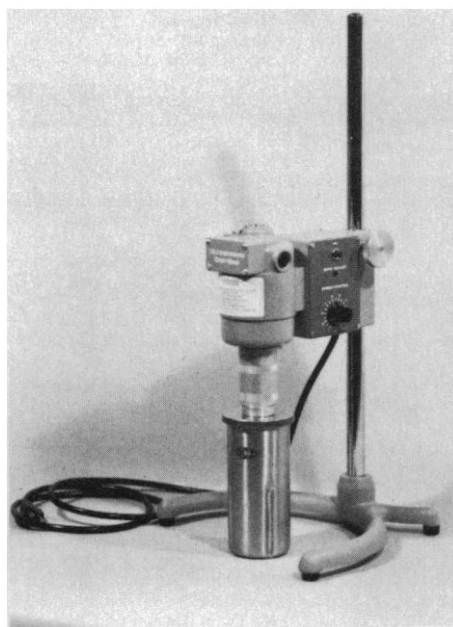
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Literature

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Plasticware includes a guide to the structure and properties of resins, a chart of the chemical resistance of plastic resins, and a guide to the uses and care of plasticware plus nearly 100 pages of laboratory products. Cole-Parmer Instrument. Circle 559.

Sterilizers features the Eagle series 900 line of countertop laboratory instrument cleaners. AMSCO/American Sterilizer. Circle 560.

Cell Culture offers the Mouse fermentation and cell culture system, Cryostar cryogenic preservation system, incubators, shakers, and chambers. Queue Systems. Circle 561.

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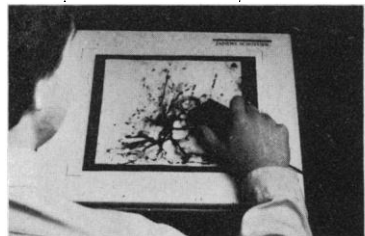


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Neurobiochemistry. Selected Topics. B. Hamprecht and V. Neuhoff, Eds. Springer-Verlag, New York, 1985. x, 212 pp., illus. \$49. Colloquium der Gesellschaft für Biologische Chemie, 36 (Mosbach, Baden-Württemberg, Germany, April 1985).

Neuropeptides in Neurologic and Psychiatric Disease. Joseph B. Martin and Jack D. Barchas, Eds. Raven, New York, 1986. xxii, 360 pp., illus. \$69.50. Research in Nervous and Mental Disease, vol. 64. Based on a meeting, 1984.

Neurophilosophy. Toward a Unified Science of the Mind-Brain. Patricia Smith Churchland. MIT Press, Cambridge, MA, 1986. xiv, 546 pp., illus. \$27.50. Computational Models of Cognition and Perception. A Bradford Book.

The Penguin Dictionary of Science. E. B. Uvarov and Alan Isaacs. 6th ed. Penguin, New York, 1986. viii, 468 pp., illus. Paper, \$7.95. Penguin Reference Books.

Perfect Symmetry. The Search for the Beginning of Time. Heinz R. Pagels. Bantam, New York, 1986. xviii, 413 pp., illus., + plates. Paper, \$4.95. Reprint, 1985 edition.

The Permafrost Environment. Stuart A. Harris. Barnes and Noble, Totowa, NJ, 1986. xii, 276 pp., illus. \$31.50.

Pharmacology of Eating Disorders. Theoretical and Clinical Developments. Michael O. Carruba and John E. Blundell, Eds. Raven, New York, 1986. xiv, 178 pp., illus. \$33. Based on a symposium, Florence, June 1984.

Physical Fundamentals of Remote Sensing. Erwin Schanda. Springer-Verlag, New York, 1986. x, 187 pp., illus. Paper, \$22.

Physicians and Social Change. John Colombotos and Corinne Kirchner. Oxford University Press, New York, 1986. xviii, 264 pp. \$35.

The Plague Years. A Chronicle of AIDS, The Epidemic of Our Times. David Black. Simon and Schuster, New York, 1986. 224 pp. \$16.95.

Planning and Operation of Electric Energy Systems. S. H. F. da Cunha, Ed. Published for the International Federation of Automatic Control by Pergamon, New York, 1986. xii, 490 pp., illus. \$109. IFAC Proceedings Series, 1986, no. 3. From a symposium, Rio de Janeiro, July 1985.

Pollution in the Urban Environment. POLMET 85. M. W. H. Chan *et al.*, Eds. Elsevier, New York, 1985. xviii, 699 pp., illus. \$107.25. From a conference, Hong Kong, Dec. 1985.

The Prelude to the Migraine Attack. Willem K. Amery and Albert Wauquier, Eds. Baillière Tindall, Eastbourne, England, 1986 (U.S. distributor, Saunders, Philadelphia). x, 213 pp., illus. \$48. From a symposium, Beerse, Belgium, Sept. 1985.

Primary Hypertension. Basic Mechanisms and Therapeutic Implications. W. Kaufmann *et al.*, Eds. Springer-Verlag, New York, 1986. xii, 239 pp., illus. Paper, \$49. Based on a symposium, Cologne, FRG, March 1985.

Professional Powers. A Study of the Institutionalization of Formal Knowledge. Eliot Freidson. University of Chicago Press, Chicago, 1986. xviii, 241 pp. \$20.

The Quest for SS433. David H. Clark. Penguin, New York, 1986. xviii, 206 pp., illus. Paper, \$6.95.

Random Data. Analysis and Measurement Procedures. Julius S. Bendat and Allan G. Piersol. 2nd ed. Wiley-Interscience, New York, 1986. xx, 566 pp., illus. \$49.95.

A Relationship Restored. Trends in U.S.-China Educational Exchanges, 1978–1984. David M. Lampton with Joyce A. Madancy and Kristen M. Williams. National Academy Press, Washington, DC, 1986. xx, 266 pp. Paper, \$19.95.

Remote Sounding of Atmospheres. J. T. Houghton, F. W. Taylor, and C. D. Rodgers. Cambridge University Press, New York, 1986. viii, 343 pp., illus. Paper, \$24.95. Cambridge Planetary Science Series. Reprint, 1984 edition.

Science and Civilization in China. Vol. 6, Biology and Biological Technology. Part 1, Botany. Joseph Needham with the collaboration of Lu Gwei-Djen and Huang Hsing-Tsung. Cambridge University Press, New York, 1986. xxxii, 718 pp., illus. \$95.

Secondary Ion Mass Spectrometry. SIMS. V. A. Benninghoven *et al.*, Eds. Springer-Verlag, New York, 1986. xxii, 561 pp., illus. \$49. Springer Series in Chemical Physics, vol. 44. From a conference, Washington, DC, Sept. 1985.

Seismology of the Sun and the Distant Stars. D.

O. Gough, Ed. Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Hingham, MA). xii, 479 pp., illus. \$79. NATO Advanced Science Institutes Series C, vol. 169. From a workshop, Cambridge, England, June 1985.

Social Relationships and Cognitive Development. Robert A. Hinde, Anne-Nelly Perrett-Clermont, and Joan Stevenson-Hinde. Clarendon (Oxford University Press), New York, 1985. xvi, 384 pp., illus. \$49.95; paper, \$29.95. A Fyssen Foundation Symposium (Versailles, France, Nov. 1984).

Soil Conservation. Assessing the National Resources Inventory. Committee on Conservation Needs and Opportunities, National Research Council. National Academy Press, Washington, DC, 1986. Vol. 1. xxii, 114 pp., illus. Paper, \$11.50. Vol. 2. xii, 314 pp., illus. Paper, \$22.50. The set, \$30.60.

Space Safety and Rescue 1984–1985. Gloria W. Heath, Ed. Published for the American Astronautical Society by Univelt, San Diego, CA, 1986. xii, 388 pp., illus. \$55; paper, \$45. Science and Technology Series, vol. 64. From two symposiums, Lausanne, Switzerland, Oct. 1984, and Stockholm, Oct. 1985.

Spinoza's Algebraic Calculation of the Rainbow and Calculation of Chances. Edited and translated by M. J. Petry. Nijhoff, Dordrecht, 1985 (U.S. distributor, Kluwer, Hingham, MA). 159 pp., illus. \$44.50.

Star-Forming Dwarf Galaxies. And Related Objects. D. Kunth, Trinh Xuan Thuan, and J. Tran Thanh Van, Eds. Editions Frontières, Gif sur Yvette, France, 1985. xiv, 517 pp., illus. \$59. From a workshop, Paris, July 1985.

Statistics for Nuclear and Particle Physicists. Louis Lyons. Cambridge University Press, New York, 1986. xii, 226 pp., illus. \$44.50.

Stratospheric Ozone Reduction, Solar Ultraviolet Radiation and Plant Life. Robert C. Worrest and Martyn M. Caldwell, Eds. Springer-Verlag, New York, 1986. x, 375 pp., illus. \$72. NATO Advanced Science Institutes Series G, vol. 8. From a workshop, Bad Windsheim, FRG, Sept. 1983.

Strike-Slip Deformation, Basin Formation, and Sedimentation. Kevin T. Biddle and Nicholas Christie-Blick, Eds. Society of Economic Paleontologists and Mineralogists, Tulsa, OK, 1985. viii, 386 pp., illus. \$38. Special Publication, no. 37. From a symposium, San Antonio, TX, 1984.

The Sun and Solar System Debris. A Catalog of Astronomical Anomalies. Compiled by William R. Corliss. The Sourcebook Project, Glen Arm, MD, 1986. vi, 282 pp., illus. \$17.95.

The Sun and the Heliosphere in Three Dimensions. R. G. Marsden, Ed. Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Hingham, MA). xii, 525 pp., illus. \$79. Astrophysics and Space Science Library, vol. 123. From a symposium, Les Diablerets, Switzerland, June 1985.

Synthetic Organic Chemistry. H.-D. Beckhaus *et al.* Springer-Verlag, New York, 1986. xvii, 209 pp., illus. \$53. Topics in Current Chemistry, 130.

Systems Analysis and Simulation in Wildlife and Fisheries Sciences. William E. Grant. Wiley-Interscience, New York, 1986. xiv, 338 pp., illus. \$47.50.

Translational Control. Michael B. Matthews, Ed. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, 1986. x, 192 pp., illus. Paper, \$27. Current Communications in Molecular Biology. From a conference, Cold Spring Harbor, NY, Nov. 1985.

Transportation Networks. A Quantitative Treatment. D. Teodorović. Gordon and Breach, New York, 1986. xii, 219 pp., illus. \$80. Transportation Studies, vol. 6. Translated from Serbo-Croatian.

Unitization of Oil and Gas Fields in Texas. A Study of Legislative, Administrative, and Judicial Policies. Jacqueline Lang Weaver. Resources for the Future, Washington, DC, 1986 (distributor, Johns Hopkins University Press, Baltimore). xvi, 555 pp., illus. \$37.50.

