

about 1912 are the subject of a study by John A. Popplestone and Marion White McPherson. The volume concludes with an account by Michael M. Sokal of developments in American psychology in the 1920's. A detailed index to the contributions is included.—K.L.

Books Received

- Acoustic Waveguides.** Applications to Oceanic Science. C. Allan Boyles. Wiley-Interscience, New York, 1984. xii, 321 pp., illus. \$46.95.
- Adhesives Handbook.** J. Shields. 3rd ed. Butterworths, Boston, 1984. xii, 360 pp., illus. \$79.95.
- Advanced Plant Physiology.** Malcolm B. Wilkins, Ed. Pitman, Marshfield, Mass., 1984. xii, 514 pp., illus. \$35.95.
- Advances in Data Base Theory.** Vol. 2. Hervé Gallaire, Jack Minker, and Jean Marie Nicolas, Eds. Plenum, New York, 1984. xiv, 428 pp., illus. \$59.50. From a workshop, Toulouse, France, Dec. 1982.
- Advances in Immunobiology.** Blood Cell Antigens and Bone Marrow Transplantation. Jeffrey McCullough and N. Gerald Sandler, Eds. Liss, New York, 1984. xxii, 435 pp., illus. \$58. Progress in Clinical and Biological Research, vol. 149. From a symposium, Washington, D.C., May 1983.
- Affinity Chromatography and Biological Recognition.** Irwin M. Chaiken, Meir Wilchek, and Indu Parikh, Eds. Academic Press, New York, 1983. xxvi, 515 pp., illus. \$43.50. From a symposium, Annapolis, Md., June 1983.
- Afrique de l'Ouest.** West Africa. Geological Introduction and Stratigraphic Terms. J. Fabre, Ed. Pergamon, New York, 1984. 396 pp., illus. \$65. Lexique Stratigraphique International, Nouvelle Série, No. 1.
- Aging and Cell Function.** John E. Johnson, Jr., Ed. Plenum, New York, 1984. xiv, 283 pp., illus. \$42.50.
- Aging and Recovery of Function in the Central Nervous System.** Stephen W. Scheff, Ed. Plenum, New York, 1984. xiv, 221 pp., illus. \$35.
- AIDS.** The Medical Mystery. Frederick P. Siegal and Marta Siegal. Grove, New York, 1984. xiv, 270 pp. \$19.50; paper, \$7.95.
- The Brain, Biochemistry, and Behavior.** Robert L. Habig, Ed. American Association for Clinical Chemistry, Washington, D.C., 1984. xxviii, 360 pp., illus. \$35. From a conference, Tarpon Springs, Fla., Jan. 1983.
- Calculus.** Basic Concepts and Applications. R. A. Rosenbaum and G. Philip Johnson. Cambridge University Press, New York, 1984. xvi, 422 pp., illus. \$24.95.
- A Complete Guide to Monkeys, Apes and Other Primates.** Michael Kavanagh. Viking, New York, 1984. 224 pp., illus. \$19.95.
- Contemporary Hematology/Oncology.** Vol. 3. Albert S. Gordon, Joseph LoBue, and Robert Silber, Eds. Plenum, New York, 1984. xvi, 271 pp., illus. \$39.50.
- Contributions to the History of North American Natural History.** Alwyne Wheeler, Ed. Society for the Bibliography of Natural History, London, 1983 (U.S. distributor, Department of Library Services, American Museum of Natural History, New York). vi, 97 pp., illus. Paper, \$16. Society for the Bibliography of Natural History Special Publication No. 2. From a conference, Philadelphia, Oct. 1981.
- Controlled Wildlife.** A Three-Volume Guide to U.S. Wildlife Laws and Permit Procedures. Vol. 2, Federally Controlled Species. Carol Estes and Keith W. Sessions, Eds. Association of Systematics Collections, Lawrence, Kans., 1983. viii, 327 pp. Paper, \$55.
- Current Trends in Atomic Spectroscopy.** National Academy Press, Washington, D.C., 1984. x, 81 pp., illus. Paper. From a workshop, Tucson, Ariz., Oct. 1982.
- Cyclic Nucleotide Phosphodiesterases.** Samuel J. Strada and W. Joseph Thompson, Eds. Raven, New York, 1984. xviii, 442 pp., illus. \$49. Advances in Cyclic Nucleotide and Protein Phosphorylation Research, vol. 16. From a symposium.
- Dear Lord Rothschild.** Birds, Butterflies and History. Miriam Rothschild. Balaban, Philadelphia, and Hutchinson, London, 1984 (U.S. distributor, ISI Press, Philadelphia). xxiv, 398 pp. + plates. \$29.95.
- Deposition Both Wet and Dry.** Bruce B. Hicks, Ed. Butterworths, Boston, 1984. xvi, 197 pp., illus. \$32.50. Acid Precipitation Series, vol. 4. An Ann Arbor Science Book. From a symposium, Las Vegas, March 1982.
- The Development and Sustainance of Self-Esteem in Childhood.** John E. Mack and Steven L. Ablon, Eds. International Universities Press, New York, 1984. xiv, 304 pp., illus. \$30.
- Diabetes Mellitus.** Etiopathogenesis and Metabolic Aspects. F. Belfiore, D. J. Galton, and G. M. Reaven, Eds. Karger, Basel, 1984. x, 282 pp., illus. \$127. Frontiers in Diabetes, vol. 4. From a conference, Catania, Sicily, Nov. 1982.
- Dictionary of Geological Terms.** Robert L. Bates and Julia A. Jackson, Eds. 3rd ed. Anchor/Double-day, Garden City, N.Y., 1984. iv, 571 pp. Paper, \$7.95.
- The Enigma of Daniel Home.** Medium or Fraud? Trevor H. Hall. Prometheus, Buffalo, N.Y., 1984. 148 pp. \$16.95.
- Environmental Influences on Fertility, Pregnancy, and Development.** Strategies for Measurement and Evaluation. Marvin S. Legator, Michael J. Rosenberg, and Harold Zenick, Eds. Liss, New York, 1984. x, 177 pp., illus. \$39. Also published in *Teratogenesis, Carcinogenesis and Mutagenesis*, vol. 4, No. 1. From a meeting, Cincinnati, May 1982.
- Eukaryotic Cell Cultures.** Basics and Applications. Ronald T. Acton and J. Daniel Lynn, Eds. Plenum, New York, 1984. x, 556 pp., illus. \$75. Advances in Experimental Medicine and Biology, vol. 172. From a congress, Birmingham, Ala., Sept. 1981.
- Excimer Lasers.** Ch. K. Rhodes, Ed. 2nd ed. Springer-Verlag, New York, 1984. xii, 271 pp., illus. Paper, \$25. Topics in Applied Physics, vol. 30.
- Excitotoxins.** Kjell Fuxe, Peter Roberts, and Robert Schwarzw, Eds. Plenum, New York, 1984. xii, 363 pp., illus. \$55. Wenner-Gren Center International Symposium Series, vol. 39. From a symposium, Stockholm, Aug. 1982.
- Exploration Seismology.** Vol. 2. Data-Processing and Interpretation. R. E. Sheriff and L. P. Geldart. Cambridge University Press, New York, 1984. xiv, 221 pp., illus. \$29.95.
- Farm Animals.** Husbandry, Behavior, and Veterinary Practice (Viewpoints of a Critic). Michael W. Fox. University Park Press, Baltimore, 1984. xvi, 285 pp., illus. \$24.95.
- Female Primates.** Studies by Women Primatologists. Meredith F. Small, Ed. Liss, New York, 1984. x, 272 pp., illus. \$58. Monographs in Primatology, vol. 4.
- Fetal Alcohol Syndrome and Fetal Alcohol Effects.** Ernest L. Abel. Plenum, New York, 1984. x, 246 pp., illus. \$27.50.
- Fetal Nutrition, Metabolism, and Immunology.** The Role of the Placenta. Richard K. Miller and Henry A. Thiede, Eds. Plenum, New York, 1984. xii, 387 pp., illus. \$52.50. Trophoblast Research, vol. 1. From a conference, Rochester, N.Y., Oct. 1983.
- A Field Guide to Birds of the USSR.** Including Eastern Europe and Central Asia. V. E. Flint *et al.* Princeton University Press, Princeton, N.J., 1984. xxxvi, 353 pp., illus., + plates. \$65. Translated from the Russian edition (1968) by Natalia Bourso-Leland.
- Genes and Antigens in Cancer Cells.** The Monoclonal Antibody Approach. G. Riethmüller *et al.*, Eds. Karger, Basel, 1984. x, 192 pp., illus. \$37.75. Contributions to Oncology, vol. 19. From a meeting, Bonn, June 1983.
- Genetics.** Charlotte J. Avers. 2nd ed. Willard Grant, Boston, 1984. xii, 644 pp., illus. \$29.70.
- Geological Aspects of Acid Deposition.** Owen P. Bricker, Ed. Butterworths, Boston, 1984. xiv, 143 pp., illus. \$32.50. Acid Precipitation Series, vol. 7. An Ann Arbor Science Book. From a symposium, Las Vegas, March 1982.
- Geomorphology of Europe.** Clifford Embleton, Ed. Wiley-Interscience, New York, 1984. x, 465 pp., illus. \$79.95.
- Giardia and Giardiasis.** Biology, Pathogenesis, and Epidemiology. Stanley L. Erlandsen and Ernest A. Meyer, Eds. Plenum, New York, 1984. xxiv, 407 pp., illus. \$65.
- Glimpsing an Invisible Universe.** The Emergence of X-Ray Astronomy. Richard F. Hirsh. Cambridge University Press, New York, 1983. viii, 186 pp., illus. \$39.50.
- Glucocorticoid Effects and Their Biological Consequences.** Louis V. Avioli, Carlo Gennari, and Bruno Imbimbo, Eds. Plenum, New York, 1984. xii, 419 pp., illus. \$57.50. Advances in Experimental Medicine and Biology, vol. 171. From a colloquium, Siena, Italy, Sept. 1982.
- The Great Pyramid Speaks to You.** Joseph B. Gill. Philosophical Library, New York, 1984. 174 pp., illus. \$13.95.
- Growth of the Heart in Health and Disease.** Radovan Zak, Ed. Raven, New York, 1984. x, 480 pp., illus. \$79.
- Handbook of Chemical Industry Labeling.** Charles J. O'Connor and Sidney I. Lirtzman, Eds. Noyes, Park Ridge, N.J., 1984. xxii, 487 pp., illus. \$64.
- Handbook of Mutagenicity Test Procedures.** B. J. Kilbey *et al.*, Eds. 2nd ed. Elsevier, New York, 1984. xvi, 859 pp., illus. \$150.
- Handbook of Neurochemistry.** Vol. 6. Receptors in the Nervous System. Abel Lajtha, Ed. 2nd ed. Plenum, New York, 1984. xxvi, 668 pp., illus. \$89.50.
- Human Intestinal Microflora in Health and Disease.** David J. Hentges, Ed. Academic Press, New York, 1983. xviii, 568 pp., illus. \$65.50.
- Human in Vitro Fertilization and Embryo Transfer.** Don P. Wolf and Martin M. Quigley, Eds. Plenum, New York, 1984. xiv, 440 pp., illus. \$59.50.
- Hypertension and the Angiotensin System.** Therapeutic Approaches. Austin E. Doyle and Alexander G. Bearn, Eds. Raven, New York, 1984. xvi, 304 pp., illus. \$39.50. From a meeting, Strasbourg, France, June 1983.
- Imaging of Infections and Inflammations of the Central Nervous System.** Computed Tomography, Ultrasound, and Nuclear Magnetic Resonance. Dieter R. Enzmann. Raven, New York, 1984. xii, 348 pp., illus. \$55.
- Integrated Optics.** Theory and Technology. Robert G. Hunsperger. 2nd ed. Springer-Verlag, New York, 1984. xvi, 321 pp., illus. \$29. Springer Series in Optical Sciences, vol. 33.
- The International Karakoram Project.** K. J. Miller, Ed. Cambridge University Press, New York, 1984. Two volumes. Vol. 1. xxx, 412 pp., illus. \$79.50. Vol. 2. xxviii, 635 pp., illus. \$89.50. From two conferences, Islamabad, Pakistan, June 1980, and London, Sept. 1981.
- Jeunes Déviants ou Délinquants Juveniles?** Michel Born. Mardaga, Brussels, 1983. 160 pp. Paper, 590 BF. Psychologie et Sciences Humaines, 128.
- Kulturwandel bei den Samen.** Eine ethnohistorische Untersuchung zum Kulturkontakt in Schwedisch-Lappland. Erich Kasten. Dietrich Reimer Verlag, Berlin, 1983. viii, 197 pp. Paper, DM 32.
- Laboratory Exercises in Human Anatomy with Cat Dissections.** Gerard J. Tortora. Burgess, Minneapolis, 1984. x, 383 pp., illus. Paper, \$16.95.
- Language, Thought, and Other Biological Categories.** New Foundations for Realism. Ruth Garrett Millikan. MIT Press, Cambridge, Mass., 1984. xii, 355 pp. \$29.95. A Bradford Book.
- Methods of Protein and Nucleic Acid Research.** Lev A. Osterman. Springer-Verlag, New York, 1984. Vol. 1. Electrophoresis, Isoelectric Focusing, Ultracentrifugation. x, 342 pp., illus. \$59. Vol. 2, Immunoelectrophoresis, Application of Radioisotopes. x, 204 pp., illus. \$38.
- Methylation of DNA.** Thomas A. Trautner, Ed. Springer-Verlag, New York, 1984. x, 176 pp., illus. \$36. Current Topics in Microbiology and Immunology, 108.
- Microbial Ecology.** R. Campbell. 2nd ed. Blackwell Scientific, Palo Alto, Calif., 1984. x, 191 pp., illus. Paper, \$17. Basic Microbiology, vol. 5.
- Microbial Geochemistry.** W. E. Krumbein, Ed. Blackwell Scientific, Palo Alto, Calif., 1983. xii, 330 pp., illus. \$60.
- A Modern Introduction to Food Microbiology.** R. G. Board. Blackwell Scientific, Palo Alto, Calif., 1983. x, 236 pp., illus. Paper, \$17.50. Basic Microbiology, vol. 8.
- National Strategies and Agricultural Change in a Mexican Community.** Kathleen Musante DeWalt. UMI Research Press, Ann Arbor, Mich., 1984. xx, 211 pp., illus. \$39.95. Studies in Cultural Anthropology, No. 6.
- Neuronal Operations in the Visual Cortex.** Guy A. Orban. Springer-Verlag, New York, 1984. xvi, 367 pp., illus. \$38. Studies of Brain Function, vol. 11.
- Neutron Activation Analysis for Clinical Trace Element Research.** K. Heydorn. CRC Press, Boca Raton, Fla., 1984. Two volumes. Vol. 1. xiv, 217 pp., illus. \$75. Vol. 2. xiv, 172 pp., illus. \$60.
- The Omni Interviews.** Pamela Weintraub, Ed. Ticknor and Fields, New York, 1984. xiv, 364 pp., illus. \$17.95; paper, \$9.95. An Omni Press Book.
- Orchid Biology.** Reviews and Perspectives, III. Joseph Arditti, Ed. Comstock (Cornell University Press), Ithaca, N.Y., 1984. 432 pp., illus. \$49.50.
- Organic Analysis Using Atomic Absorption Spectrometry.** Saad S. M. Hassan. Horwood, Chichester, England, and Halsted (Wiley), New York, 1984. 384 pp., illus. \$89.95. Ellis Horwood Series in Analytical Chemistry.
- P.C.B. Levels in Human Fluids.** Sheboygan Case Study. B. Jill Smith. University of Wisconsin Sea Grant Institute, Madison, 1984. xii, 104 pp. Paper, \$4. Technical Report WIS-SG-83-240.
- Petroleum Geochemistry and Exploration of Europe.** J. Brooks, Ed. Published for the Geological Society by Blackwell Scientific, Palo Alto, Calif., 1983. xvi, 379 pp., illus. \$60. From a conference, Glasgow, Sept. 1982.
- Pharmaceutical Microbiology.** W. B. Hugo and A. D. Russell, Eds. 3rd ed. Blackwell Scientific, Palo Alto, Calif., 1983. x, 470 pp., illus. Paper, \$29.
- The Pharmacology of Nerve and Muscle in Tissue Culture.** Alan L. Harvey. Liss, New York, 1984. x, 252 pp., illus. \$48.
- Philosophy, Evolution and Human Nature.** Florian (Continued on page 647)