Virology. Bernard N. Fields *et al.*, Eds. Raven, New York, 1985. xvi, 1614 pp., illus. \$149.50.

Wildlife, Wild Death. Land Use and Survival in Eastern Africa. Rodger Yeager and Norman N. Miller. Published in association with the African-Caribbean Institute by State University of New York Press, Albany, 1986. xvi, 173 pp., illus. \$34.50; paper, \$10.95. SUNY Series in Environmental Public Policy.

Work Places. The Psychology of the Physical Environment in Offices and Factories. Eric Sundstrom in collaboration with Mary Graehl Sundstrom. Cambridge University Press, New York, 1986. xvi, 461 pp., illus. \$49.50; paper, \$16.95. Environment and Behavior Series.

The World of the Cell. Wayne M. Becker. Benjamin/Cummings, Menlo Park, CA, 1986. xxviii, 882 pp., illus. \$39.95. Benjamin/Cummings Series in the Life Sciences. A textbook.

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Biochemist/Biotechnologist (M.S. Biotechnology): Proficient in genetic engineering, applied enzymology, microbial biochemistry, and fermentation technology. Seeks research assistantships in industries and academe. Challenging researches welcomed, financial remuneration unessential. Box 136, **SCIENCE**. 7/25; 8/1

Ph.D. Biology. Many years of research experience, publications. Expertise receptors, tissue culture. Seeks research/teaching position. Fall, 1986. Box 137, **SCIENCE**. 7/25; 8/1

Computer Scientist; M.S. molecular biology. Seeking a unique Ph.D. program in molecular biology and computer science with research focused on incorporating simulation modeling, and knowledge-based systems with image processing/graphical analysis of immunological systems. Several years of experience working in both basic and applied molecular research laboratories, and as a scientific computer programmer. Publications. Excellent references. Box 138, **SCIENCE**. X

D.V.M., M.S., Ph.D. Ten years of clinical practice. Graduate research in cancer (mice) and infectious diseases (fish). Interest in research concerning health and immunology of aquatic organisms. S. Wechsler, 4129 SW 31 Drive, Gainesville, FL 32608. X

Research Biotechnology, M.S. with industrial experience. Desire challenging position in industry or academia. Laboratory experiences include molecular biology, recombinant DNA, strain development, fermentation, radioisotopes, and separations techniques: LC, HPLC, agarose/polyacrylamide electrophoresis, and ultrafiltration. Designed, built, and operated supercritical extraction system. Box 129, **SCIENCE**. 7/25; 8/1, 8, 15

POSITIONS WANTED

Nairobi, Kenya. **Technician.** Reproduction/health science. Desires field or clinical position with animals/people. Ten years of experience. Excellent references. Telephone: 619-753-2534. X

Tissue Culture/Genetics: Ph.D. with 4 years of tissue culture experience in industry concerning plant improvement and product development. Experienced in genetics, plant breeding, and cytogenetics of various crop species. Interested in permanent/contract position with industries, universities, or government institutions. Box 139, **SCIENCE**. X

POSITIONS OPEN

ANALYTICAL AND ORGANIC (2 POSITIONS). Search reopened; continues until filled. **Tenure-track** position for (i) Ph.D. in analytical chemistry to teach analytical and freshman-level courses, (ii) Ph.D. in organic chemistry to teach organic and freshman-level courses. Both must be able to do productive research with undergraduate students. Applicant should demonstrate a distinguished academic record, as well as an outstanding undergraduate teaching record. Appointment for September 1986 or January 1987. Northeast Missouri State University (NMSU), a dynamic university with an enrollment of 7000, received AASCU top honors for the innovative program of student assessment known as "value-added." In January 1986 we became Missouri's university of liberal arts and sciences. The chemistry discipline is dedicated to a quality program, and has received part of a \$2.5-million renovation of the professional and education facilities. New instrumentation includes FT-IR, HPLC, GLC, and AA to augment a wide variety of existing equipment. Send résumé, undergraduate and graduate transcripts, three letters of recommendation, and a brief research prospectus to: **Dr. Russell Baughman, Science Division, Northeast Missouri State University, Kirksville, MO 63501.**

APPLICATIONS PROGRAMMER: The University of Wisconsin Genetics Computer Group (UWCGC) is looking for a programmer with experience writing scientific applications. Experience with the VMS (or UNIX) operating system is necessary. Background in biology, especially molecular genetics, would be helpful, but is not required. Salary is negotiable. Please send résumé to: **John Devereux, UW Biotechnology Center, 1710 University Avenue, Madison, Wisconsin 53705.**

ASSISTANT ADJUNCT PROFESSOR OF SURGERY/ HEAD AND NECK SURGERY UNIVERSITY OF CALIFORNIA AT SAN DIEGO

QUALIFICATIONS: Ph.D. in biomechanics or related subspecialty and 3 years of laboratory research experience in biomedical engineering. Will assist Division of Head and Neck Surgery faculty with research on investigation of trauma mechanisms of occupants in automobile accidents, and will teach medical, graduate, and postgraduate students. Send curriculum vitae and inquiry to: **Dennis Schneider, Ph.D., Assistant Adjunct Professor of Surgery, M-014, University of California, San Diego, Gilman Drive and La Jolla Village Drive, La Jolla, CA 92093.** Salary: Per published scale. This is not a tenure-track position. Closing date is 15 August 1986. *University of California, San Diego is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT COMPUTER SCIENTIST II

Position available in applied mathematical sciences research program. Duties include developing user interfaces for scientific computation and writing of application codes. A minimum of a master's degree in computer science or applied mathematics with research experience leading to an M.S. is required. A working knowledge of LISP and C is required, as is experience in the development of user interfaces for scientific packages. Employer offers excellent benefits. Salary range \$25,000 to \$33,229 annually. Interested applicants should submit their résumé along with names of three professional references to: **Job Service of Iowa, 330 Main Street, Ames, Iowa 50010.** Job order number 1615072. *An Equal Opportunity/Affirmative Action Employer, M/F/V/H.*

POSITIONS OPEN

ASSISTANT PROFESSOR-LEVEL POSITION IN PHYSIOLOGY. New York College of Osteopathic Medicine invites applications from qualified Ph.D.'s for a full-time assistant professor position in the Department of Physiology (yearly renewable contract/multiple year contracts available, salary commensurate with experience). The position chiefly involves research (90 percent time allocation) with minimal teaching duties (no more than 20 percent). The research interest of applicants should be in the area of cardiac cellular electrophysiology. Modern laboratory space and start-up funds will be provided to the successful candidate. Applications, including curriculum vitae, statement of research plan and track record, and the names and addresses of three references should be mailed to: **Dr. Arnold L. Nagler, Associate Dean, New York College of Osteopathic Medicine, Old Westbury, New York 11568.** Deadline for receipt of applications is 15 August 1986.

A vacancy exists for an **ASSISTANT PROFESSOR** in the Department of Pathology at McMaster University to join an active group doing research on the biology of mast cells. Only applicants with good evidence of productivity, independence, and experience with mast cells and/or their mediators, and a background in biochemistry and/or molecular biology should apply. This position is available immediately for an initial appointment of 3 years. Interested candidates should send their curriculum vitae and the names of three referees to, or contact: **Dr. J. Bienenstock, Chairman, Department of Pathology, Room 2N16, McMaster University, 1200 Main Street West, Hamilton, Ontario, Canada L8N 3Z5.**

ASSISTANT PROFESSOR—Immunology and animal cell biology. Tenure-track position to teach graduate and undergraduate courses and develop research program. Required Ph.D. or Ph.D. candidate in final stage of completion of degree in immunology or cell biology. Start January 1987. Apply by 1 September to: **R. Simon, Chairperson, Department of Biology, State University of New York (SUNY)—Geneseo, Geneseo, NY 14454.** *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR, DEPARTMENT OF PATHOLOGY. A tenure-track position in the Clinical Chemistry Division is available at the level of assistant professor. Applicants must have an M.D. degree and be eligible for Board-certification in clinical pathology. The position requires supervision and further development of the division's highly active toxicology/pharmacokinetics service. Specific expertise in clinical toxicology is therefore desirable. Candidates must also have a commitment to teaching and research. Applicants are requested to submit curriculum vitae and three letters of reference to: **Dr. Ajit Singhvi, Professor of Pathology, 776 Scaife Hall, Department of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, PA 15261.**

BACTERIOLOGIST

A Cornell University appointment is available for a diagnostic bacteriologist to work in the Diagnostic Laboratory at the College of Veterinary Medicine, King Faisal University, Al-Hasa, Saudi Arabia. This senior technical position offers attractive salary, fringe benefits, and professional opportunities. Send curriculum vitae to: **Dr. Charles G. Rickard, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401.**

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

POSTDOCTORAL POSITION available in electrophysiology of cardiac tissue and cardiomyocytes. Applicants should have experience in intracellular techniques. A background in whole patch and patch clamp procedures is preferred, but not required. The successful candidate will be expected to give several lectures in the freshman medical physiology course. Salary is competitive. The successful applicant will work under the direct supervision of **Dr. Kenneth Rossner, Department of Physiology.** Applications, including curriculum vitae, statement of research interests, and the names and addresses of three references should be mailed to: **Dr. Arnold L. Nagler, Associate Dean, Search Committee, New York College of Osteopathic Medicine, Old Westbury, NY, 11568.** Deadline for receipt of applications is 15 August 1986.

Scientist

Membrane Research

The Liposome Company is a rapidly growing biomedical technology firm specializing in advanced drug delivery systems with an emphasis on liposome and lipid based carriers. The company has a need for expertise in liposomology and membraneology and offers the following challenging career opportunity.

This position reports to the director of membrane research and will be responsible for the design, development and characterization of liposome systems for pharmaceutical applications. The position will also have responsibility to establish inroads into novel areas of research potentially beneficial to the company.

The successful applicant will have a Ph.D. in an appropriate discipline, 1-5 years postdoctoral experience, a background in lipids and model membranes, training in a broad range of physical techniques and a commitment to publish his or her work.

The Liposome Company is an equal opportunity employer that offers competitive salaries, comprehensive benefits and a creative environment for professional performance and growth. Interested candidates should send their resumes, selected reprints and three references to:

Andrew S. Janoff, Ph.D.
Director of Membrane Research
The Liposome Company, Inc.
One Research Way, Princeton, NJ 08540

The **Liposome Company** Inc
Princeton

Senior Biochemist

Eicosanoid Research

The Squibb Institute for Medical Research is recognized as an international leader in the research and development of pharmaceuticals and related health care products. Recognizing the potential importance of eicosanoids in human health and disease, we are expanding our commitment to eicosanoid research.

We are now seeking a Senior Biochemist (Ph.D. in Biochemistry with 5-8 years postdoctoral experience) with a working knowledge of eicosanoid biochemistry. The successful candidate will explore enzymatic and receptor-initiated processes involved in the metabolism and activities of eicosanoids. Responsibilities will include development of analytical techniques for separation and quantitation of arachidonic acid metabolites and application of these methods in the preparation, characterization, and use of enzyme systems for drug development and exploratory research. This individual will work with pharmacologists, biochemists and chemists in collaborative research directed towards the development of novel therapeutic agents.

The Squibb Institute is located in Princeton, NJ, a pleasant semi-rural setting convenient to both Philadelphia and New York City.

For confidential consideration, please submit your C.V. to the **Squibb Institute for Medical Research, Human Resources Department 343, Princeton, NJ 08543-4000**. Equal Opportunity Employer, M/F/H/V.



SQUIBB

Where science comes to life.

Environmental Toxicologist

Syntex, an international healthcare company and a leader in its field, has an outstanding opportunity for a Toxicologist to join our Department of Environmental Health and Safety.

You will be responsible for risk assessment of hazardous waste sites, design and review of protocols for toxicology research, interaction with regulatory agencies, technical support of attorneys involved in litigation, and development of scientific manuscripts. The position requires a PhD in Toxicology or related fields, along with at least 2 years of post doctoral work or 3 years experience in industry or government. The ideal candidate will possess excellent written and oral communication skills and have an interest in regulatory and litigation-related toxicology. The position will involve significant travel.



Syntex offers a competitive salary and benefits package. For consideration, send your resume to Syntex, Professional Staffing, Dept. DL, 3401 Hillview Ave., Palo Alto, CA 94304. An equal opportunity employer.

DNAX Research Institute

Post Doctoral Fellowships

DNAX Research Institute of Molecular and Cellular Biology is conducting basic molecular and cell biology research on the growth and differentiation of lymphoid cells, hemopoietic cells, and yeast.

Within the Molecular Biology Department directed by Dr. Ken-ichi Arai, fellowships are available with the following: Dr. Naoko Arai: Replication and gene expression of animal viruses, including the development of mammalian expression vectors and genes which regulate the growth and differentiation of T and B lymphocytes.

Dr. Kunihiro Matsumoto: Yeast cell cycle control, including the genes related to target proteins for protein kinase in yeast rascAMP cascade; and genetic and molecular biology studies on control of G₀/G₁ transition in yeast.

Dr. Atsushi Miyajima: Signal transduction pathways for growth and differentiation of hemopoietic or lymphoid cells by lymphokines and colony stimulating factors.

Dr. Takashi Yokota: Isolation and characterization of lymphokine genes from activated T cells and studies on the regulation of their expression.

Candidates should have a Ph.D. plus training and competence in molecular biology and biochemistry.

Additional Postdoctoral Fellowships are available in both Molecular Biology and Immunology. From time to time, DNAX accepts a selected few graduate students who are already enrolled in university predoctoral programs. Interested applicants should send a curriculum vitae, a concise statement of research interest, and the names of three references, to Barbara Harley, DNAX Research Institute of Molecular and Cellular Biology, 901 California Avenue, Palo Alto, CA 94304-1104. EOE.

EPIDEMIOLOGIST

The U.S. Environmental Protection Agency (EPA) is seeking candidates for three (3) potential epidemiologist positions. The positions are located in the Health Effects Research Laboratory (HERL), Research Triangle Park, NC. The positions are permanent full-time at the GS 12-15 levels. The salary range is \$31,619 to \$67,940, depending upon qualifications.

HERL has a staff of about 325, over 100 of whom hold doctoral level degrees. The Laboratory has a diverse program under the management of seven Divisions, namely Developmental Biology, Biometry, Experimental Biology, Genetic Toxicology, Inhalation Toxicology, Neurotoxicology, and Toxicology and Microbiology, the latter of which is located in Cincinnati. The program includes *in vitro*, animal, human clinical, and epidemiological research, designed to address issues related to the health effects of air and water chemical pollutants, as well as biopesticides, water-borne microbes, and non-ionizing radiation.

The positions available include **PROGRAM DIRECTOR**, **TEAM LEADER**, and **STAFF EPIDEMIOLOGIST**. The epidemiology program is expanding and is focused on indoor and outdoor air pollutants, as well as water-borne toxic chemicals. The majority of the program is extramural, with HERL scientists playing the major role in program development and direction. These positions, as well as those of other epidemiologists on staff, are within the Biometry Division. The epidemiologists also collaborate with scientists in other Divisions to enable the development of novel approaches to environmental problems.

Successful candidates for all the positions will be expected to have an M.D. or a doctoral degree in a health-related field. U.S. citizenship is required.

Qualifications for the **STAFF EPIDEMIOLOGIST** position include a minimum of one (1) year of post-doctoral experience in epidemiology and evidence of expertise as indicated by publications in the peer-reviewed literature.

Qualifications for the **TEAM LEADER EPIDEMIOLOGY** position include:

1. At least four (4) years of post-doctoral research experience in epidemiology, preferably as related to the effects of chemicals.
2. National recognition in epidemiology as indicated by multiple senior-authored publications in the peer-reviewed literature, and invitations to participate in national meetings or scientific society activities.
3. At least two (2) years of experience in directing/supervising the work of others on epidemiology projects.
4. Ability to develop projects and lead in all phases of the projects.

Qualifications of the **PROGRAM DIRECTOR OF EPIDEMIOLOGY** include:

1. At least five (5) years of post-doctoral research experience in epidemiology, at least two (2) of which are in the epidemiology of chemical toxicants.
2. International recognition in environmental and/or occupational epidemiology as shown by publications in the peer-reviewed literature and invitations to participate in international meetings/panels on environmental and/or occupational epidemiology.
3. Experience in management of scientific staff (including a professional staff) and budgets. At least three (3) years of experience as a supervisor.
4. Proven ability to provide leadership in directing the development and progress of a creative and effective environmental epidemiology research program.

Forward curriculum vitae and names of three (3) references (prior to August 8, 1986) to:

Dr. F. Gordon Hueter, Director, HERL
c/o Cynthia Kelly, PMD (MD-29)
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

MALE PHYSIOLOGY/ ANDROLOGY

The Sterling Research Group, a division of Sterling Drug Inc., announces an opening at its Research Institute in Rensselaer, NY for a Senior Research Biologist in its expanding endocrinology department. We are expanding our discovery and development of new drug therapies for male urogenital diseases.

The successful candidate will possess a PhD degree in physiology, endocrinology, animal science or pharmacology with 2-5 years relevant *in vivo* experience in andrology or prostatic diseases. Prior work with domestic and/or primate species is desirable. Supervision of other scientific and technical staff is expected and will be enhanced with strong interpersonal and communication skills.

We offer an attractive salary and benefits package. Located in the center of major summer and winter recreational and cultural activities, the Institute offers professional development opportunities within a dynamic research environment.

Interested candidates should send curriculum vitae including salary requirements in confidence to:

William F. Sheldon
Employment Manager



**STERLING-WINTHROP
RESEARCH INSTITUTE**

A Division of Sterling Drug Inc.

Columbia Turnpike, Rensselaer, NY 12144

Equal Opportunity Employer M/F/H

SeaPharm

SeaPharm, an international biotechnology company developing pharmaceutical applications for marine natural products, is seeking several key scientists for their Drug Discovery Group. Areas of specialty are:

- **TUMOR BIOLOGY:** Design/operation of *in vivo* tumor model systems for evaluating chemotherapeutic agents. Familiarity with established murine leukemia and solid tumors and human tumor xenografts required. Skills in *in vitro* prescreens, cytotoxicity assays and target-directed screens highly desirable. Ph.D. Cell Biology, Experimental Oncology or Pharmacology.
- **MICROBIOLOGY:** Design/operation of *in vitro* and *in vivo* anti-microbial assay systems. Emphasis in antifungal drug development including target site-directed screens. Additional experience helpful in culture, isolation and fermentation of microorganisms as sources of bioactive materials. Ph.D. Microbiology, industrial experience highly desirable.
- **BIOCHEMISTRY:** Plant biochemistry including experience in preparation, purification and assay of enzymes from plants and plant tissue culture. Individual expected to interact with biology and chemistry groups working on isolation, purification, structure elucidation, bioactivity and mechanisms of action of marine natural products. Ph.D. Biochemistry, broad general biochemistry experience desirable.
- **IMMUNOLOGY:** Discovery of immunomodulators, requires ability to conceive and implement drug development schemes for characterization and development toward clinical use of variety of immunologicals. Familiarity with *in vitro* and *in vivo* models. Ph.D. Immunology, industrial experience highly desirable.

- **PHYCOLOGY:** Isolation, culture and scale-up algal culture, particularly cyanobacteria. Position will include establishing marine and fresh water algal cultures for production of bio-active substances and optimization studies involving modification of environmental growth conditions. Ph.D. Phycology or Microbiology.

- **NATURAL PRODUCTS CHEMISTRY:** Demonstrated skills in isolation and characterization of natural products using modern chromatographic and spectroscopic techniques. Experience with marine or fermentation sources preferred. Ph.D. Natural Products Chemistry.

- **PHARMACOLOGY:** Design/implementation of *in vitro* and *in vivo* assay systems for pharmacologically active agents. Specific expertise in antiinflammatory, cardiotonic, CNS or other classes of drugs helpful. Ph.D. Pharmacology, training/experience in general pharmacology studies including bio-availability, pharmacokinetics, mechanisms of action and toxicology highly desirable.

All positions require 2 or more years of relevant experience. Senior candidates with several years experience may be considered for Group Leader positions. Post-Doctoral and Research Technician positions also available.

Applicants must be willing to relocate to Florida's Eastern Treasure Coast. Send resume to: Ms. Kathy M. Filion, SeaPharm, Inc., 791 Alexander Road, Princeton, NJ 08540.