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(Continued from page 616)

von Schilcher and Neil Tennant. Routledge and Kegan Paul, Boston, 1984. viii, 283 pp. \$29.95.

Photoperiodic Regulation of Insect and Molluscan Hormones. Pitman, London, 1984 (U.S. distributor, CIBA Pharmaceutical Co., West Caldwell, N.J.). viii, 298 pp., illus. \$35. Ciba Foundation Symposium 104. From a symposium, London, July 1983.

The Question of the Atom. From the Karlsruhe Congress to the First Solvay Conference, 1860-1911. A Compilation of Primary Sources Selected and Introduced by Mary Jo Nye, Tomash, Los Angeles, 1984. xxii, 654 pp., illus. \$48. A Series in the History of Modern Physics, 1800-1950, vol. 4.

Ramón y Cajal's Contribution to the Neurosciences. Santiago Grisolia *et al.*, Eds. Elsevier, New York, 1983. xviii, 267 pp., illus. \$80.75. From a symposium, Valencia, Spain, March 1982.

Rattlesnakes. Their Habits, Life Histories, and Influence on Mankind. Laurence M. Klauber. Abridged by Karen Harvey McClung. Published for the Zoological Society of San Diego by University of California Press, Berkeley, 1984. xxii, 350 pp., illus., + plates. Paper, \$8.95. Reprint, 1982 edition.

Real Time Digital Control Applications. A. Alonso-Concheiro, Ed. Published for the International Federation of Automatic Control by Pergamon, New York, 1984. xiv, 642 pp., illus. \$169. IFAC Proceedings Series, 1984, No. 1. From a symposium, Cuernavaca, Mexico, Jan. 1983.

Recent Advances in Immunology. Asuman Ü Mütioğlu and Nefise Barlas, Eds. Plenum, New York, 1984. x, 241 pp., illus. \$39.50. From a meeting, Istanbul, June 1982.

Social and Economic Organization in the Prehispanic Andes. David L. Browman, Richard L. Burger, and Mario A. Rivera, Eds. BAR, Oxford, England, 1984. vi, 247 pp., illus. Paper, £14. BAR International Series 194. From a congress, Manchester, 1982.

Social Stigma. The Psychology of Marked Relationships. Edward E. Jones *et al.* Freeman, New York, 1984. x, 347 pp. \$23.95; paper, \$14.95. A Series of Books in Psychology.

The Stochastic Modeling of Elementary Psychological Processes. James T. Townsend and F. Gregory Ashby. Cambridge University Press, New York, 1984. xx, 501 pp., illus. \$69.50; paper, \$27.95.

Structural Models in Anthropology. Per Hage and Frank Harary. Cambridge University Press, New York, 1984. xiv, 205 pp., illus. \$39.50; paper, \$12.95. Cambridge Studies in Social Anthropology, 46.

Structure and Fiber Connections of the Hippocampus. A Comparative Study. Walter K. Schwerdtfeger. Springer-Verlag, New York, 1984. vi, 76 pp., illus. Paper, \$24.50. Advances in Anatomy, Embryology and Cell Biology, vol. 83.

A Study of Spinoza's Ethics. Jonathan Bennett. Hackett, Indianapolis, Ind., 1984. x, 396 pp. \$25; paper, \$13.75.

Surfactants in Solution. K. L. Mittal and B. Lindman, Eds. Plenum, New York, 1984. Three volumes. lxvi, 2173 pp., illus., + index. Each volume, \$95. From a symposium, Lund, Sweden, June 1982.

Targeting Economic Incentives for Environmental Protection. Albert L. Nichols. MIT Press, Cambridge, Mass., 1984. xviii, 189 pp., illus. \$22.50. MIT Press Series on the Regulation of Economic Activity, 8.

Tropical Rain Forest. Ecology and Management. S. L. Sutton, T. C. Whitmore, and A. C. Chadwick, Eds. Blackwell Scientific, Palo Alto, Calif., 1983. xiv, 498 pp., illus. \$57. Special Publication No. 2 of the British Ecological Society. From a symposium, Leeds, U.K., April 1982.

The Truth in Money Book. Theodore R. Thoren and Richard F. Warner. 2nd ed. Truth in Money, Inc., Chagrin Falls, Ohio, 1984. viii, 263 pp., illus. Paper, \$8.50.

Up and Running. A Case Study of Successful Systems Development. H. Dines Hansen. Yourdon, New York, 1984. xii, 139 pp., illus. Paper, \$25.

Violence and Crime in Cross-National Perspective. Dane Archer and Rosemary Gartner. Yale University Press, New Haven, Conn., 1984. x, 341 pp. \$30.

Viral Infections of Humans. Epidemiology and Control. Alfred S. Evans, Ed. 2nd ed. Plenum, New York, 1984. xxxviii, 720 pp., illus. \$24.50.

Vital Rates in India, 1961-1981. P. N. Mari Bhat, Samuel Preston, and Tim Dyson. National Academy Press, Washington, D.C., 1984. xvi, 173 pp. Paper, \$16.50. Committee on Population and Demography Report No. 24.

Women in Scientific and Engineering Professions. Violet B. Haas and Carolyn C. Perrucci, Eds. University of Michigan Press, Ann Arbor, 1984. viii, 246 pp., illus. \$24; paper, \$12.50. Women and Culture Series. From a conference, West Lafayette, Ind., March 1981.

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New Orleans, Louisiana 70112-2822

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The Division of Endocrinology and Metabolism at the Yale University School of Medicine invites applications at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. Candidates should have a strong background in molecular cloning, sequencing, and related techniques. Experience with protein purification, immunochemical techniques, and/or an interest in neuroscience would also be desirable. An M.D. degree with Board-eligibility or -certification in endocrinology is preferred. Please contact: **Arthur E. Broadus, M.D., Ph.D.**, Division of Endocrinology and Metabolism, Yale University School of Medicine, Fitkin 1, 333 Cedar Street, New Haven, Connecticut 06510. Curriculum vitae and the names of three references should be provided. *Yale University is an Equal Opportunity/Affirmative Action Employer.* The position is presently available and is to be filled by 1 July 1985 at the latest.

ASSISTANT/ASSOCIATE PROFESSOR, EUKARYOTIC GENETICS. Candidates sought to conduct independent research in the field of eukaryotic genetics, preferably with an interest in the molecular basis of gene regulation, function and/or development. Tenure-track position with light teaching load, excellent laboratory facilities, and strong research environment. Applicants are invited to submit curriculum vitae, representative publications, and three letters of recommendation by 1 October 1984 to:

Dr. Carolyn W. Slayman

Department of Human Genetics

Yale University School of Medicine

P.O. Box 3333

New Haven, Conn. 06510

Yale is an Equal Opportunity/Affirmative Action Employer.