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHARMACOLOGY

The Department of Pharmacology, University of Kentucky College of Medicine, invites applications for a tenure-track position at the level of assistant professor. Candidates must have a M.D. or Ph.D. degree and have demonstrated ability to conduct independent research. Primary responsibilities are establishment of a funded, independent research program and teaching of medical and graduate students. Applications are encouraged from individuals interested in toxicology, drug metabolism, chemical carcinogenesis, as well as the study of receptors, neuropsychopharmacology, and cardiovascular pharmacology. Excellent opportunities are available for interaction with the Tobacco and Health Research Institute, the Lucille P. Markey Cancer Center, the Sanders-Brown Center on Aging and the Departments of Psychiatry, Anesthesiology, and Medicine. Interested individuals should send an outline of future research plans, curriculum vitae, bibliography, and the names of individuals who may be contacted as references to:

Mary Vore, Ph.D.
Search Committee
Department of Pharmacology
University of Kentucky
College of Medicine
Lexington, KY 40536

The University of Kentucky is an Equal Opportunity/Affirmative Action Employer

BASIC SCIENTIST (Ph.D./M.D.): The Cardiac Research Laboratory at Rhode Island Hospital/Brown University is expanding its commitment to basic research in the area of coronary blood flow regulation. Funding for up to 5 years is available for a basic scientist with expertise in physiology, pharmacology, and/or biochemistry. Applicant must be capable of doing independent research and must qualify for an appointment at the assistant or associate professor level in the Brown University Program of Medicine. For additional information, contact: **Henry Gewirtz, M.D., Division of Cardiology, Rhode Island Hospital, Providence, Rhode Island 02903.** *Rhode Island Hospital is an Equal Opportunity Employer.*

BIOCHEMISTS. Two tenure-track positions at assistant professor level, minimum \$31,000 for 9 months to \$41,000 for 12 months. Start 1 January or 1 September 1987. Require Ph.D. in biochemistry or molecular biology. Prefer postdoctoral experience, strong (B.S.) chemistry background and some university/college teaching experience. Duties: teach biochemistry and general chemistry, research in biochemical adaptation to the environment with preference in any of the following areas: animal nucleic acid biochemistry and recombinant DNA; hormonal control in plants, plant or animal enzymology of intermediary metabolism, or chronobiology and rhythms. Send complete curriculum vitae, statement of teaching and research interests, transcripts, and three letters of reference to: **G. F. Shields, Chairman Biochemistry Search Committee, Institute Arctic Biology, University of Alaska, Fairbanks, AK 99775; telephone: 907-474-7656.** Deadline 15 September 1986. *UAF is an Equal Opportunity/Affirmative Action Employer and Educational Institution.*

DEPARTMENT OF AGRICULTURE (USDA) AGRICULTURAL RESEARCH SERVICE (ARS) BIOCHEMIST ATHENS, GEORGIA

ARS is seeking a **postdoctoral research associate** conducting research to purify and characterize serum-borne adipogenic factors. Candidates must have background in protein purification, monoclonal antibody production, and cell culture techniques. Relevant Ph.D. within the last 3 years and U.S. citizenship are required. Successful candidates will be hired under excepted appointments for up to 2 years in duration. Salary is commensurate with experience (\$26,381 to \$31,619 per annum). Send SF-171 (Standard government application form) and three references to: **Dr. Gary J. Hausman, USDA, ARS, Animal Physiology Unit, R. B. Russell Research Center, P.O. Box 5677, Athens, Georgia 30613; telephone: 404-546-3224.** *An Equal Opportunity Employer.*

POSITIONS OPEN

BIOCHEMISTRY POSTDOCTORAL position available in area of chemical carcinogenesis: oncogene expression and protein kinase C. Nutritional effects on molecular biology will be assessed. Start after 1 July 1986. Salary \$17,000 to \$20,000. Send curriculum vitae and two references by 27 August 1986 to: **Dr. Diane Birt, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, NE 68105-1065.**

BIOSTATISTICS DIRECTOR

Biostatistics director—Ph.D. level director sought to supervise biostatistics activities and staff of 15 at the City of Hope Cancer Research Center, including all clinical trials development, data collection, and study evaluation for this NCI-funded Cancer Center. Respond with curriculum vitae and three letters of reference to: **Dr. James Doroshow, Department of Medical Oncology, City of Hope National Medical Center, 1500 East Duarte Road, Duarte, CA 91010.** *City of Hope is an Equal Opportunity Employer.*

CHAIR JOINT MEDICAL PROGRAM AND TENURED PROFESSORSHIP UNIVERSITY OF CALIFORNIA (UC)/BERKELEY AND UC/SAN FRANCISCO

The chair will have responsibility for administration of the first 3 years of the joint program at UC Berkeley, for developing faculty and ensuring liaison with UC San Francisco. Together with the Joint Faculty Committee, the chair will be responsible for the curriculum. The chair should have a medical qualification. However, an exception may be made in the case of an individual who has demonstrated exceptional involvement in medical school administration. The chair must have qualifications to merit appointment to the faculty of both campuses. It is hoped to make the appointment as soon as possible. Résumé and application letter should be sent to: **The Chair, Search Committee, Joint Medical Program, School of Public Health, 19 Warren Hall, University of California, Berkeley, CA 94720,** by 1 October 1986.

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

CHAIRPERSON, DEPARTMENT OF PATHOLOGY

Applications are invited for the position of professor and chairperson, Department of Pathology, University of South Carolina (USC) School of Medicine, Columbia, South Carolina. Candidates should have an M.D., certification in one of the boards of pathology, a commitment to excellence in medical education, and an established record of research. The chairperson will have responsibilities for administration of the department, teaching medical students, and continuing a program of scholarly activity. The opportunity for clinical involvement is available at the affiliated VA hospital.

Applications, including curriculum vitae, bibliography, and names of three references, should be sent to: **Dr. D. O. Allen, Chairman, Pathology Search Committee, Department of Pharmacology, USC School of Medicine, Columbia, SC 29208.** *The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.*

CONSULTING STAFF SCIENTIST (HALF-TIME)

The Health Effects Institute (HEI), an independent, nonprofit organization that funds biomedical research on the health effects of automotive air pollutants, is seeking a scientist to assist in the technical review of final reports. Projects funded by the institute are subjected to a rigorous peer-review process prior to publication of final reports by HEI. The person selected will participate in the review process and interact with members of the Institute's Health Review Committee. Applicants should have excellent communications skills, a doctoral degree or equivalent experience in the biomedical sciences, and some background in toxicology, physiology, cell biology, or risk assessment. Send curriculum vitae and the names and addresses of three references to: **Dr. Ken Sexton, Health Effects Institute, 215 First Street, Cambridge, MA 02142.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CLINICAL GENETICIST—M.D. Assistant or associate professor. Temple University School of Medicine and St. Christopher's Hospital for Children, to head Genetics Clinic, participate in teaching and research. Board-certified (eligible) in pediatrics and clinical genetics. Interested applicants should send curriculum vitae to: **Hope H. Punnett, Ph.D., St. Christopher's Hospital For Children, Genetics Section, 5th Street and Lehigh Avenue, Philadelphia, PA 19133.** *Equal Opportunity/Affirmative Action Employer.*

DIVISION DIRECTOR—A growth-oriented Life Sciences Division is seeking an enthusiastic individual to take an active role in the further development of programs in the areas of environmental, marine, and medical sciences. Primarily administrative. Successful candidate must possess a Ph.D., preferably in marine or environmental science. Must have teaching experience and demonstrated leadership and management skills. Send curriculum vitae and cover letter by 15 August 1986 to: **Director of Personnel, University of New England, 11 Hills Beach Road, Biddeford, Maine 04005.** *UNE is an Equal Opportunity/Affirmative Action Employer.*

DROSOPHILA POSTDOCTORAL POSITION

NSF-funded position available immediately to study the molecular and developmental genetics of homeotic mutations. Previous experience in molecular biology desirable. Send curriculum vitae and three letters of reference to: **Dr. Rob Denell, Division of Biology, Ackert Hall, Kansas State University, Manhattan KS 66506.** *KSU is an Equal Opportunity/Affirmative Action Employer.*

ECOLOGISTS, middle to senior level for a professorship to be filled contingent on budgetary approval in summer or fall, 1987. Successful applicant should provide leadership in an active graduate program and interact with a young and vigorous faculty in ecology and evolutionary biology. Preference will be given to candidates working at the population or community level. Submit curriculum vitae and three letters of reference by 19 September 1986 to: **Dr. James S. Findley, Ecology Search Committee, Department of Biology, University of New Mexico, Albuquerque, NM 87131.** *Affirmative Action/Equal Opportunity Employer.*

The Department of Anatomy at the University of Missouri—Columbia invites applications from qualified individuals for a full-time, tenure-track **FACULTY POSITION** to conduct research in such areas as molecular neurobiology, neuroendocrinology, and/or cell biology. Teaching duties are negotiable, but a willingness to participate in either histology or gross anatomy is expected. Applicants should have Ph.D. or equivalent and should have evidence of teaching experience and active research. Rank and salary to be commensurate with qualifications and experience. Applicants should send their résumés to: **Dr. W. K. Paull, Chairman, Department of Anatomy, University of Missouri School of Medicine, University of Missouri—Columbia, Columbia, Missouri 65212,** by 31 August 1986. *The University of Missouri is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS—ENDOCRINOLOGY. The Division of Endocrinology, Department of Internal Medicine, State University of New York (SUNY) at Stony Brook, invites applications for regular tenure-track positions with an academic rank (assistant or associate professor), depending on experience, scientific achievement, and professional/technical qualifications. Preference will be given to candidates with a Ph.D. degree, at least 2 years of postdoctoral experience, and a publication record indicating competence in the use of modern experimental techniques for the study of neuroendocrine structure/function. Successful applicants are expected to participate in the divisional teaching program, to obtain extramural funding, to develop an independent research program, and to cooperate in the development of multidisciplinary projects. Interested candidates should submit their curriculum vitae, references, and a summary of research interests to: **Dr. Michael Berelowitz, Division of Endocrinology/Metabolism, HSC, T15-060, SUNY Stony Brook, Stony Brook, NY 11794-8154.** *SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.* AK number 154.

Senior Scientist Peptide Synthesis

The Squibb Institute for Medical Research is recognized as an international leader in the research and development of pharmaceutical products. Due to our continued growth, we currently have a challenging opportunity available for a senior scientist with expertise in solid-phase peptide synthesis and an interest in the application of peptide methodology to biological problems.

Responsibilities of the position will include the design and synthesis of peptides for the use in a variety of research programs and the development of an independent research program. The successful candidate must possess a demonstrated ability to solve problems related to peptide chemistry, interact effectively with a multi-disciplinary group of scientists and have a strong commitment to biochemical research.

Qualified applicants should have a Ph.D. in Biochemistry or Organic Chemistry or related discipline and a minimum of two years of peptide synthesis experience beyond the post doctoral level.

The Squibb Institute, located in Princeton, N.J., offers the opportunity for exceptional scientists to pursue stimulating careers. Our location is a pleasant semi-rural setting convenient to both Philadelphia and New York City.

Resumes should be directed to: Human Resources Department 376, The Squibb Institute for Medical Research, P.O. Box 4000, Princeton, NJ 08543-4000. Equal Opportunity Employer, M/F/H/V.



SQUIBB

Where science comes to life.

**Life on the
Edge.**

SOFTWARE PRODUCT SPECIALIST

International Biotechnologies, Inc. (IBI) specializes in *innovative* products and systems designed specifically for Molecular Biology Research Applications.

We currently have an opening for a **MOLECULAR BIOLOGY SOFTWARE PRODUCT SPECIALIST** to provide technical support to our scientific customer base and sales force. Responsibilities include writing and updating product documentation, technical seminar presentations and individual interactions with users on both the molecular biology and the computer aspects of our software products.