THE SMITHSONIAN INSTITUTION invites applications for the position of **ASSISTANT SECRETARY FOR MUSEUM PROGRAMS**, Washington, D.C. The assistant secretary assists and advises the secretary of the Institution on all policy and program matters related to the museological and museographic aspects of the Institution's programs and operations; coordinates and provides direction to the Institution's central museum management and support activities; and maintains liaison with national and international museum organizations. Applicants must have a comprehensive knowledge of and experience in the fields of museology and museography, including museum administration, collections management, exhibition, conservation and preservation, museum training, and related activities; scholarly attainment in a field of the arts, humanities, or sciences; and demonstrated administrative and managerial ability. Salary: \$66,400 per annum. Send a Standard Form 171, Personal Qualifications Statement, and curriculum vitae and bibliography by 31 August 1984 to: **Office of Personnel Administration, Smithsonian Institution, Washington, D.C. 20560, Attention: MPA-EX-04-84.** *An Equal Opportunity Employer.*

CELL BIOLOGIST/MOLECULAR BIOLOGIST/DEVELOPMENTAL BIOLOGIST

The Department of Cell and Molecular Biology of the Medical College of Georgia invites applications for a 12-month, tenure-track position at the senior faculty level. The successful candidate will be expected to continue a strong research program in some aspect of cellular structure/function in his/her specialty and to participate in the teaching program, including a course in cell biology. Interested applicants should send curriculum vitae, including representative reprints, a brief statement of anticipated research, and names and addresses of three references to: **Dr. Lon D. Hodge, Chairman, Search Committee, Department of Cell and Molecular Biology, Medical College of Georgia, Augusta, Ga. 30912.** *An Equal Opportunity/Affirmative Action Employer.* J1870.

POSITIONS OPEN

PRINCETON UNIVERSITY. The Department of Geological and Geophysical Sciences invites applications for a tenure-track appointment beginning 1 September 1985 at the **ASSISTANT PROFESSOR** level in the area of **ISOTOPE GEOLOGY** with specialization in $^{40}\text{Ar}/^{39}\text{Ar}$ mass spectrometry.

Candidates must be thoroughly grounded in the fundamentals of isotope studies (stable and radioactive) and their application in earth science, and have demonstrated an ability for research in this or related fields. The appointee will be expected to supervise our newly assembled continuous-laser-heating argon age laboratory, and to participate in collaborative research programs using this facility. Teaching duties are to complement and expand the existing programs.

Princeton University is an Equal Opportunity/Affirmative Action Employer. Applicants should send résumé and names of three referees to: **Robert A. Phinney, Chairman, Department of Geological and Geophysical Sciences, Princeton University, Princeton, N.J. 08544.**

ATOMIC PHYSICIST to conduct original theoretical research in the area of hyperspherical coordinate treatments of electron correlation effects in atomic collision processes. Must have Ph.D. in theoretical atomic physics (all but dissertation permissible). Fortran computer programming experience and publications in refereed journals; \$1583 per month. Send résumés to: **Robert Powell, Nebraska Department of Labor, P.O. Box 94600, State House Station, Lincoln, Nebraska 68509.**

BIOLOGY DEPARTMENT HEAD

The Department of Biology, University of Minnesota-Duluth, invites applications and nominations for the position of department head. Appointment begins 1 September 1985. Candidates must be eligible for appointment with tenure at the associate or full professor level. Expected qualifications are a Ph.D., a record of research accomplishment in either **ENTOMOLOGY** or **BIOLOGICAL LIMNOLOGY**, administrative experience, and a commitment to undergraduate and graduate education. Responsibilities include leading a department with diverse teaching, research, and service missions; maintaining an active, externally funded research program; contributing to the department's course offerings including a course in either general entomology or limnology; and supervising graduate research. Applicants should submit a résumé, a statement of educational philosophy and professional goals, and names of three references. Deadline for application is 1 October 1984. Applications, nominations, and inquiries should be directed to: **D. P. Christian, Chair, Department Head Search Committee, Department of Biology, University of Minnesota-Duluth, Duluth, Minnesota 55812. Telephone: 218-726-7566.**

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

DIRECTOR INDUSTRIAL INTERFACE PROGRAM THE UNIVERSITY OF GEORGIA

The University of Georgia, Athens (UGA) is seeking an individual to provide leadership in developing interactions between its research programs and industry.

The director of the Industrial Interface Program will be responsible for stimulating new ventures, helping establish new contractual and consulting relationships between faculty members and industry, and stimulating increased industrial interest in technologies resulting from UGA research programs. He/she will oversee technology transfer programs, including patents, copyrights, contracting, and licensing.

The ideal candidate will have significant experience in university/industry research relationships. Preferred qualifications include appropriate graduate degree and research experience in science and technology, practice or administration of industrial research and its liaison with universities, and training or experience relating to legal aspects of these activities. Salary will be strongly competitive, commensurate with qualifications.

Applications, including curriculum vitae and three references, should be submitted by 15 September to: **Dr. Nathan W. Dean, Acting Vice President for Research, University of Georgia, 609 Graduate Studies Building, Athens, Georgia 30602.**

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

10 AUGUST 1984

Metabolism Chemist

American Cyanamid Company, a leading manufacturer of agricultural chemicals, invites applications for a Ph.D. level position in the Metabolism & Residue Research Section of the Agricultural Research Division, Princeton, New Jersey. As part of a multidisciplinary team, the successful applicant will conduct metabolism studies using radioisotope techniques to study the absorption, distribution, metabolism and excretion of experimental compounds in animals; work closely with residue chemists; prepare protocols and technical reports to support government registrations of compounds.

Qualified candidates must possess a Ph.D. in Biochemistry with 0-2 years experience in drug metabolism research. Proficiency in HPLC is essential, as are excellent oral and written communications skills. Some background in pharmacokinetics is desirable.

We offer very competitive compensation, a comprehensive benefits program and a research environment conducive to professional growth. Please forward your resume with salary requirements, in confidence, to the Employment Office,



American Cyanamid Company

Agricultural Research Division

P.O. Box 400

Princeton, New Jersey 08540

Equal Opportunity Employer m/f/h/v



TECHNICAL EDITOR

UNITED NATIONS

seeks qualified candidates for a post of **TECHNICAL EDITOR (P-4 level)** in the Editorial Control Section of the United Nations Industrial Development Organization (UNIDO). Women candidates are encouraged to apply.

DUTY STATION: Vienna (Austria)

FUNCTIONS:

edits technical texts in engineering, physical and natural sciences, mathematics, economics and industrial technology; corrects in consultation with the authors errors of logic or in facts to ensure that they conform with the standards of nomenclature, units, formulas, etc. adopted by international, national and professional bodies; revises and rewrites texts; prepares or helps prepare notes, terminology bulletins to be used by those who prepare manuscripts.

QUALIFICATIONS:

advanced university degree in science, engineering, mathematics or economics plus eight years experience in editing and writing technical matter; must be able to deal with scientific and engineering terminology, mathematics and chemical formulas; English mother tongue; working knowledge of French and of other United Nations official languages highly desirable.

EXCELLENT SALARY AND BENEFITS

DEADLINE FOR APPLICATIONS: 31 August 1984

APPLICATIONS: send detailed curriculum vitae (including date of birth and nationality) to:

Secretariat Recruitment Section, Room EO544

UNIDO, Vienna International Center

P.O. Box 300, A-1400 Vienna, Austria

POSITIONS OPEN

BIOTECHNOLOGY PROFESSIONALS. Seeking immunologists/immunochemists, nucleic acid sequence/synthesis, fermentation specialists, protein/peptide sequencing/separation/synthesis; monoclonals, diagnostics, lymphokines. QC/QA, R&D, production. Reply in strict confidence with your résumé and salary history to: **LYBROOK ASSOCIATES, P.O. Box 310, Vineland, N.J. 08360; telephone: 609-691-6221.**

DEAN—SCHOOL OF SCIENCE RENSSELAER POLYTECHNIC INSTITUTE

Rensselaer is a private, coeducational, nondenominational technological university formed of Schools of Architecture, Engineering, Humanities and Social Sciences, Management, and Science. The School of Science contains Departments of Biology, Chemistry, Geology, Mathematical Sciences/Computer Science, and Physics and offers B.S., M.S., and Ph.D. degrees in these fields as well as in interdisciplinary areas.

The Institute has mounted a major program of growth of the School of Science. In common with the Institute as a whole, the School of Science looks forward to continued expansion of graduate and research activity. Dean of science candidates are expected to have a strong background in one or more of the relevant sciences and to have demonstrated a commitment to excellence in both education and research. Pertinent administrative experience is a strong positive factor. Paramount are the qualities of vision, judgment, and leadership to match the opportunity offered by the projected growth of the School of Science.

The position will be open in early 1985. Deadline for applications is 30 August 1984. Please send nominations and applications to:

**Professor Charles P. Bean, Chairman
Dean of Science Search Committee
Science Center
Rensselaer Polytechnic Institute
Troy, N.Y. 12180**

An Affirmative Action/Equal Opportunity Employer



DEAN OF THE FACULTY TRINITY COLLEGE Hartford, Connecticut

Applications and nominations are invited for the position of dean of the faculty; appointment to begin on or before 1 July 1985. The dean is the chief academic officer of the college and is responsible for overseeing and developing its academic programs and its faculty.

Qualifications: Ph.D. or equivalent; scholarly achievement in the liberal arts or sciences; experience in academic administration; ability as a teacher.

The dean, the senior officer responsible for the instructional budget, reports directly to the president, supervises department and program chairpersons in their recruitment and review of faculty, and directs the offices of the associate academic dean and the associate administrative dean.

The salary will be commensurate with the candidate's experience and qualifications. A decision on the appointment is expected by 15 January 1985. All applications will be acknowledged.

Applications with the names of five references should be sent by 1 October 1984 to:

**Office of the President
Trinity College
Hartford, Conn. 06106**

An Equal Opportunity/Affirmative Action Employer

FACULTY POSITION IN CLINICAL PHARMACOLOGY

A tenure-track faculty position at assistant or associate professor level available for qualified candidates with an M.D., training in internal medicine, clinical pharmacology (cardiovascular), and 3 to 5 years of independent clinical and basic research experience, preferably on the role of vasopressin in hypertension. Candidate would be expected to develop an independently funded program in hypertension research in both clinical and basic science fields. Send curriculum vitae, including bibliography, and names and addresses of three references to: **P. Somani, M.D., Ph.D., Chief, Division of Clinical Pharmacology, Medical College of Ohio, C.S. 10008, Toledo, Ohio 43699.**

An Equal Opportunity Employer

POSITIONS OPEN

The Rita and Stanley H. Kaplan Cancer Center of New York University (NYU) Medical Center is seeking a **CLINICAL MOLECULAR PHARMACOLOGIST** to begin 1 January 1985. Requirements include a history of independent research with evidence of the capability to attract and manage sponsored peer reviewed funding. The individual will be responsible for heading the Oncopharmacology Unit of the Kaplan Cancer Center. This will entail conducting independent studies on the molecular and pharmacologic bases and interactions of oncologic therapeutic agents as well as collaborating with the clinical scientists of the Cancer Center to enhance investigational treatment regimes.

Academic appointment and salary will be commensurate with experience and credentials in accordance with policies of the NYU School of Medicine.

Four hundred square feet of well located and equipped laboratory facilities are available. As the position and laboratory will operate from both the Department of Pharmacology and Cancer Center organization structures, this is an attractive opportunity for collaboration, scientific inquiry, and career growth.

Candidates for the position should address all correspondence, including current curriculum vitae, a statement of current research support, and three professional references to:

**Franco M. Muggia, M.D.
Professor of Medicine
Director, Division of Oncology
Deputy Director for Clinical Programs
Kaplan Cancer Center
NYU Medical Center
550 First Avenue
New York, New York 10016**

The Division of Clinical Pharmacology requires a **COMPUTER MANAGER** to service, maintain, manage, and program a number of DEC computers. The computers are dedicated either to running mass spectrometers or interpreting data from patients undergoing analysis of cardiac arrhythmias. The manager will also act as a consultant on computer science to individual investigators within the division. Minimum qualifications are a B.S. in computer science or electrical engineering and at least 2 years of directly related work experience, or a M.S. with a background in computer science and electrical engineering. Salary will be in the range \$20,000 to \$25,000, depending on experience. For further details, contact: **Dr. Ian Blair, telephone: 615-322-2094**, or apply by sending curriculum vitae to: **Fran Johnston, Department of Pharmacology, Vanderbilt University, Nashville, Tenn. 37232.**

EPIDEMIOLOGIST

The U.S. Consumer Product Safety Commission, located in Bethesda, Maryland, in seeking a qualified epidemiologist to evaluate the hazards posed to consumers by exposure to chemicals in products. A strong background in the health sciences and current cancer theory is also required. The position primarily involves evaluation of data and protocols available to the Commission but may also involve some research. This is a Civil Service position with a salary of \$42,928 (GS-14) per annum. To apply, please contact:

**Sheila Wilson
Consumer Product Safety Commission
Division of Personnel Management, Room 300
Bethesda, Maryland 20207
Telephone: 301-492-6660**

Refer to vacancy announcement number DPM-060-84, completed forms must be postmarked no later than 24 August 1984.

FACULTY POSITIONS—VIROLOGY

The Department of Virology and Epidemiology, Baylor College of Medicine, invites applications for two tenure-track faculty positions in a strong, research-oriented department. We are seeking innovative individuals to establish and/or maintain vigorous, independent, high quality research programs in **VIRAL IMMUNOLOGY OF MOLECULAR VIROLOGY** and to contribute to the departmental graduate program. Academic rank dependent upon qualifications. Salary will be competitive. Applicants should have a Ph.D. or M.D. degree and postdoctoral training. Interested persons should respond by 15 September 1984, by sending curriculum vitae, statement of research interests, and the names of three references to: **Dr. Janet Butel, Search Committee, Department of Virology and Epidemiology, Baylor College of Medicine, 1 Baylor Plaza, Houston, Texas 77030. Baylor College of Medicine is an Equal Opportunity Employer.**

POSITIONS OPEN

DEVELOPMENTAL BIOLOGY/CELL BIOLOGY ASSISTANT PROFESSOR

The Department of Biology, Carleton University, invites applications for a tenure-track preliminary appointment at the assistant professor level from 1 July 1985 (or earlier if the applicant is an NSERC University Research Fellow) in the area of developmental biology/cell biology. The applicant must have a Ph.D., postdoctoral experience, and show potential for developing a strong, independent research program in developmental or cell biology. The successful applicant will be expected to teach advanced graduate and honours undergraduate courses in animal developmental biology, cell biology and/or introductory biology. Send curriculum vitae and the names of three referees to: **Dr. D. R. Gardner, Chairman, Department of Biology, Carleton University, Ottawa, Ontario, Canada K1S 5B6. Closing date: 1 October 1984.**

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Open to both men and women.

DIRECTOR OF RESEARCH, M.D. or Ph.D.

Applications and nominations are invited for the position of director of research at the newly constructed Tampa Unit of the Shriners Hospitals for Crippled Children. The individual will be supported by an endowed Chair of Orthopedic Research and will have a joint appointment as professor, University of South Florida College of Medicine. Candidates should have experience and a record of scholarly activity relative to research in the development, repair, and regeneration of the skeletal system. Candidates should also have a record of excellence in teaching, active research interests, and administrative and leadership skills. The individual will be expected to direct, with the chief of staff of the hospital, an array of research related to developing cartilaginous and osseous tissue. Applications and nominations will be accepted until 1 October 1984 to: **Lewis A. Barnes, M.D., Chairman, Search Committee, University of South Florida, College of Medicine, Department of Pediatrics—Box 15, 12901 North 30 Street, Tampa, Fla. 33612. An Affirmative Action Equal Opportunity Employer.**

Duke University Center for Biochemical Engineering

Tenured or tenure-track **FACULTY POSITIONS** are available in a new program. Applicants should have demonstrated ability to carry out original research in one or more of the following or similar areas: bioreactor design and scale-up, product separation from microbial or cell culture broths, sensors, controls, or modeling in biological systems. All academic ranks are open, but preference will be given to those with a record of innovative research, a strong record of publication in refereed journals, and an interest in and talent for teaching.

Send curriculum vitae and names of three references to: **Professor Howard G. Clark, Center for Biochemical Engineering, Duke University, Durham, N.C. 27706.**

Duke University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS are available in **The Program in Infectious Diseases and Clinical Microbiology, The University of Texas Medical School at Houston, P.O. Box 20708, Houston, Texas 77025**, to participate in teaching microbiology to medical students and to collaborate on ongoing research projects. Initial appointment will be for one academic year. Submit curriculum vitae and letter of interest to: **Herbert L. Dupont, M.D. Reply by 28 August 1984. An Equal Opportunity Employer. Women and minorities are encouraged to apply.**

MICROBIOLOGIST/BIOCHEMIST. Applications are invited from Canadian citizens or permanent residents of Canada for nomination for an NSERC University Research Fellowship. Applicants should have a Ph.D. and research experience in microbiology/biochemistry, and an interest in exploitation of microorganisms or cell systems in biotechnology. The appointee will be expected to carry out independent research and contribute to teaching in a new undergraduate specialisation in biotechnology. The appointee will participate in the graduate program of the Ottawa-Carleton Centre for Graduate Studies and Research. Salary equivalent to assistant professor level. Full details and three letters of recommendation should be sent to: **Chairman, Biology Department, Carleton University, Ottawa, Ontario, Canada K1S 5B6, by 15 September 1984. An Equal Opportunity Employer.**



MICROBIOLOGIST

Short term (1 year with renewal for a second year possible) research opportunity with the U.S. Department of Agriculture, Agricultural Research Service, Eastern Regional Research Center, Wyndmoor (suburb of Philadelphia), PA.

Participating with other researchers in the Food Safety Laboratory, the incumbent will conduct research on the mechanism of carbohydrate transport in aflatoxin-producing fungi. Specific research areas include: identifying and characterizing the mechanisms of carbohydrate transport in *Aspergillus parasiticus*; determining the molecular basis by which caffeine inhibits carbohydrate transport in this species; and developing methods for blocking carbohydrate transport (thereby inhibiting aflatoxin synthesis).

The incumbent must have a knowledge of microbial physiology and biochemistry, chromatography and enzyme assay techniques. Previous experience with fungal systems desirable, though not mandatory.

Salary: GS-11 (\$25,489 per annum)

PH.D. IS DESIRABLE

U.S. CITIZENSHIP IS REQUIRED

The candidate selected for this position must be available to begin work by January 1, 1985.

Send Curriculum vitae, three references and list of publications to:

Dr. Robert L. Buchanan
U.S. Department of Agriculture, ARS
Eastern Regional Research Center
600 East Mermaid Lane
Philadelphia, PA 19118

Curriculum vitae, etc. must be received by
AUGUST 31, 1984

USDA is an Affirmative Action/Equal Employment Opportunity Employer. Women and minorities are urged to apply.

Senior Scientist, Biochemistry for Growing, Dallas/Fort Worth-Based Pharmaceutical Company

Alcon Laboratories is presently building its overall capability to generate new technology in the 1980's-90's. As a part of this effort, we have an immediate need for an innovative Biochemist to join our interdisciplinary cataract research team involved in the design and evaluation of novel therapeutic agents useful in treating senile cataracts.

Minimum requirements include:

- ☐ Ph.D. in Biochemistry.
- ☐ 2 or more years of postdoctoral training in the field of protein and membrane biochemistry. A background in immunology and cell biology is desirable.
- ☐ Excellent oral/written communication skills.

If our opportunity is what you have been thinking of—please give us serious consideration. We are a high technology corporation building for the future. We need and appreciate talented individual contributors who can function effectively as team members.

Naturally, our position includes a highly competitive starting salary, plus comprehensive benefits including profit sharing trust, group medical and dental. To indicate your interest in exploring this key position on a confidential basis, please send your detailed C.V. to:

Sherry H. Rightmer - Senior Employment Administrator

Alcon

Alcon Laboratories, Inc.
P.O. Box 1959
Fort Worth, TX 76101
Equal Opportunity Employer, M/F/V/H
Principals Only, Please!

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

DIRECTOR DIVISION OF DIGESTIVE DISEASES (and Associate Director for Digestive Diseases)—Dual Position

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

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

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

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

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

AN EQUAL OPPORTUNITY EMPLOYER

CHIEF, LABORATORY OF VIRAL CARCINOGENESIS National Institutes of Health National Cancer Institute

The National Cancer Institute has an opening for Chief, Laboratory of Viral Carcinogenesis. Duties include the scientific and administrative supervision of a broad and comprehensive program of research in experimental oncology. Directs complex studies involving several disciplines including oncological and comparative virology, immunology, biochemistry, molecular and cellular biology, genetics, clinical medicine, and pathology.

The position requires the leadership and experience in one or a combination of the above disciplines. Experience and background in program planning, implementation, administration and evaluation of in-house as well as collaborative research is required.

In addition to three years of experience, minimum educational requirements include a 4 year course of study in an accredited college or university leading to a bachelor's degree with major study in microbiology, chemistry or genetics. A doctorate or equivalent training in speciality area is desirable.

This is a Civil Service Career-Conditional Appointment under the Merit Pay System at the GS-15 level with a salary range of \$50,252 to \$65,327 depending on qualifications of the applicant selected. Benefits include Civil Service Retirement/Social Security, life and health insurance. This is a supervisory position and may require the incumbent to serve a one year probationary period. U.S. Citizenship is required. Submit application (SF-171, Personal Qualifications Statement), current performance appraisal and names of three references to:

Ms. Rados, Cancer Personnel Office, Bldg. 31, Rm. 3A23, 9000 Rockville Pike, Bethesda, MD 20205; Tel: 301/496-6864. Applications must be received or postmarked by September 21, 1984. NIH is an equal opportunity employer.

Biochemist

Gastrointestinal Research

The expansion of Pfizer Central Research has created an exciting opportunity for a Ph.D. Biochemist to become involved in the discovery and development of important new medicines to treat ulceration and other gastrointestinal disorders. The successful candidate will join a well-established multidisciplinary team of biological and chemical scientists.

Applicants should have experience with the isolation, purification, and assay of membrane bound enzymes or receptors. Prior expertise with ATPases would be particularly beneficial. Emphasis on the gastrointestinal tract is desirable but not essential.

This position offers an excellent opportunity for professional recognition and career growth within a large and expanding pharmaceutical research organization. Recently completed new laboratories provide excellent facilities for our research teams, and publication of important new findings is encouraged. In addition, we offer a competitive compensation and benefits package and the opportunity to live in an attractive Connecticut shore community. Please send resume and brief description of research interests to: Dr. Jerry K. Larson, Manager of Employment, Pfizer Central Research, Eastern Point Road, Groton, CT 06340



An Equal
Opportunity Employer

A/S FERROSAN RESEARCH DIVISION

Clinical Department

DENMARK

For a decade, the Research Division of the Danish Ferrosan Group has been actively engaged in successful CNS discovery research. New substances of original chemical structure offering advantageous pharmacological and neurochemical properties are being developed within various therapeutic fields.

Due to retirement, applications are invited for a

DIRECTOR OF CLINICAL RESEARCH

Applicants with experience from participation in international clinical development programmes aimed at registration will be preferred. The Department of Clinical Research is responsible for the planning, performing and evaluation of clinical phase I-III studies.