The ideal candidate will have hands-on experience in molecular biology techniques and a working knowledge of PC-based computer operations.

Interested candidates should send their resume to: Personnel Department-SPS, IBI, P.O. Box 9558, New Haven, Connecticut 06535.

The Cutting Edge of Molecular Biology

IBI

Senior Investigator — Cosmetic Scientist

ELIZABETH ARDEN RESEARCH LABORATORIES, a division of Eli Lilly and Company and a leader in cosmetic sciences, is seeking applicants for a senior level position.

Candidates for this position should have a doctorate degree in pharmaceuticals, organic chemistry, or physical organic chemistry. In addition, experience in the areas of biochemistry or inorganic chemistry would be beneficial.

The primary research emphasis will be to develop novel and innovative approaches to cosmetic formulations which have some demonstrable activity on human skin. Expertise in emulsions, microemulsions, liquid crystals, and surfactant/skin interactions is required. Research will be conducted as a part of a team comprising the disciplines of cosmetic chemistry, skin biochemistry, and the biomechanical properties of the skin.

Interface at a peer level with scientists in the pharmaceutical, pharmacological, physiological, biochemical and medical disciplines will require this investigator to collaborate and communicate well with people in these areas.

Qualified applicants should send their curriculum vitae to:



John W. Crooks, Manager
College Relations (EARL)
Eli Lilly and Company
Lilly Corporate Center
Indianapolis, IN 46285

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POSITIONS OPEN

EXPERIMENTAL PLASMA PHYSICS RESEARCH POSITION

The University of Washington Fusion Plasma Physics Program has an opening for a **postdoctoral research** associate in experimental plasma physics in its 3-meter theta pinch laboratory (helical-axis stellarators and Alfvén wave heating). The work also involves graduate student supervision and occasional teaching. Salary level will be based on applicant's qualifications. Send résumé and two letters of recommendation to: **Professor Fred L. Ribe, Department of Nuclear Engineering, BF-10, University of Washington, Seattle, WA 98195. Telephone: 206-543-0355. Equal Opportunity Employer.**

FACULTY POSITION IN PARASITOLOGY

The Department of Pathobiology, School of Veterinary Medicine at the University of Pennsylvania invites applications for a tenure-track assistant professor position in the Laboratory of Parasitology, available fall, 1986. Applicants are expected to have a D.V.M./Ph.D., M.D./Ph.D., or Ph.D. with postdoctoral experience and demonstrated research and teaching ability in parasitology. Preference will be given to candidates with a background in molecular or immunoparasitology. The successful applicant will be expected to develop a strong research program and participate in the teaching and training of veterinary and graduate students. Salary will be commensurate with qualifications. Candidates are requested to submit curriculum vitae and the names and addresses of at least three references to: **Dr. Alan Kelly, Chair, Search Committee, School of Veterinary Medicine, University of Pennsylvania, 3800 Spruce Street, Philadelphia, PA 19104. Deadline for applications is 1 October 1986. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.**

HEAD OF FOOD SCIENCE AND NUTRITION, tenured as professor. Ph.D. in food science, nutrition, or close field; 8 years of professional experience; achievement in research and teaching or extension. Send application, résumé, and three references by 1 October to: **R. Goodrich, Search Committee Chair, 120 Peters Hall, University of Minnesota, St. Paul, MN 55108. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

Successful in-vitro fertilization program at community hospital in Boston area seeks **LABORATORY DIRECTOR**. Duties include media and sperm preparation, oocyte grading and fertilization, embryo culture, and equipment maintenance. Tissue culture experience required. I.V.F. laboratory background preferred. **Telephone: 617-965-7270.**

MOLECULAR NEUROBIOLOGY: Applications are invited for a position of assistant staff scientist in the Institute for Advanced Biomedical Research, Oregon Health Sciences University. Applicants must possess a Ph.D. and qualify for an academic appointment at the assistant professor level. The position requires independent research in three areas: regulation of the expression of the prodynorphin gene, cloning of the opioid peptide receptors, and seeking the genes responsible for developmental restrictions. Special expertise is required in molecular biology as demonstrated by extensive experience in the areas of gene expression, nucleic acid purification and characterization, biosynthesis of proteins, biotechnology, gene cloning, and the synthesis and cloning of cDNA. Extensive expertise also is expected in the areas of gene screening, oligonucleotide applications, mRNA translation in vitro, brain dissection, cell culture, receptor binding assays, gene transfer, and mRNA subtractions. Teaching abilities must include basic eukaryotic molecular biology, gene cloning, post-transcriptional regulation, and gene expression in the nervous and endocrine systems. The incumbent will be responsible for the training and supervision of graduate students, technicians, and research assistants and associates.

Applications, including curriculum vitae, are to be sent to: **Dr. Edward Herbert, Director, IABR—L474, The Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201.**

The OHSU is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

NEUROANATOMIST/FACULTY POSITION. A new tenure-track position will be available after 1 July 1987 in Department of Otolaryngology-Head and Neck Surgery with secondary appointment in neuroscience. Candidates must have training and experience in advanced techniques for the study of the neuroanatomy of the central nervous system, have earned a doctoral degree, have demonstrated independent research productivity, and be capable of attracting research support. Selected candidate will be a member of the newly formed Center for Hearing Sciences and will be expected to develop a research program commensurate with the center's goal of understanding the fundamental neural mechanisms of hearing. Teaching duties include participating in graduate student, medical student, and resident training programs. Qualified candidates should submit by 30 November 1986 curriculum vitae, list of publications, up to three selected reprints and names of three referees whom we can contact to: **Dr. Murray B. Sachs, Director, The Johns Hopkins University Center for Hearing Sciences, The Johns Hopkins School of Medicine, 506 Traylor Building, Baltimore, MD 21205.**

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

PATENT LICENSING ASSOCIATE UNIVERSITY OF CALIFORNIA

License university technology to industry; assist in negotiations and draft agreements. Extensive personal contact with industry and inventors. Moderate travel. Knowledge patent and licensing law desired. Education/experience equivalent to college degree in chemistry or related field, plus 5 years of industrial experience. Background in development of new health care products or pharmacology desired. Starting salary for minimum qualifications \$34,272; maximum salary for appointment currently \$45,492. Apply to: **University of California, Office of the President, Personnel Services number 410, 2144 Addison Street, Berkeley, CA 94720. Equal Opportunity/Affirmative Action Employer.**

The Primate Research Institute (PRI), New Mexico State University, is undertaking a major expansion program. PRI engages in multidisciplinary basic and applied research in the areas of toxicology, pharmacology, veterinary science, pathology, reproductive physiology, primatology, metabolism, and infectious diseases. A doctoral-level position in the following area is now open:

PHARMACOLOGIST/TOXICOLOGIST: Assistant/associate professor. Earned doctorate in pharmacology/toxicology with experience in separation and identification of drug metabolites in biological matrices. Toxicology and pharmacokinetic experience desirable. PRI is interested in further development of the chimpanzee as a metabolic and pharmacokinetic model of man.

The salary will be competitive and commensurate with experience and the salary structure of the professional field. Opportunity exists to pursue individual research interests, to collaborate with on-campus scientists, and to teach and interact with graduate students. Deadline for applications is 15 August.

The institute has 100 plus employees and is located on Holloman Air Force Base, near Alamogordo, New Mexico, at the foot of the Sacramento Mountains. Living costs are among the lowest in the United States. Climate and living conditions are superb, with 350 days of sunshine per year. Staff members can choose to live in any climate between high desert and alpine forests.

New Mexico State University is an Equal Employment Opportunity/Affirmative Action Employer.

Send résumé, letter of interest, and names of two references to:

**Dr. William C. Hobson, Director
PRIMATE RESEARCH INSTITUTE
P.O. Box 1027
Holloman AFB, NM 88330-1027**

POSTDOCTORAL FELLOW OR EQUIVALENT

Experienced in molecular hybridization and non-radioactive probes. Gene diagnosis project. Please telephone: **David H. Gillespie, Ph.D., Hahnemann University, Broad and Vine Streets, Philadelphia, PA 19102, Telephone: 215-448-8659.**

POSITIONS OPEN

PHARMACOLOGY

The School of Pharmacy, Campbell University, invites applications for a 12-month, tenure-track faculty position in the Department of Pharmaceutical Sciences. Rank and salary are negotiable and commensurate with the applicant's qualifications and experience. Candidates for the position should hold a Ph.D. degree and have broad training in pharmacology. Responsibilities include the development and maintenance of an active research program and instruction in Doctor of Pharmacy curriculum. Excellence in teaching is expected. Interested applicants should send their curriculum vitae, summaries of their research interests and objectives, and three letters of reference to: **Dr. Harry Rosenberg, Chairman, Department of Pharmaceutical Sciences, School of Pharmacy, Campbell University, Buies Creek, North Carolina 27506. An Equal Opportunity Employer.**

The Department of Biology, Southwest Missouri State University, Springfield, Missouri, is seeking a **PH.D. MICROBIOLOGIST** to replace a professor on sabbatical leave for the spring and fall semesters, starting 5 January 1987. The position involves teaching the courses: Introduction to Microbiology, Soil Microbiology, and Microbial Metabolism and Physiology. Research is encouraged. Interested individuals should submit a résumé, transcripts and the names and addresses of three references to: **Dr. Russell Rhodes, Chairman, Biology Department, Box 148, Southwest Missouri State University, Springfield, MO 65804. Deadline for application material is 1 September 1986. Southwest Missouri State University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION IN CARDIOVASCULAR PHARMACOLOGY. Available immediately for a recent Ph.D. in pharmacology, physiology, or biochemistry. The project is related to identification, isolation, and purification of purine receptors. Salary NIH level. Experience in receptor biochemistry or pharmacology preferred. Send curriculum vitae and three letters of recommendation by 30 September 1986 to: **Dr. S. Jamal Mustafa, Department of Pharmacology, East Carolina University, Greenville, North Carolina 27834. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately to study acquired resistance to cisplatin. Cultured human ovarian carcinoma cells will be studied to isolate genes associated with the resistant phenotype using molecular biologic techniques, and to determine the biochemical bases of cisplatin resistance. Salary commensurate with experience, health benefits provided. Please send curriculum vitae, representative reprints, and the names of three references to: **Dr. Paul A. Andrews, Cancer Center, University of California, San Diego T-012, La Jolla, CA 92093. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available at the University of California in San Francisco (UCSF) to study expression of blood-group glycosyltransferases in colon cancer cells. Requires a strong background in enzymology and/or molecular biology. Familiarity with somatic cell cloning is desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Young S. Kim, Gastrointestinal Research Laboratory (151M2), VA Medical Center, 4150 Clement Street, San Francisco, CA 94121. UCSF is an Equal Opportunity Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL POSITIONS, MOLECULAR GENETICS—Two positions are available, summer 1986, to study: (i) the structural characterization of human alpha- and beta-spectrin genes, which will subsequently be used to identify the molecular defects in those inherited hemolytic anemias which have been shown to have deficient spectrin; (ii) the characterization of chloride transport proteins by cDNA and genomic cloning, mapping and genetic linkage to cystic fibrosis, and by using retroviral vectors to study the expression of cloned cDNA's. Experience in molecular biology is desirable. Send curriculum vitae and the names and telephone numbers of three references to: **Dr. Peter Curtis, The Wistar Institute, 36th and Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer, M/F.**

SCIENCE WRITER

Senior Level

The University Of Texas Medical Branch at Galveston

Our large academic health science center is dedicated to medical research, tertiary patient care, and education/training for physicians and nurse professionals. We currently have an opening for a Science Writer.