Written applications should be sent to:

Dr. J. Buus Lassen, Director of Research
A/S FERROSAN RESEARCH DIVISION
Clinical Department
5, Sydmarken
DK-2860 Soeborg, DENMARK

POSITIONS OPEN

ENTOMOLOGIST, ASSISTANT PROFESSOR; full-time; 12 months; Ph.D. degree in entomology required. Research (60 percent) biological control; teaching (40 percent) graduate course in biological control and undergraduate courses. Send letter of application, curriculum vitae, transcripts, and names of four references to: **Dr. Joel Coats, Search Committee Chairman, Department of Entomology, Insectary Building, Iowa State University, Ames, Iowa 50011.** Application deadline: 1 October 1984 or until position is filled. *An Equal Opportunity/Affirmative Action Employer.*

ENVIRONMENTAL SCIENTIST

Master's degree or Ph.D. environmental scientist with concentration in groundwater/surface water pollution needed for position with public interest environmental organization in Washington, D.C., to work on study of contamination of urban water supplies with a team of scientists, lawyers, and economists. Coursework or experience in statistics and epidemiology/public health desirable. Interest in public policy essential. Salary: \$18,000. Send résumé to: **Linda Greer, Environmental Defense Fund, 1525 18th Street, NW, Washington, D.C. 20036.**

FACULTY POSITION IN INDUSTRIAL HYGIENE CHEMISTRY. The Department of Environmental Health Sciences, School of Public Health, University of Alabama in Birmingham, seeks a candidate for a tenure-track position, at the assistant or associate professor level, in industrial hygiene. A strong chemistry background is desirable as is certification by the American Board of Industrial Hygiene in comprehensive practice and/or chemical aspects. A Ph.D. in chemistry, industrial hygiene, or a related field is required. The successful candidate will be expected to contribute to the growth of the existing programs in industrial hygiene and environmental health through teaching, research, and service. Submit curriculum vitae, a description of research and teaching interests, and three references to: **Dr. Vernon E. Rose, Chairman, Search Committee, School of Public Health, University of Alabama in Birmingham, Birmingham, Ala. 35294.** To assure consideration, all application materials must be received by 30 August 1984. *The University of Alabama in Birmingham is an Equal Opportunity/Affirmative Action Employer.*

FOREST GENETICIST

Assistant professor, 12-month, tenure-track position available 1 December 1984, to conduct research identifying genetic characters of forest trees with the goal of applying advances in physiology and genetic engineering to tree improvement. Also expected to teach a course in forest genetics and participate in continuing education activities. Ph.D. required; applicant should have a background in forestry and training in physiological genetics, biochemistry, or molecular biology. Send letter of application, complete résumé, transcripts, examples of publications, and three letters of reference by 15 September 1984 to: **Dr. Logan Norris, Head, Department of Forest Science, College of Forestry, Oregon State University, Corvallis, Ore. 97331.** *An Equal Opportunity/Affirmative Action Employer, complies with Section 504 of the Rehabilitation Act of 1973.*

Ph.D. or PD GASTROINTESTINAL SCIENTIST, entry level. Gastrointestinal tract specialization with understanding of GI function and disorders required. Degree may be in biochemistry, pharmacology, or GI physiopathology, so long as above requirements met. U.S. citizens or permanent visa holders only. Send résumé and publication list to: **Dr. T. J. Logan, Manager, Ph.D. Recruiting, Procter & Gamble Company, P.O. Box 39175, Cincinnati, Ohio 45247.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGIST

A well-funded staff scientist position is available immediately to work with a group studying the biology of bovine coronavirus. Expertise in handling mRNA, in vitro translation, cDNA cloning, and DNA sequencing are required. Individuals with experience in working with monoclonal antibodies, peptide chemistry, or the expression of cloned DNA in prokaryotes will merit more immediate consideration. Salary commensurate with experience. Send résumé and the telephone numbers of three references to:

Dr. Stephen D. Acres
Veterinary Infectious Disease Organization (VIDO)
University of Saskatchewan
124 Veterinary Road
Saskatoon, Saskatchewan, Canada S7N 0W0
Telephone: 306-343-3155

MICROBIOLOGIST/ RESEARCH CHEMIST

BEHRING DIAGNOSTICS, based in San Diego, is a major supplier of clinical chemical reagents, immuno diagnostics and research biochemicals throughout the world.

We have an opening in our Microbiology Research and Development Group. Should possess a PhD in Microbiology or related area, with emphasis in microbial physiology and/or biochemistry. A working knowledge of fermentor and fermentation sciences is desirable. A MS with 3-5 yrs. experience would also be considered. Should be augmented with working knowledge of contemporary techniques and instrumentation.

Our company offers good competitive salaries and excellent company benefits. Interested and qualified candidates are invited to submit resume by Sept. 10th to:

Employment Manager

BEHRING DIAGNOSTICS

A division of
American Hoechst Corp.
10933 N. Torrey Pines Road
La Jolla, CA 92037

Hoechst 

An Affirmative Action Employer

DEVELOPMENTAL BIOLOGY

The SALK INSTITUTE invites applicants for faculty positions at the Assistant Professor level in the area of regulation of gene expression in eucaryotic cells, molecular genetics, cell-cell interactions, and developmental controls particularly as it affects the immune and/or nervous system.

Candidates should have Postdoctoral training and expertise in recumbent DNA technology or membrane physiology, and should be prepared to initiate an independent research program.

Send curriculum vitae, summary of previous and proposed research, and names of 3 references to:

**Dr. Melvin, Cohn, Chairperson
Search Committee, Developmental Biology:**

THE SALK INSTITUTE

P.O. Box 85800
San Diego, CA 92138

We are an equal opportunity employer m/f/h/v

AUSTRALIAN INSTITUTE OF MARINE SCIENCE RESEARCH APPOINTMENTS

The Australian Institute of Marine Science was established in 1972 as a Statutory Authority of the Australian Government. Its functions are to carry out research in marine science, to assist other persons and institutions engaged in research in this field, and to disseminate information relating to marine science. The Institute is located in modern facilities at Cape Ferguson, 50 kilometers from Townsville in the central section of the Queensland coast adjacent to the Great Barrier Reef. At present some 50 professional scientists and an equal number of technical support staff are engaged in research relating to the marine tropics.

Opportunities presently exist for appropriately qualified individuals to participate in several of the Institute's core programs either as research fellows, for example, on sabbatical leave from other organizations, or in the longer term as regular members of the scientific staff. Term appointments are subject to review and possible renewal normally to a total of not longer than 10 years but may lead to the award of tenure.

The areas in which the Institute seeks expressions of interest are as follows:

PHYSICAL OCEANOGRAPHY

Applications are invited from researchers in coastal engineering, geophysical fluid dynamics, physical oceanography, theoretical or numerical modelling, or other appropriate areas. Enquiries will be welcomed from recent Ph.D. graduates or established or leading researchers. Associations for periods up to 2 years will be considered for research fellows, while term appointments may be for periods up to 5 years in the first instance.

SEDIMENTOLOGY

Applications are invited from researchers with a background in the earth sciences and relevant experience to undertake studies of sediment transport and deposition on tropical coasts. The investigations would be undertaken as an integral part of co-ordinated programs mainly involving biologist and physical oceanographers which are already underway to develop a predictive understanding of important elements of the Australian marine environment and its major flood events exert important influences in the coastal zone.

REEF ECOLOGY

Applications are invited from researchers with backgrounds in community ecology to contribute to a fuller integration of Institute activities in this field and particularly to enable the modelling of system behaviour at relevant scales both in space and time. Particular interest is attached to developing a fuller understanding of the manner in which the physical environment influences community structure and its development. However, other interests will be considered provided they can be shown to relate effectively to the ongoing program.

REEF TROPHODYNAMICS

Applications are invited from researchers with strong interests and experience in community trophic structure and trophodynamics to join with a group actively engaged in studies of reef metabolism presently emphasizing the modelling of productivity, calcium carbonate deposition and organic fluxes and budgets in the reef environment. Against that background, particular interest is now attached to developing an understanding of the nature of resource utilization within the food webs of reef communities.

SYSTEMS ECOLOGY

Applications are invited for a researcher interested in natural systems, and with an appropriate background in mathematical biology, to assist in the development of models of mangrove primary productivity and trophodynamics working in association with a group investigating these areas both in the field and in the laboratory. An upgrading of the Institute's computer facilities, being arranged within the next 12 months, will enhance support to develop research along the lines described.

SALARY: The salaries offered will be determined by the qualifications and experience of the successful candidates and will be within one of the following ranges:

Research Scientist or Fellow: A\$25,342 to A\$31,270 per annum
Senior Research Scientist or Fellow: A\$32,367 to A\$37,274 per annum
Principal Research Scientist or Fellow: A\$38,686 to A\$43,941 per annum

Enquiries and/or applications, including complete curriculum vitae and the names of at least three but not more than five referees, should be forwarded to:

**The Secretary
AUSTRALIAN INSTITUTE OF MARINE SCIENCE
P.M.B. Number 3
Townsville MC, Queensland, 4810
AUSTRALIA**

Closing date for applications is 10 September 1984.

TOXICOLOGIST/CANCER RESEARCH:

Applications are invited for two group leader positions in the Health Effects Research Laboratory, U.S. Environmental Protection Agency in Cincinnati, Ohio. These are permanent full-time Federal Civil Service positions with salary range of \$30,549 to \$42,382 depending upon experience.

The successful candidate will be expected to: (i) develop a research program in the area of one of the vacancies; (ii) perform the administrative duties of a group leader and (iii) closely collaborate with other scientists of the Bioassay Branch.

Vacancy 1: Short-term bioassays for chemical carcinogens. This position pertains to research on employing short-term bioassays in mammals and in cultures of mammalian cells in order to determine the carcinogenic and tumor initiating and promoting activity of environmental samples and chemicals.

Vacancy 2: Biochemical markers for tumor initiators and promoters. This position pertains to the determination of the dose-response, interspecies variation, and mechanism of action for tumor initiators and promoters. Biochemical and molecular markers will be used in these determinations. A flow cytometer with sorting is available for use by both vacancies.

The candidate should: (i) possess a Ph.D. in toxicology, pathology, biochemistry, or a closely related field, (ii) have postdoctoral research experience, and (iii) have demonstrated research ability by publications in peer-reviewed journals.

Further information, including detailed qualification requirements, may be obtained from: **Nancy A. Foster, Personnel Management Division, U.S. Environmental Protection Agency, 26 West St. Clair Street, Cincinnati, Ohio 45268. Telephone: 513-684-7804.** Applications (SF-171, Personal Qualifications Statement), accompanied by current curriculum vitae and bibliography, must be submitted to: **Nancy A. Foster** prior to 7 September 1984. *An Equal Opportunity Employer.*

Applications are invited for two positions in the Health Effects Research Laboratory, U.S. Environmental Protection Agency in Cincinnati, Ohio. These are permanent full-time Federal Civil Service positions.

Vacancy 1: VETERINARY MEDICAL OFFICER: salary range: \$30,569 to \$47,226, depending on education and experience. The successful candidate will perform the duties of animal care and pathology services coordination for the Division of Toxicology and Microbiology and will serve as project officer on contracts for laboratory animal management, veterinary support services, and pathology support services. The veterinarian is expected to develop an independent research activity that will utilize basic skills, particularly in pathology or subclinical indicators of adverse toxicological effects of environmental contaminants.

Vacancy 2: STATISTICIAN; salary range: \$25,489 to \$39,711, depending on education and experience. This statistician will provide assistance to health scientists, that is, toxicologist and epidemiologists, in the design and analysis of experimental projects. Responsibilities will include protocol development and review, analysis of experimental data, explanation and interpretation of results and review of proposals and reports. Due to the nature of research within the laboratory, the collaboration with other scientists requires a substantial degree of innovation and development of new statistical methods. Qualified candidates should have a Ph.D. in statistics or biostatistics or equivalent combination of education and experience.