Position reports to the Director of Public Affairs and is responsible for writing news and feature stories covering a broad range of clinical and basic medical sciences. Also, act as the University's chief media contact on science-related matters. Minimum requirements include a **Bachelor's degree**, 5 years **professional writing and editing experience**, thorough **background in medical sciences** and preferably **journalistic experience**. Prior **experience in an academic health science center** is highly desired.

The selected applicant can expect salaries commensurate with education and experience, plus comprehensive fringe benefits package. Our Gulf Coast location is ideal for water enthusiasts, and is within driving distance of metropolitan Houston.

Qualified candidates, send your detailed resume in confidence with salary history/requirements, samples of published materials, and 3 professional references to: **Office of Public Affairs, Suite 633, Administration Building, The University of Texas Medical Branch, Galveston, Texas 77550.**



The University
of Texas
Medical Branch

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RADIOCHEMIST

(Work Location: Mercury, Nevada)

Establish and direct a laboratory for the radioanalysis of low-level environmental samples. A PhD. with eight years of experience, including five years of environmental work and three years in supervision, are desired. A strong background in gamma spectroscopy and transuranic chemistry is required. Continuous interface with other laboratories and agencies demands excellent communications and collaborative skills.

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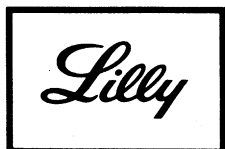
SENIOR CENTRAL NERVOUS SYSTEM PHARMACOLOGIST

(Neurochemical Pharmacologist)

THE LILLY RESEARCH LABORATORIES, a division of Eli Lilly and Company, is seeking highly qualified candidates for a Senior Scientist position in neurochemical pharmacology within its Central Nervous System Research Division.

Applicants must have a doctoral degree in Pharmacology or Biochemistry with at least 2 years postdoctoral training. Preference will be given to those candidates with expertise in areas of receptor binding, neurotransmitter release, autoradiography, and membrane receptor regulation. The Senior Scientist will be expected to establish an independent neurochemistry laboratory in our research facility located at our Corporate Center. The Senior Scientist will join a group of innovative scientists developing drugs for a wide range of psychiatric and neurological disorders.

Qualified applicants should send their curriculum vitae to:



John W. Crooks, Manager
College Relations (CNS)²
Eli Lilly and Company
Lilly Corporate Center
Indianapolis, IN 46286

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POSITIONS OPEN

Atmospheric Chemistry/University of Virginia **POSTDOCTORAL POSITION** available to work on the Global Precipitation Chemistry Project, investigating the processes controlling the composition of precipitation in remote areas of the world. Send résumé and three references to: **Dr. James N. Galloway, Department of Environmental Sciences, Clark Hall, University of Virginia, Charlottesville, VA 22903.**

POSTDOCTORAL POSITION

Postdoctoral position available immediately to study various aspects of regulation of mammalian aldehyde dehydrogenases. Experience in enzymology, molecular biology, lipid metabolism, and/or tissue culture desirable. Send curriculum vitae, including statement of research interests, and names of three references to: **Dr. Ronald Lindahl, Department of Biology, The University of Alabama, P.O. Box 1927, University, Alabama 35486. The University of Alabama is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION: Biochemist to join a multidisciplinary photomedicine research group to investigate photosensitization reactions in biological systems. Training in enzymology (mechanisms, purification, and characterization), electrophoretic and chromatographic techniques required. Experience in immunochemistry and protein modification desirable.

Contact: **Tayyaba Hasan, Ph.D., Wellman Research Laboratories, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114. Telephone: 617-726-6995 or 617-726-6996.**

POSTDOCTORAL POSITIONS are available for individuals interested in the structure and function of blood coagulation proteins. Present studies include the molecular biology, protein chemistry, and immunology of blood clotting proteins and physical chemical studies of the assembly and expression of the complex enzymes involved in blood clotting. Candidates should submit curriculum vitae and three letters of recommendation to: **Kenneth G. Mann, Ph.D., Professor and Chairman, Department of Biochemistry, The University of Vermont, College of Medicine, C401 Given Building, Burlington, Vermont 05405.**

POSTDOCTORAL POSITION IN DEVELOPMENTAL NEUROBIOLOGY available for morphological and electrophysiological studies of development and regeneration of synaptic contacts in spinal cord of rat embryos. Candidates with experience using HRP and/or intracellular electrophysiological techniques are preferred. Send curriculum vitae, statement of research interests, and three letters of reference to: **Dr. Lea Ziskind-Conhaim, Department of Physiology, SMI Room 129, 1300 University Avenue, University of Wisconsin, Madison, WI 53706; telephone: 608-263-3382.**

THE RESEARCH SCHOOL OF CHEMISTRY of the **AUSTRALIAN NATIONAL UNIVERSITY** invites applications for **POSTDOCTORAL RESEARCH POSITIONS**. Major research interests in physical and theoretical chemistry include: novel materials; low-dimensional phenomena including interfaces; neutron scattering (**Professor J. W. White**); photophysics and magnetic resonance (**Dr. R. Bramley**); NMR spectroscopy, structure and dynamics of macromolecules (**Dr. L. R. Brown**); x-ray diffraction and theoretical studies of disordered materials (**Dr. T. R. Welberry**); liquid state chemical physics (**Dr. D. J. Evans**); theoretical organic chemistry (**Dr. L. Radom**); optical spectroscopy (**Dr. E. R. Krausz**). Salary ranges: postdoctoral fellow \$A23,473 to 26,889 per annum; research fellow \$A27,233 to 35,777 per annum; (\$A1: \$U.S. 68¢). Reasonable travel expenses. Assistance with housing. Maternity leave. Superannuation. There is no application form. Applicants should quote Reference Number RC.18.6.1 and supply to: **The Registrar, Australian National University, G.P.O. Box 4, Canberra, A.C.T. 2601, Australia, by 26 September 1986, curriculum vitae, list of publications, statement of research interests, two passport-sized photographs, names and addresses of three academic referees, and probable date on which the fellowship, if awarded, could be taken up.**

The University is an Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITION available in estrogen-induced carcinogenesis to investigate metabolism of modified estrogens, interactions of estrogens and glutathione, and estrogen-induced DNA adducts (^{32}P -postlabeling analysis). Please send curriculum vitae and three letters of recommendation to: **Dr. Joachim G. Liehr, Department of Pharmacology and Toxicology, University of Texas Medical Branch, Galveston, TX 77550. UTMB is an Equal Opportunity Affirmative Action Employer, M/F/H.**

POSTDOCTORAL POSITIONS in application of recombinant DNA technology to bacterial, fungal, higher plants, and animal systems. Previous experience desirable, but not essential. Send curriculum vitae and names of three references to: **Dr. P. E. Kolattukudy, Institute of Biological Chemistry, Washington State University, Pullman, WA 99164-6340. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE POSITION in cloning of genes of fish viruses for vaccines. Area of study includes gene cloning, DNA sequencing, protein purification, and characterization. Send curriculum vitae and names of references to: **C. Passavant, Department of Microbiology, Oregon State University, Corvallis, Oregon 97331-3804. Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973. Closing date: 1 August 1986.**

POSTDOCTORAL RESEARCH AT THE NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH—NCTR's research mission is to study the biological effects of potentially toxic chemicals. Doctoral degree received within last 3 years required. Stipend is \$23,000 to \$28,000, depending on research area. For information and applications, contact: **Oak Ridge Associated Universities Postgraduate Research Program at NCTR, University Programs Division, P.O. Box 117, Oak Ridge, TN 37831; telephone: 615-576-3190. This is an Equal Opportunity Program open to U.S. citizens or PRA.**

POSITIONS OPEN

COLUMBIA UNIVERSITY POSTDOCTORAL RESEARCH FELLOW STRUCTURAL STUDIES OF MACROMOLECULAR ASSEMBLIES

A position is available for a postdoctoral researcher to participate in studies of macromolecular assemblies using x-ray diffraction from non-crystalline specimens. Focus of these studies is on development of new methods for the analysis of fiber diffraction data. Biological systems being studied include filamentous bacteriophage, membrane gap junctions, and actin. Background in x-ray crystallography or fiber diffraction or analysis of electron micrographs preferred. Strong background in computer data analysis essential. Please send curriculum vitae and the names of three references to: **Dr. Lee Makowski, Department of Biochemistry and Molecular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE IN CELL BIOLOGY/IMMUNOPHARMACOLOGY. Research involves elucidation of molecular mechanism(s) of action of a novel, highly potent immunosuppressive agent that selectively and reversibly inhibits interferon-induced responses in cultured cells. Salary commensurate with qualifications. Send curriculum vitae to: **Dr. L. T. Webster, Jr., Chairman, Department of Pharmacology, School of Medicine, Case Western Reserve University, Cleveland, Ohio 44106. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION IN MEMBRANE/SURFACE CHEMISTRY for investigation of membrane-cytoskeletal interactions in a monolayer model system. Experience with structural protein isolation is very desirable. It is anticipated that support will also be available for research on other model membrane systems, namely, neurosecretion, virus infection, and protein penetration. Competitive salary commensurate with experience and qualifications. Write: **R. C. MacDonald, Department of Biochemistry, MCB, Northwestern University, Evanston, IL 60201. Affirmative Action/Equal Opportunity Employer.**

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Supervisor, DNA Sequencing Lab

Hoffmann-La Roche's Department of Molecular Genetics is seeking a self-motivated scientist to lead a newly created DNA sequencing laboratory. The ideal candidate will have a BS or MS degree, extensive experience in Maxam-Gilbert and/or dideoxy DNA sequencing, and demonstrated ability to work independently.

You will be expected to create a state-of-the-art sequencing facility, as well as hire, supervise and work closely with other scientists on recombinant DNA projects of vital pharmaceutical importance. This is a significant position which will be scientifically challenging and financially rewarding for the right individual.