Further information, including detailed qualification requirements, may be obtained from: **Nancy A. Foster, Personnel Management Division, U.S. Environmental Protection Agency, 26 West St. Clair Street, Cincinnati, Ohio 45268. Telephone: 513-684-7804.** Applications (SF-171, Personal Qualifications Statement), accompanied by current curriculum vitae and bibliography, must be submitted to: **Nancy A. Foster** prior to 7 September 1984. *An Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION—Associate Center Director. The Department of Environmental Health in the University of Alabama, Birmingham (UAB), School of Public Health solicits applications for one position. Responsibilities include duties as the associate director of the newly formed UAB Center for Environmental Health and to assist the Center in obtaining funding for studies in analytical methodology development, environmental biology, environmental and industrial hygiene, and environmental epidemiology. The goal of the Center is to focus existing expertise in occupational health, industrial hygiene, environmental and occupational epidemiology and environmental monitoring on specific environmental health problems in Alabama. Director will be responsible for representing the Center to the Alabama legislature, government agencies, industry, and the general public. A thorough knowledge of the state and federal agencies dealing with environmental issues, and doctoral degree in an area related to environmental health is required. A working knowledge of industrial processes and factors affecting pollution and environmental health will be helpful. This position is tenure earning and carries the rank of assistant professor. Send curriculum vitae, reprints of major work, and three letters of recommendation by 30 August 1984 to: **Dr. J. Walter Mason, Chairman, Search Committee, School of Public Health, University of Alabama in Birmingham, Birmingham, Alabama 35294. An Equal Opportunity Affirmative Action Employer.**

FACULTY POSITIONS IN MICROBIOLOGY

The Department of Microbiology and Immunology of Louisiana State University (LSU) Medical Center invites applications for tenure-track faculty positions to be filled in 1984 and 1985 at the level of assistant or associate professor. Applicants should have solid training and research experience in

MOLECULAR VIROLOGY, MOLECULAR BIOLOGY, MOLECULAR GENETICS OR IMMUNOLOGY

and will be expected to develop and maintain a research program of high quality. Teaching responsibilities are limited and include participation in courses for graduate and medical students. Applicants should send curriculum vitae, names of three references, and a summary of research interests and ongoing projects to:

Dr. Dennis J. O'Callaghan
Professor and Chairman
Department of Microbiology and Immunology
LSU Medical Center
1501 Kings Highway
Shreveport, La. 71130
An Equal Opportunity Employer

INFECTIOUS DISEASE FACULTY POSITION

Department of Medicine, Yale University, seeks tenure-track faculty member, Board-certified/eligible in infectious disease, to establish independent research program in bacteriology or parasitology. Skill and interest in the molecular basis of organism pathogenicity is desirable. Rank and salary commensurate with qualifications. Send curriculum vitae to: **Vincent T. Andriole, M.D., Chief, Section of Infectious Diseases, Department of Medicine, Yale University, 333 Cedar Street, New Haven, Conn. 06510. Equal Opportunity Employer.**

MICROBIAL GENETICIST

Assistant or associate professor and assistant or associate geneticist in the experiment station (commensurate with experience) to investigate the genetics and molecular biology of yeast with the objective of genetically improving wine yeast strains, particularly by use of recombinant DNA and other emerging genetic technologies as well as by conventional methods. Teaching in enology program required after orientation period and student advising is expected. An 11-month, tenure-track position. Ph.D. in genetics, microbiology, molecular biology, or related discipline required; postdoctoral experience desirable. A commitment to excellence in research and teaching is required. Send curriculum vitae (including a complete history of teaching and research experience and official graduate transcripts), published and submitted papers, statements of research and teaching interests, and names and addresses of three references to: **Dr. R. E. Kunkke, Department of Viticulture and Enology, University of California, Davis, Calif. 95616, by 1 November 1984.** Position available 1 January 1985. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

MEDICAL ONCOLOGIST-RESEARCHER—Must have a strong clinical commitment and significant research background, including but not restricted to the applications of monoclonal antibodies and molecular biology to clinical problems, new methods of immunotherapy, and biological modifiers. Background suited to collaboration with strong basic science group recently developed in the Cancer Center. Rank depends on qualifications. Send curriculum vitae, representative reprints, and statement of interests and research goals to: **Thomas Tomasi, M.D., Ph.D., Director, Cancer Center, University of New Mexico, Albuquerque, N.M. 87131. Affirmative Action/Equal Opportunity Employer.**

MOLECULAR BIOLOGIST

The Department of Anatomy is seeking a molecular biologist for a nontenure-track position at the assistant professor level. Teaching experience in any of the subdisciplines of anatomy is desirable. Research interest in neuroscience, vision, or molecular evolution is preferred. Please send curriculum vitae to: **Dr. H. Maisel, Department of Anatomy, Wayne State University, 540 East Canfield, Detroit, Mich. 48201.**

Equal Opportunity/Affirmative Action Employer

MOLECULAR GENETICIST with an interest in exploiting restriction fragment length polymorphisms and other molecular genetic characters, to establish a new laboratory in our Genetics Department. Major collaborative projects among our existing Biochemical Genetics, Population Genetics, and Immunogenetics Laboratories involve genetic influence on predisposition to atherosclerosis in baboons; regulation of immune functions and of X-chromosome inactivation in marsupials; and organization of genes in and near the major histocompatibility complexes of mice, rats, marsupials, baboons and humans. Animal resources include over 2800 baboons and 1000 marsupials in addition to standard laboratory animals. The successful applicant will be expected to develop a strong independent research program and will have the opportunity to collaborate in any of the above projects. Academic affiliation is possible. This is an excellent opportunity for a creative scientist in a young, expanding department. Send résumé, statement of research interests, and names and addresses of three references to: **Personnel Manager, Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, Texas 78284. Equal Opportunity/Affirmative Action Employer.**

Geriatric Research, Education and Clinical Center (GRECC), VAMC Durham, Center for the Study of Aging, and Department of Medicine, Duke University, seeking **PHYSICIAN-INVESTIGATOR**, to direct or participate in GRECC research program in molecular/cellular biology of neoplasia/aging interactions. Clinical background in oncology and/or geriatrics preferred. Also seeking **DIRECTOR of Biology of Aging Program**, Center for Aging. Curriculum vitae to: **Harvey Jay Cohen, M.D., Director, GRECC (182), VAMC, Durham, N.C. 27705. Equal Opportunity Employers.**

PHYSICS ASSISTANT

Immediate placement available to the qualified candidate in Regional Radiation Therapy Center. Position responsibilities include: developing department policy/procedure, staff education, calibrating equipment, planning patient treatment.

Minimum placement requirements: B.S. in physics, preferably with 2 years of experience in medical application or degree in a related science. For further information, please contact: **Sandy Mahon, Employment Manager, Washoe Medical Center, 77 Pringle Way, Reno, Nevada 89520. An Equal Opportunity Employer.**

PHYSIOLOGIST or BIOPHYSICIST. The Department of Physiology and Biophysics at the State University of New York (SUNY) at Stony Brook has an opening for a talented investigator and experienced teacher of physiology whose area will complement those already represented in the department. The appointment will be a full or associate professor, depending on the qualifications of the candidate. Qualifications are Ph.D. in physiology or in these related fields: (i) pharmacology, (ii) biochemistry, (iii) control systems, and (iv) applied mathematics. Please submit a letter of interest, curriculum vitae, and the names of five references by 1 September 1984 to: **Chairman, Department of Physiology and Biophysics, SUNY, Stony Brook, Stony Brook, New York 11794. SUNY, Stony Brook, is an Affirmative Action/Equal Opportunity Educator and Employer. AK150.**

BIOCHEMISTS/ MOLECULAR BIOLOGISTS

OAK RIDGE NATIONAL LABORATORY's Biology Division is seeking Ph.D. applicants for initial two-year temporary staff positions, with salaries up to \$27K per year. These positions are available immediately in a new program on site-directed mutagenesis. The program will be directed by Dr. Fred Hartman, Head of the Molecular Genetics Section. The successful candidates will work in collaboration with a number of staff members in the Biology Division on alteration of sequences of cloned genes and characterization of the expressed mutant enzymes. Applicants should have strong backgrounds in DNA cloning techniques and/or experience in enzymology.

Excellent facilities for the program include oligonucleotide synthesizer, amino acid analyzer, protein sequencer, and fermentation facilities. ORNL offers an excellent benefits package and a generous relocation program plus a stimulating working environment. U.S. citizenship required.

Qualified applicants should forward resume, three letters of recommendation, and academic transcripts before September 21, 1984, to:

Mr. J. T. Atherton
Technical Employment Manager
Oak Ridge National Laboratory
P.O. Box X
Oak Ridge, Tennessee 37831

AN EQUAL OPPORTUNITY EMPLOYER

NORTHROP SERVICES, INC. Environmental Sciences

Has vacancies for scientist to provide contract, research and project support to the National Acidic Precipitation Assessment Program (N.A.P.A.P.). The overall mission of the research and assessment program is to determine the effects of acidic deposition on surface and ground water, forest and associated biotic resources and also to detect changes in these resources over time. Research program leaders are needed in the following areas:

- Forest Soil Science
- Watershed/Hydrology/Geochemistry
- Environmental Chemistry
- Watershed Modeling
- Forest Science
- Aquatic Ecology
- Aquatic Chemistry

Qualified applicants will interact with governmental entities and appropriate scientist responsible for the N.A.P.A.P. Aquatic and terrestrial effects research program. Candidates for research leadership positions must possess an earned doctorate or its equivalent in the scientific discipline needed and possess significant experience in planning research program, establishing research priorities, and evaluating results.

One or two of these professional vacancies may be available for individuals desirous of taking sabbaticals from established positions in academic institutions.

Interested candidates should send a detailed curriculum vitae and three letters of professional reference to:

DR. MARK B. DAVID
NORTHROP SERVICES, INC.
200 S.W. 35th Street
Corvallis, Oregon 97333

Deadline for acceptance of applications is October 15, 1984.

An Equal Opportunity Employer

Clinical Scientist Central Nervous System Research Ann Arbor, Michigan

The Warner-Lambert/Parke-Davis Pharmaceutical Research Division is seeking an outstanding, innovative clinical scientist for a highly responsible position in our Clinical Research Department.

The successful candidate for the position of Assistant Director, Clinical Science, will plan, implement, and monitor the clinical studies of important new CNS therapeutic programs; will provide scientific interpretation and summarization of clinical and/or pre-clinical data and participate in the preparation and presentation of the New Drug Application.

The requirements for this position include either an M.D. or Ph.D. degree in a life science related to drug development, and 8 to 10 years pharmaceutical research experience in clinical or preclinical areas with particular emphasis in neurological science. He/she must demonstrate management skills and strong collegial relationships with key neurological clinical investigators. Excellent oral and written communication skills are required.

The Warner-Lambert/Parke-Davis research facilities, adjoining the University of Michigan campus in Ann Arbor, Michigan are among the finest and best equipped in the world and are dedicated exclusively to the discovery and development of new drugs.

Join the exciting Research and Development team of this dynamic, expanding organization and enjoy an outstanding compensation plan and environment. Qualified applicants should send a resume and salary requirements in confidence to: Ms. M. Wolin, Senior Human Resources Representative, WARNER-LAMBERT/PARKE-DAVIS, Dept. 2384, 2800 Plymouth Road, Ann Arbor, MI 48105

An Equal Opportunity Employer M/F/H.