Please send a C.V. and list of three references to: **Peter T. Lomedico, Department of Molecular Genetics.**



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The Provost supervises the academic administration of the University, including the Schools of Arts and Sciences, Engineering, Continuing Studies, Medicine, Nursing, Public Health, and the Peabody Conservatory in Baltimore, Maryland, as well as the School of Advanced International Studies in Washington, D.C., with centers in Bologna and Nanjing.

Natural and social scientists and scholars in the humanities with administrative experience and significant professional achievement are encouraged to apply.

Resumes should be sent by August 15, 1986 to:

Professor M. Gordon Wolman
Chairman, Search Committee
Department of Geography and Environmental
Engineering
The Johns Hopkins University
Baltimore, Maryland 21218
Telephone: (301)338-7090

The Johns Hopkins University is an affirmative action, equal opportunity employer.

STAFF FELLOW
(Less than 3 yrs. Professional Research Experience)
Salary Range: \$17,000 to \$34,269

SENIOR STAFF FELLOW
(3-7 yrs. Research Experience)
Salary Range: \$20,688 to \$38,422

The Clinical Oncology Program of the Division of Cancer Treatment, National Cancer Institute, seeks Staff Fellow or Sr. Staff Fellow with credentials in chemical synthesis (organic, organometallic, or coordination chemistry). Candidate must have or will soon complete the Ph.D. degree.

Previous experience in synthesis and/or work with radionuclides is helpful. Position involves synthesis of ligands to bind radionuclides to monoclonal antibodies at the National Institutes of Health, Bethesda, Maryland.

For further information, contact:

Dr. Otto A. Gansow, Head
Inorganic & Radioimmune Chemistry Section
Radiation Oncology Branch
Clinical Oncology Program
Division of Cancer Treatment
National Cancer Institute
National Institutes of Health
Building 10, Room B3B69
Bethesda, Maryland 20892
Telephone: (301) 496-5936

AN EQUAL OPPORTUNITY EMPLOYER

BS/MS IMMUNOLOGIST (Animal Health)

THE LILLY RESEARCH LABORATORIES, a division of Eli Lilly and Company, is seeking candidates for a position in Animal Health Research within its Animal Science Discovery Research Division.

Applicants must have a BS/MS degree and experience in performing a number of immunological procedures. Preference will be given to those candidates with expertise in detection and quantification of serum and mucosal antibody production in animals. The associate immunologist will join a group of innovative scientists studying host immune mechanisms to infectious agents in animals in our research facility located at Greenfield, Indiana.

Qualified applicants should send their resume to:



Ms. Lori E. Pivo
Personnel Representative LP729
Eli Lilly and Company
Greenfield Laboratories
P. O. Box 708
Greenfield, Indiana

AN EQUAL OPPORTUNITY EMPLOYER M/F

PHARMACOLOGIST

The Merrell Dow Research Institute has immediate openings in Project Administration for BS/MS/PhD level individuals. Candidates should have a strong laboratory background in pharmacology, preferably cardiovascular or autonomic. Additional experience in conduct of clinical trials or drug regulatory affairs is preferred. BS/MS level candidates will be expected to review laboratory/clinical projects for accuracy and completeness, to tabulate results from these projects and to prepare draft reports for supervisory review and approval. PhD level candidates will be expected to demonstrate supervisory capabilities and to be responsible for final preparation of research reports, clinical investigator brochures and preparation/assembly of New Drug Applications according to the new FDA Guidelines. Demonstrated communication skills, both verbal and written are an absolute necessity.

Merrell Dow Research Institute is a subsidiary of Dow Chemical Company and offers excellent compensation, comprehensive benefits and relocation assistance. If you are interested and would like to work for a rapidly growing research institute, send your curriculum vitae, salary requirements and the names of three references to:

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POSITIONS OPEN

POSTDOCTORAL POSITION

To study the relationship between gene expression of mammalian DNA polymerase alpha and the initiation of DNA replication. Involves protein structure analysis using monoclonal antibodies, cloning mammalian genes, immunocytochemistry, and flow cytometry. Contact: **Dr. Robert Bambara, Biochemistry, Box 607, University of Rochester, Rochester, NY 14642.**

POSTDOCTORAL POSITIONS

Postdoctoral positions available to study molecular action of cyclic AMP-dependent protein kinase subunits at the gene level. Experience in recombinant DNA, molecular biochemistry techniques, and/or protein purification is desirable. Send curriculum vitae outlining academic training and research experience, as well as names of three references, to: **Dr. Richard A. Jungmann, Department of Molecular Biology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH POSITION available. Involved in study of biochemistry/molecular biology of prostaglandin receptors. Experience in platelet biology helpful. Permanent resident or U.S. citizenship required. Please send résumé to: **Asru K. Sinha, Ph.D., Division of Cardiology, Montefiore Medical Center, 111 East 210 Street, Bronx, NY 10467 or telephone: 212-920-4125.**

POSTGRADUATE RESEARCHER IN NEUROSCIENCES: Candidate should have Ph.D. and background in several of the following: biochemistry, molecular biology, morphology, and neurosciences. Will be working in molecular pathology related to cerebral aging and Alzheimer's disease. Immediately available. Send résumé to: **R. D. Terry, Department of Neurosciences M-024, University of California San Diego (UCSD), La Jolla, CA 92093, by 30 October 1986. Salary based on experience and UCSD pay scale. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTGRADUATE RESEARCH ASSOCIATE position available for an individual interested in studying the organization and composition of the membranes of malaria-infected red cells. Preference will be given to recent Ph.D.'s with background in lipid extraction and analysis and for membrane protein biochemistry. Send curriculum vitae, letters of reference, and description of research interests to: **Professor Irwin W. Sherman, Department of Biology, University of California, Riverside, CA 92521.**

RESEARCH ASSISTANT PROFESSOR, non-tenure-track, M.D. or Ph.D. Qualifications include ability and research record in molecular genetics. Candidate should have independent research support and be willing to work on current departmental projects. Please send curriculum vitae and three letters of reference to: **Roy D. Schmickel, M.D., Chairman, Department of Human Genetics, University of Pennsylvania, School of Medicine, Philadelphia, PA 19104-6072. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSISTANT PROFESSOR

The Department of Obstetrics and Gynecology of Georgetown University Medical Center, Washington, DC, invites applications for assistant laboratory director for the Division of Gynecologic Oncology. We are seeking an individual to assist in the maintenance of an active, extramurally funded research program in tumor virology. Applicants should have a Ph.D. degree or equivalent with previous postdoctoral experience in molecular biology. Salary negotiable. We anticipate filling the position before 1 December. Applicants should send curriculum vitae and three letters of reference to:

**Dr. Wayne D. Lancaster
Department of Obstetrics and Gynecology
Georgetown University Medical Center
3800 Reservoir Road, NW
Washington, DC 20007**

Georgetown University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS

JILA (operated jointly by the U.S. National Bureau of Standards and the University of Colorado) is devoted to research, study, and teaching in atomic and molecular physics, laser physics, astrophysics, precision measurements, geophysical measurement, and related areas. Applications are invited for two programs:

1. **RESEARCH ASSOCIATESHIPS**, for advanced research by recent Ph.D.s. Applications are accepted and considered anytime throughout the year.
2. **VISITING FELLOWSHIPS**, for advanced research by senior scientists. Deadline for completed applications is 9 January 1987.

Further information can be obtained from: **The Secretary, Visiting Scientists Program, JILA, Box 440, University of Colorado, Boulder, CO 80309-0440. The University of Colorado is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH SCIENTISTS NEW VENTURE OPENINGS

BioGrowth, Inc., a recently organized and funded biotechnology company, is building its staff and has openings for the following scientists:

MOLECULAR BIOLOGISTS with in-depth technical knowledge and proven experience with state-of-the-art cloning and expression system development. This should include RNA isolation, library construction and screening, M13 DNA sequencing, and vector construction.

RETROVIROLOGISTS with emphasis in mammalian cell expression.

Prefer 2 to 4 years of hands-on industry experience in addition to strong technical background.

We are located in the Bay Area and offer excellent salary and benefits. For confidential consideration, send your résumé, salary requirements, a letter describing your qualifications, and the names of three references to: **Vice President and Technical Director, BioGrowth, Inc., 505 Ortega Street, San Francisco, CA 94122.**

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Molecular Genetics

Smith Kline & French Laboratories, a leader in pharmaceutical research, is seeking additional senior scientific staff to expand its current research programs employing recombinant DNA technology and other genetic approaches to develop novel therapeutic agents.

Excellent opportunities exist for innovative interdisciplinary research in our new and superbly equipped Research and Development Center in suburban Philadelphia near Valley Forge, Pennsylvania.

The Department of Molecular Genetics is recruiting for several outstanding Senior Scientists with Ph.D.'s in Microbiology, Biochemistry or equivalent and expertise in genomic and cDNA cloning, yeast expression of heterologous proteins, retrovirus replication and expression systems or protein engineering.

We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. Publication of research results is encouraged and supported. For confidential review, please forward your C.V. and names of three references to: **George P. Kissell, Jr., Manager, Personnel Relations, Smith Kline & French Laboratories, a division of SmithKline Beckman Corporation, 1586 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.**

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Clinical Research Professionals

Key Roles in New Drug Development at Pfizer



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Pfizer Inc. is internationally recognized for innovations and research achievements in the healthcare field. New and ongoing projects in our New York Headquarters office have created excellent opportunities for high caliber clinical research professionals to join interdisciplinary drug development teams in the following areas:

Associate Director- Toxicology

Manage a toxicology drug development program through the NDA stage. Conduct analytical reviews of toxicology data, including the evaluation and summarization of data in verbal or written form to management, contract facilities and regulatory agencies. Interact with other departmental members, clinical research teams, management staff, and regulatory agencies as well as toxicologists and managers of domestic/international drug companies in evaluating joint development programs for licensed drug candidates. Involves approximately 15% travel. Requires a PhD in Pharmacology, Toxicology or Physiology, backed by 5-8 years of toxicology experience, with 1-3 years in the pharmaceutical industry. Will possess broad-based toxicology experience that includes "hands on" laboratory experience in designing, conducting, and evaluating drug toxicity studies.

Associate Director- Pharmacokinetics

Design, initiate and monitor clinical and non-clinical studies for pharmacokinetic, bioavailability, and drug metabolism assessments. In addition, you will evaluate and summarize pharmacokinetic/pharmacodynamic data and prepare regulatory submissions. Requires a PhD in Pharmaceutical Sciences or a Pharm D with 3-5 years of experience in pharmacokinetics/biopharmaceutics.

Assistant Director- CNS Pharmacology

Participate in management of clinical research programs including protocol design, investigator selection, monitoring, data collection, and interpretation. Prepare IND/NDA documents for governmental submission. Review pre-clinical and clinical data of drugs undergoing licensing evaluation. Screen research proposals for scientific interest to Pfizer and potential medical value. Requires PhD in the CNS area with at least 3 years postdoctoral experience. Clinical research experience is highly desirable.