**WARNER
LAMBERT**

POSITIONS OPEN

NEUROPSYCHOLOGY POSTDOCTORAL POSITION

The Alcohol Research Center of The Salk Institute and Scripps Clinic, under a training grant from the National Institute of Alcoholism and Alcohol Abuse, has a position available for postdoctoral training. Focus will be on the use of event-related potentials (ERP) in the study of brain functions in individuals at risk for the development of alcoholism and the effects of alcohol on cerebral functions. Preference will be given to applicants with experience in the ERP technique. U.S. citizens, with M.D., Ph.D., or equivalent degrees are invited to submit curriculum vitae, letters of support, and statements of specific interests. Positions, of 1 to 2 years in duration, are available through 30 June 1987. Applications should be sent to: **Dr. Helen Neville, The Salk Institute, P.O. Box 85800, San Diego, California 92138. The Salk Institute is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL—NEUROVASCULAR PHYSIOLOGY position available to study the interaction of sympathetic nerves and blood vessels during physiologic and pathologic states in animals and humans. Ph.D. or M.D. U.S. citizenship required. Send curriculum vitae, statement of research interests, and two references to: **Dr. Shirley Mueller, Department of Neurology and Physiology, 1001 West 10th Street, Indianapolis, Ind. 46202.**

THE UNIVERSITY OF TEXAS AT DALLAS—BIOLOGY PROGRAMS periodically seeks **POSTDOCTORAL APPLICANTS** interested in pursuing research in collaboration with faculty. Applicants should have interest and/or experience in one of the following areas: chromosome and plasmid replication in bacteria; control of ribosome synthesis in bacteria; DNA repair processes in prokaryotic and in cultured mammalian cell systems; cloning and expression of exotoxin A gene of *Pseudomonas aeruginosa*; control of DNA replication and ribosomal DNA-matrix protein interactions in the nucleus of *Physarum polycephalum* (experience in immuno-techniques and/or electron microscopy desirable); molecular biology and genetics of the mammalian mitochondria; endocytosis and study of mammalian mutants in culture carrying defects in endocytic function. Please send résumé (*indication of sex and ethnicity for Affirmative Action statistical purposes is requested but not required*) to: **Dr. R. C. Clowes, Programs in Biology, The University of Texas at Dallas, P.O. Box 830688, Richardson, Texas 75083-0688.**

POSTDOCTORAL ASSOCIATE, INSECT ECOLOGY: Available September 1984. Biogeographical and chemical systematic studies of termite populations in Venezuelan savannas. Candidates should anticipate 18 months on-site fieldwork, with travel costs paid in addition to salary. Ideal for development of independent research projects. Send résumé and three letters of reference to: **Professor B. L. Bentley, Department of Ecology and Evolution, State University of New York (SUNY) Stony Brook, Stony Brook, N.Y. 11794-5245. SUNY, Stony Brook, is an Affirmative Action/Equal Opportunity Educator and Employer. AK148.**

POSTDOCTORAL FELLOW—An opening exists with a group focusing strongly on protein biochemistry and protein (including apolipoprotein)-lipid interactions. Structure-function relationships will be investigated from the perspective of biological relevance. Applicants must have a Ph.D. or equivalent training and appropriate prior postdoctoral training to indicate familiarity with the established methodologies for protein separation, isolation, characterization, and functional studies relating to cholesterol transport. Submit complete résumé and names of three references to: **Dr. R. T. Holzbach, GI Research Unit, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio 44106.**

Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL FELLOW

Position immediately available in a group interested in the cellular and immunological aspects of connective tissue in rheumatoid diseases. Studies utilize cell culture for cloning, attachment and proliferation assays, hybridoma and general immunologic techniques. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Steffen Gay or William T. Koopman, Division of Clinical Immunology and Rheumatology, University of Alabama in Birmingham Medical Center, Birmingham, Ala. 35294. An Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE. A faculty position (Ph.D. required) funded by a grant-in-aid for 1 or 2 years from the American Heart Association will be available 15 September. Functional and structural studies of the association between cardiolipin and cytochrome c oxidase from beef heart using spin-labeled cardiolipin are to be continued. The salary range is \$15,000 to \$18,000, depending on experience. Please provide curriculum vitae and two letters of reference before 1 September 1984 to:

**Gary L. Powell
Professor of Biochemistry
Department of Biological Sciences
Clemson University
Clemson, S.C. 29631**

Clemson University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for insect sensory physiologist or insect biochemist to study the mechanism of action of azadirachtin and other plant metabolites on the corn borer. Send curriculum vitae and addresses of at least two referees to: **Dr. D. R. Gardner, Department of Biology, Carleton University, Ottawa, Ontario, Canada K1S 5B6. Closing date: 1 September 1984.**

POSTDOCTORAL POSITIONS available to study the molecular interactions between peptides and microorganisms. Development of antifungal agents, isolation of membrane transport components, and characterization of interactions between cells and peptide pheromones are projects funded by NIH and ACS grants. Send curriculum vitae and three letters of reference to: **Dr. Jeffrey M. Becker, Department of Microbiology, University of Tennessee, Knoxville, Tenn. 37996-0845. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION IN NEUROBIOLOGY available immediately to study the cholinergic system in seizures. Techniques include: 2-deoxyglucose brain mapping and quantitative receptor autoradiography. Salary range: \$18,000 to \$24,000, based on experience. Send curriculum vitae and summary of research experience with names of three references to: **Dr. Fred Samson, Director, MRRC, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, Kans. 66103. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION IN NEUROPEPTIDE MOLECULAR BIOLOGY to study hormonal and metabolic regulation of hypothalamic peptide genes. Candidates should have a strong background in recombinant DNA technology. Salary and title commensurate with experience. Submit letter of interest with curriculum vitae and names of three references to: **Michael Berelowitz, M.D., Endocrine Division, University of Cincinnati, 231 Bethesda Avenue, M.L. Number 547, Cincinnati, Ohio 45267.**

POSTDOCTORAL POSITION available immediately to study the physiology of muscarinic synapses in autonomic ganglia [see: *TINS* 6, 180 (1983), for reference]. Experiments will involve intracellular recording, on-line computer assisted data analysis, and light microscopy. Send curriculum vitae and three letters of reference to: **Dr. John P. Horn, Department of Physiology, University of Pittsburgh School of Medicine, Pittsburgh, Pa. 15261.**

POSTDOCTORAL POSITION available immediately to study **SOMATIC EMBRYOGENESIS** in cultured grape cells. Experience in in vitro plant morphogenesis required. Send curriculum vitae and names of three references to: **Dr. Carole P. Meredith, Department of Viticulture and Enology, University of California, Davis, California 95616. The University of California is an Equal Opportunity/Affirmative Action Employer.**

UNIVERSITY OF CALIFORNIA, IRVINE POSTDOCTORAL RESEARCH

Postdoctoral position available for research on the neurobiology of the striatum. Research includes: (i) quantitative autoradiography/image analysis of dopamine receptor distribution, (ii) neurochemical markers of striatal heterogeneities, and (iii) response of striatal neurons to denervation. Applicant with background in neurochemistry/pharmacology or anatomy should send résumé and names and addresses of three references to: **Dr. John F. Marshall, Department of Psychobiology, University of California, Irvine, Calif. 92717.**

UCI

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL POSITION in immunopharmacology available immediately to study the basis of and the therapeutic potential of immunomodulation induced by antineoplastic agents. Areas under study include effects on: lymphokine production, specific cell subsets, and their function. Background in cellular immunology and familiarity with techniques in protein purification or pharmacology is desirable. Please submit curriculum vitae and names of three references to: **Dr. Enrico Mihich, Director, Grace Cancer Drug Center, Roswell Park Memorial Institute, Buffalo, N.Y. 14263. An Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS (TWO) IN IMMUNOLOGY are available; one starting fall 1984 to study the immunobiology of connective tissue and metabolic functions in cloned fibroblasts and endothelial cells and regulation of connective tissue by immune cell products.

A second position starting 1 July 1985 to study human T cell function in autoimmune diseases using T cell cloning and monoclonal antibody technology. Send curriculum vitae and names of three references to:

**Dr. Joseph Korn (Connective Tissue Investigators)
Dr. Robert B. Clark (T Cell Function)
Division of Rheumatic Diseases
Department of Medicine
University of Connecticut Medical School
Farmington, Conn. 06032
An Affirmative Action/Equal Opportunity Employer, M/W/H**

POSTDOCTORAL POSITION available to study hydrogen exchange kinetics in proteins by high resolution nuclear magnetic resonance spectroscopy. Candidates must have a background in physical biochemistry or biophysics. Experience in NMR or protein dynamics preferred. Salary competitive. Send curriculum vitae and three references to: **Clara Woodward, Department of Biochemistry, 140 Gortner Hall, University of Minnesota, St. Paul, Minn. 55108. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available in protein chemistry and affinity labeling of purine nucleotide sites in enzymes. Recent Ph.D. in biochemistry. Send résumé and three references to: **Dr. Roberta F. Colman, Chemistry Department, University of Delaware, Newark, Del. 19716. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS

CLONING AND CHARACTERIZATION OF HUMAN FOLATE DEPENDENT ENZYMES. Areas of specialized: gene cloning, DNA sequencing, protein purification and characterization, and peptide sequencing. Send curriculum vitae and names of references to: **Gregory Milman or Barry Shane, Department of Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, Maryland 21205.**

POSTDOCTORAL/RESEARCH ASSOCIATE. Immediate position available to study the role of actin binding proteins in platelet activation and microfilament organization. Strong background in protein biochemistry or cell biology desired. In collaboration with Dr. Joe Bryan, Baylor College of Medicine, the position involves the purification of cytoskeletal proteins and their localization using monoclonal antibodies, immunocytochemistry, and digital image processing techniques, the fluorometric analysis of actin polymerization, and study of platelet protein phosphorylation. Send curriculum vitae and three letters of recommendation to: **Dr. Gary C. Rosenfeld, Department of Pharmacology, University of Texas Medical School, P.O. Box 20708, Houston, Texas 77025. An Equal Opportunity Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL RESEARCH POSITION available at Health Research, Inc., immediately for a **cell or molecular biologist** with prior training in electron microscopy. The candidate who fills this position will work in close association with Dr. J. Frank and Dr. C. L. Rieder on the tomographic reconstruction of cell components from multiple projections of thick sections obtained in the high voltage electron microscope. A working hardware and software system for this project already exists and familiarity with computers is desirable but not mandatory. This position is supported for 3 years at a starting salary of \$16,294 to \$22,421, depending on experience. Send curriculum vitae and a list of three references to: **Dr. J. Frank, Division of Clinical Sciences, Center for Laboratories and Research, New York State Department of Health, Albany, New York 12201.**

SCIENTIST

Coulter Diagnostics, the market leader for Hematology Controls and Reagents, has an immediate opening for a Scientist in their Hematology Advanced Development Area. The individual we seek should have a Ph.D. in Hematology or Biochemistry, or an M.S. or equivalent, with a minimum of 3 years experience. Applicants should be experienced in hematology product research and development and must be capable of developing and conducting well controlled experiments. Responsibilities will be to plan, develop, execute and analyze research and development projects supporting hematology controls/calibrators and reagents; prepare technical reports outlining R&D projects; provide scientific guidance and assistance to other management and technical/non-technical staff, as well as supervise and provide guidance to subordinate staff members.

If you want a challenge and an opportunity to make a real contribution, mail your resume in confidence to: **Marsha Kallstrom, Professional Recruiter, COULTER ELECTRONICS, INC., 650 West 20th Street, Hialeah, FL 33010.** An Equal Opportunity Employer.



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® INNOVATING A VITAL
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Senior Scientist— Tissue Culture

**Explore a position today with
the industry of the future**

CIBA-GEIGY's Agricultural Division is offering a challenging opportunity for a Senior Scientist in Plant Tissue Culture.

The Biotechnology Research group has just completed construction of its new research facility for plant genetic engineering, located in the stimulating environment of Research Triangle Park, North Carolina. This position requires a Ph.D., and applicants should have a strong background of plant physiology, cell biology and/or genetics, along with several years of research experience in plant tissue culture, preferably crop plants.