Assistant Director- Cardiovascular Pharmacology

Participate in management of clinical research programs including protocol design, investigator selection, monitoring, data collection, and interpretation. Prepare IND/NDA documents for governmental submission. Review preclinical and clinical data of drugs undergoing licensing evaluation. Screen research proposals for scientific interest to Pfizer and potential medical value. Requires a PhD in Pharmacology in the cardiovascular area with at least 3 years postdoctoral experience. Clinical research experience is highly desirable.

Candidates for each of the above four positions should be self-motivators with excellent interpersonal, analytical, organizational and communication skills.

Explore your exceptional career prospects with Pfizer that include competitive salaries commensurate with experience, outstanding benefits and ample opportunities for professional growth. Send your resume with salary history, including position of interest, to: Cathlin L. Green, Personnel Associate, Human Resources, Pfizer Inc., 235 East 42nd Street, New York, NY 10017. Only candidates with appropriate backgrounds will be contacted.

POSITIONS OPEN

RESEARCH ASSOCIATE

Position available immediately involving studies on the mechanisms of tumor and retrovirus-mediated immunosuppression. Applicants should have prior experience in performing immune function assays. Experience in molecular biology and/or protein purification desirable, but not required. Interested applicants should send their curriculum vitae and names and addresses of three references to: **Dr. George J. Cianciolo, Howard Hughes Medical Institute, Box 3892, Duke University Medical Center, Durham, NC 27710.**

RESEARCH ASSOCIATE

Position open for individual with experience in histopathology and nucleic acid hybridization, to study gene expression in human vascular cells and tissues using in situ techniques. This person will join an active research group engaged in studies of blood vessel function and atherosclerosis using excellent new facilities. Salary and appointment flexible, depending on qualifications and experience. Send curriculum vitae and names of references to: **Dr. Peter Libby, Chief, Cardiovascular Research Laboratory, Human Nutrition Research Center on Aging at Tufts University, 711 Washington Street, Boston, MA 02111. Affirmative Action/Equal Opportunity Employer.**

RESEARCH SCIENTIST: Conduct research projects in chemical synthesis to develop new methodology to synthesize organic compounds. Ph.D. in synthetic organic chemistry, plus 1 year of experience required. Knowledge of inert atmosphere chemistry and use of NMR equipment required. Forty hours per week, \$39,000 per year. Send résumé to: **Job Service Technical Unit, Connecticut Department of Labor, 200 Folly Brook Boulevard, Wethersfield, CT 06109. Refer to JO number 0390334.**

The Department of Medical Oncology of the City of Hope National Medical Center has an immediate opening for a **SENIOR POSTDOCTORAL FELLOW OR ASSISTANT PROFESSOR** level individual to pursue independent research on the molecular biology of anticancer drug resistance. Competitive salary and research financial support. Interested individuals with a Ph.D. degree in molecular biology or related fields and at least 1 to 2 years of postdoctoral experience should send letter of inquiry and curriculum vitae to: **Dr. James Doroshow, Director, Department of Medical Oncology and Therapeutics Research, City of Hope National Medical Center, 1500 E. Duarte Road, Duarte, CA 91010.**

The Physiology Department at the **Armed Forces Radiobiology Research Institute (AFRRI)** is seeking candidates for **STAFF RESEARCH POSITIONS**. We will consider applicants in both **NEUROBIOLOGY** (with interests in neuronal, glial, or CNS function) and **CELL PHYSIOLOGY** (with interests in ion channels in nonneuronal cells). Candidates should have a strong publication record and have demonstrated the potential for independent research. The Physiology Department studies the physiological and biophysical mechanisms of radiation insult to cellular, organ, or whole animal systems. This neurobiology position, available immediately, is a 4-year term civil service position, with a salary range of \$30,000 to \$40,000. (Reference MSVA 73/86.) The cell physiology position will be available in September 1986, is a 1-year appointment renewable up to 4 years, salary range is \$26,000 to \$34,000. (Reference AFRRI 19/86.) A position for a research biologist/research physiologist to assist in experiments on epithelial tissue is also available. This position is available immediately, is a 1-year appointment renewable up to 4 years, salary range is \$17,000 to \$28,000. (Reference AFRRI 18/86.) To apply for these civil service positions, send curriculum vitae and/or SF-171, and reprints of representative research to: **Armed Forces Radiobiology Research Institute, Civilian Personnel Office, Bethesda, Maryland 20814-5145, by 3 September 1986. Indicate announcement MSVA 73/86, AFRRI 18/86, or AFRRI 19/86. Direct inquiries to: Dr. David Livengood, Department Chairman, telephone 202-295-1212; or Joann Kelleher, Personnel Management Specialist, telephone 202-295-1426. U.S. citizenship is required. The AFRRI is an Equal Opportunity Employer.**

POSITIONS OPEN

RESEARCH ASSOCIATE. Position available for M.D. and/or Ph.D. to participate in an ongoing study of lipid metabolism in retinitis pigmentosa. Must have thorough understanding of lipoprotein metabolism. Salary competitive. Please send curriculum vitae and names of three references to: **Robert E. Anderson, Ph.D., M.D., Cullen Eye Institute, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. An Equal Opportunity/Affirmative Action Employer.**

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Individual to supervise the daily operations of a major tissue culture/glassware preparation core facility. This facility with a repository of over 300 established cell lines, provides basic tissue culture needs (primarily media and supplements) for over 200 investigators. Research opportunities exploring novel tissue culture methods and participating directly in individual investigator's research projects. College degree in a biological science and 3 years of experience in all aspects of tissue culture; or equivalent. Practical experience with IBM PC (XT)-based accounting and database systems preferred.

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Telephone: 919-962-2991

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Bowling Green State University, Department of Chemistry: Two tenure-track positions at the **ASSISTANT PROFESSOR** level, available September 1987. We expect to make appointments in **Photobiochemistry** and in **Photophysics/Chemical Physics**, but will consider exceptionally strong candidates in other areas of photochemistry. These positions are funded as part of the Ohio Board of Regents' Academic Challenge program and represent a commitment to broaden our program in the photochemical sciences. Send curriculum vitae, transcripts, three letters of reference, and a statement of research plans to: **Dr. J. C. Dalton, Center for Photochemical Sciences, Department of Chemistry, Bowling Green State University, Bowling Green, OH 43403. BGSU is an Affirmative Action/Equal Opportunity Employer.**

TWO RESEARCH ASSOCIATE positions are available for Ph.D. or M.D. wishing to study the biochemical determinants of the neurohormonal mechanisms relevant to the control of blood pressure and renal function. Specific areas of interest include the function and regulation of renal and vascular arachidonic acid metabolites, renal kallikrein, and neuropeptides in the kidney (VIP and NPY). Experience in any of the aforementioned areas and/or in tissue culture is required. Salary range \$16,500 to \$18,500, depending on qualifications. To apply, send curriculum vitae and names of three references to: **Dr. Alberto Nasjletti, Department of Pharmacology, University of Tennessee-Memphis, 874 Union Avenue, Memphis, TN 38163. The University of Tennessee is an Equal Opportunity/Affirmative Action Employer.**

URBAN WILDLIFE FACULTY POSITIONS. The Department of Wildlife and Range Sciences, University of Florida, invites applications for one tenure-track and two annually renewable extension/research positions in urban wildlife management. Submit application (curriculum vitae, transcripts, and three letters of reference) by 15 August 1986 to: **Dr. W. R. Marion, Chair, Search Committee, Department of Wildlife and Range Sciences, University of Florida, Gainesville, FL 32611; telephone: 904-392-5420.**

TRAINEESHIPS

Applications sought for 3-year NIH-funded **TRAINEESHIPS** to begin 1 July 1987, in multidisciplinary research studies in dental caries, leading to M.S., or Ph.D. Applicants must be U.S. citizens and hold dental, M.D. or Ph.D. degrees. Stipend range \$15,996 to \$30,000, depending on experience. *Equal Opportunity Employer; women and minority applicants encouraged.* Contact: **Dr. L. Messer, 18:214 Moos Tower, University of Minnesota School of Dentistry, Minneapolis, MN 55455.**

CONFERENCE

INTERNATIONAL CONFERENCE ON PROSTAGLANDINS AND LIPID METABOLISM IN RADIATION INJURY. To be held 2 and 3 October 1986 at the Crowne Plaza Hotel in Rockville, Maryland. The proceedings will be published. The abstract deadline is 16 August 1986. Registration fee is \$45 (\$25 for students). Sponsored by **The Armed Forces Radiobiology Research Institute.** For further information contact: **Dingle Associates, 1625 Eye Street, NW, Suite 915, Washington, DC 20006.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP in psychiatry and behavioral medicine available immediately to study pharmacologic probes of CNS disorders in women and to develop own research interests. Collaboration in other areas of psychiatry and medicine encouraged. Salary: \$33,350 per year. Send curriculum vitae, reprints, and names of three references to: **Robert Freedman, Ph.D., Director, Behavioral Medicine, Wayne State University, 951 East Lafayette, Detroit, MI 48207.**

BUGHER FOUNDATION—AMERICAN HEART ASSOCIATION FELLOWSHIPS IN CARDIOLOGY AND MOLECULAR BIOLOGY

The Bugher Foundation and the American Heart Association have recently established a Center for Research on the molecular biology of the cardiovascular system at the **University of Texas Health Science Center at Dallas.** A number of fellowships are available to people interested in establishing a career in basic cardiovascular research. Successful candidates will work for 2 or 3 years in laboratories at the Health Science Center that are using the techniques of molecular biology to study the cardiovascular system in health and disease. Selected candidates will also be given the opportunity to extend their clinical training in cardiology. Applicants holding recently awarded M.D. or M.D./Ph.D. degrees should send copies of their curriculum vitae and two letters of reference from their mentors to:

Dr. J. Sambrook, Chairman
Biochemistry Department
University of Texas
Health Science Center at Dallas
5323 Harry Hines Boulevard
Dallas, TX, 75235-9038

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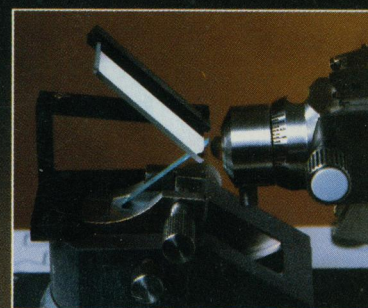
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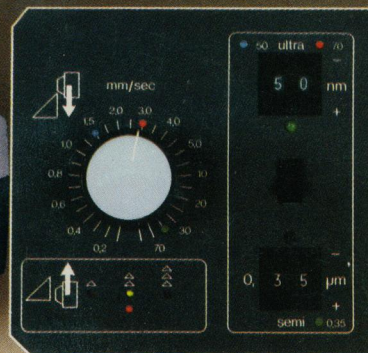
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