In addition to an attractive salary and excellent benefits, CIBA-GEIGY offers the opportunity to join a most energetic young interdisciplinary research team. Interested individuals are asked to forward their curriculum vitae and other pertinent information in confidence to:

**Dr. Mary-Dell Chilton
CIBA-GEIGY Biotechnology Research
Post Office Box 12257
Research Triangle Park, NC 27709**

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CIBA-GEIGY

Progress Through Innovation

Associate Commissioner for Science Office of the Commissioner FOOD AND DRUG ADMINISTRATION

Salary \$58,938 to \$66,000

Applications are invited for the position of Associate Commissioner for Science, Food and Drug Administration, Rockville, Maryland. The Associate Commissioner for Science serves as the principal advisor and consultant to the Commissioner on matters relating to science policy and research operations. This includes the kinds and levels of scientific research projects to be undertaken by the Agency; the establishment and maintenance of support with the outside scientific community, and the evaluation of research plans and accomplishments of the Agency's scientific units.

This position is a Senior Executive Service general position with a salary of \$58,938 to \$66,000 per annum (physicians may be eligible for a comparability allowance up to \$10,000). Candidates must have a Ph.D., M.D. or equivalent level degree in the field of natural sciences or medicine; administrative experience which includes participation in the development of organizational goals and in the planning, development, management, and evaluation of policies and programs implementing these goals; supervisory or administrative experience which demonstrates strong leadership and managerial abilities in a scientific environment; experience which indicates the ability to communicate and interact effectively with high level governmental officials, the scientific and academic communities, and national/international medical and health-related organizations; and ability to implement equal employment opportunity programs. It is desirable that candidates have national recognition as an authority in toxicology, or related biological/toxicological fields; expertise/experience in scientific research and evaluation with particular emphasis on risk assessment; and demonstrated experience which indicates the ability to direct and manage scientific and professional personnel engaged in research and testing activities.

Commissioned Officers interested in performing the duties within the Commissioned Corps may submit a resume. Commissioned Officers wishing to enter SES and all other applicants must submit an SF-171, Personal Qualifications Statement (available at all Federal Job Information Offices). All applicants should submit a supplemental statement detailing the extent to which they possess the qualifications outlined above. Failure to submit the supplemental statement may result in an applicant being given less than due credit in the rating process. **Applications should be sent to: Jeylene Wood, DIVISION OF PERSONNEL MANAGEMENT (HFA-440), Food and Drug Administration, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. For further information contact Ms. Wood on (301) 443-3634. Applications should be received by September 10, 1984.**

The Public Health Service is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE AND GRADUATE STUDENT POSITIONS in immunology available immediately to study the cellular and molecular mechanism of transplant rejection. Persons with experience in immunology and biochemistry should send curriculum vitae and three references to: **Gunther Dennert, Ph.D., Department of Microbiology, University of Southern California School of Medicine, 2011 Zonal Avenue, HMR 401, Los Angeles, Calif. 90033.**

UNIVERSITY OF QUEENSLAND PROFESSOR OF PARASITOLOGY

The chair is vacant following the retirement of Professor J. F. A. Sprent. Applicants shall be distinguished scientists with a proven record in research and demonstrated ability in both undergraduate and postgraduate teaching. The professor of parasitology is expected to provide leadership in all the activities of the department and in particular to promote and encourage postgraduate studies and research across the breadth of the various aspects of parasitology.

Salary per annum: A\$51,006.

Closing date: 14 September 1984. Reference 27284

Additional information and application forms are available from: **The Staff Officer, University of Queensland, St. Lucia, 4067, Australia.**

RECOMBINANT DNA TECHNOLOGIST

Immediate opening in molecular genetics research laboratory for individual with B. S. or M.S. degree in biochemistry, plant pathology, microbiology, or genetics. Full-time, permanent position. Responsibilities include: induction, selection, and maintenance of mutant bacteria and fungi; isolation and manipulation of nucleic acids; and performing pathogenicity assays on plants. Salary commensurate with experience in bacterial or fungal genetics, DNA cloning, and macromolecule purifications. Send current résumé, transcripts, and two letters of reference to: **Dr. Dean W. Gabriel, Department of Plant Pathology, University of Florida, Gainesville, Fla. 32611. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE to conduct advanced research to investigate the nature of intramolecular reactions and develop parameters to assess hydrophobicity of functional groups using spectroscopic and analytical instruments. Require Ph.D. in organic chemistry and 2 years of experience. Salary: \$18,500 per year. Send résumé to: **Georgia Department of Labor, 3597 Covington Highway, Decatur, Ga. 30032 (5001589).**

POSTDOCTORAL RESEARCH ASSOCIATE position available September 1984 to study the specificity of purified aryl sulfotransferase with model substrates related to drugs and carcinogens. Experience with enzyme purification and in vitro assay of enzymes is desirable. Some organic synthesis will also be required. Send curriculum vitae and names of three references to: **Michael W. Duffel, Ph.D., Division of Medicinal Chemistry and Natural Products, College of Pharmacy, University of Iowa, City, Iowa 52242. The University of Iowa is an Affirmative Action/Equal Opportunity Employer.**

POSTGRADUATE RESEARCHER AND SPECIALIST POSITIONS available for investigation of brain tumor cell resistance to chemotherapeutic agents; postgraduate researcher responsible for human glial cell cultures, cytotoxicity assays, and enzyme inhibition studies. Doctoral degree in biochemistry, pharmacology, or related field, extensive experience in cell culture, and cancer research required. Salary: approximately \$15,000 per year. Specialist responsible for performing enzyme assays on cells from human brain tumors, using sophisticated spectrophotometer and managing laboratory. Degree in biochemistry, pharmacology, or related field required. Salary: \$17,040 to \$26,712, depending on qualifications. Initial appointments through March 1985. Reappointment under 5-year grant expected. Send curriculum vitae and names/addresses of three references to: **Dr. Martyn T. Smith, School of Public Health, University of California, Berkeley, Calif. 94720, by 31 August 1984. The University of California is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

THE ERNA AND JAKOB MICHAEL VISITING PROFESSORSHIPS 1985-1986

The Weizmann Institute of Science, Rehovot, Israel, offers a limited number of visiting professorships in the natural and exact sciences.

The Erna and Jakob Michael Visiting Professorships are intended for candidates already holding the rank of full professor and will be for a duration of 3 months to 1 year.

Deadline for submittance of completed applications is 31 December 1984.

For further information please contact: **The Academic Secretary, The Weizmann Institute of Science, Rehovot 76100, ISRAEL.**

SOLAR OBSERVER. The University of Arizona Optical Science Center seeks a research assistant III to be responsible for the acquisition of solar radiometry data. Will supervise programming, calibration, operation, and maintenance of instruments and the reduction and analysis of data generated. Requires a master's degree in optics, physics, electrical engineering, or atmospheric physics and 2 years of related research experience. Desire applicants with at least 3 years of experience in radiometry, atmospheric properties, or electro-optical devices. Applications must be received by 31 August 1984. **Staff Employment, University of Arizona, 1101 Babcock Building, Tucson, Ariz. 85721. Equal Opportunity/Affirmative Action Employer.**

RESEARCH SCIENTIST

The MIT Energy Laboratory is seeking an individual to undertake original research in pyrometallurgy and high-temperature physical-chemistry related to the study of thermodynamics and kinetics of gas-solid reactions in gases from metallurgical and combustion systems.

Requires Ph.D. in a relevant discipline with research experience with high-temperature physico-chemical reactions of inorganic systems. Salary appropriate to background and experience.

Send Curriculum Vitae and names and addresses of three references to:

**Kenneth L. Hewitt,
c/o Personnel,
77 Massachusetts Ave.,
Cambridge, MA 02139.
Refer to Job No. R84-445.**

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action employer.

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Allelix^{INC}

SENIOR ENZYME IMMUNOASSAY POSITION WITHIN THE MOLECULAR IMMUNOLOGY DIVISION

Allelix, Inc., is seeking a senior scientist to guide the development of specific enzyme immunoassays compatible with unique assay delivery technology developed within the Molecular Immunology Division. The successful candidate should have a Ph.D. and extensive experience in the development of enzyme immunoassays, preferably in a commercial environment. He/she will be particularly experienced in the assay of both antigen and antibody for the diagnosis of infection by pathogenic organisms. Experience in the culture, biochemistry and immunochemistry of viral and bacterial microorganisms will be essential and experience with parasites will be advantageous. The scientist selected for this position will have a strong record of creativity and practical achievement.

Allelix provides the opportunity to learn from, and interact with, experienced staff scientists in addition to the immediate project leader, in a well-equipped laboratory. Salaries and benefits are at fully competitive levels.

Interested candidates are asked to send complete résumés, including three references and quoting file number 0066 to:

**Dr. D. C. Burke
Allelix, Inc.
6850 Goreway Drive
Mississauga, Ontario
L4V 1P1**

Biochemistry Opportunity

Berlex Laboratories, Inc., is expanding its R & D facility in Northern New Jersey and seeks a talented and qualified individual in the PHARMACOLOGY DEPARTMENT to lead a group of junior scientists in the screening and evaluation of cardioactive drugs.

The successful candidate will possess a PhD in Biochemistry with at least two years post-doc and some industrial experience with the biochemistry of cardiac and smooth muscles; experience in the areas of cyclic nucleotides and adrenergic receptor characterization is preferred. This individual will implement and maintain a program to characterize the biochemical pharmacology of cardioactive drugs.

Berlex provides an exceptional environment for research including modern equipment and technical support. An excellent starting salary and benefits package to reward the high achiever awaits the selected candidate. Interested candidates are invited to submit a resume, including salary requirements to: **Mary Jean Zimmerman, Human Resources Administrator, 100 East Hanover Ave., Cedar Knolls, New Jersey 07927. An Equal Opportunity Employer M/F.**

BERLEX
Laboratories Inc.

N.I.H. STAFF POSTDOCTORAL POSITION

Postdoctoral Staff Fellowship position immediately available for a *MOLECULAR BIOLOGIST* with experience/interest in surface membrane biochemistry or a *MEMBRANE BIOCHEMIST* with experience in molecular biology. The successful candidate will join laboratory group studying the biochemistry, physiology and immunochemistry of surface membrane enzymes and antigens of *Leishmania* and will be primarily involved in the identification, isolation and characterization of genes coding for such membrane proteins. No previous experience in parasitologic research is necessary.

The position is available immediately. Staff fellowships are tenable for up to 3 years duration and salary is commensurate with experience starting at \$17,000 per annum. Health and other benefits are equivalent to those granted to other agency employees. Applicants must be U.S. citizens or have permanent resident visa status.

Interested candidates should send *curriculum vitae*, list of publications, names of three references and telephone number to:

Dr. Dennis M. Dwyer
Cell Biology & Immunology Section
Laboratory of Parasitic Diseases
National Institutes of Allergy and
Infectious Diseases
Building 5, Room 114, National Institutes of Health
Bethesda, MD 20205 (301) 496-5969

NIH is an Equal Opportunity Employer

Division of Teratogenesis Research
National Center for Toxicological Research
Food and Drug Administration (FDA)
Public Health Service
Department of Health and Human Services

Two Research/Management Positions Available: BRANCH CHIEF—PERINATAL AND POSTNATAL EVALUATIONS BRANCH CHIEF—DEVELOPMENT MECHANISMS

Applications are invited for senior positions in the Division of Teratogenesis Research, National Center for Toxicological Research (NCTR), Jefferson, Arkansas. The successful applicant will plan, direct, and evaluate a broad research program to: (i) improve methods for evaluating the developmental toxicity of chemical compounds (and other insults); (ii) improve the capability of extrapolating animal data to man; and (iii) explore the mechanism of action of developmental toxicants. The incumbent will bridge the gap between the classical, morphological approach to teratology and the more biochemically and molecularly oriented approach. The incumbent will also coordinate and direct all phases of the research program for five to six scientists and will collaborate closely with other investigators at the Center. Experience in administering programs and interacting with governmental agencies is desirable.

Ongoing division research efforts include: comparative pharmacokinetics and metabolism, morphological and biochemical mechanisms of teratogenesis, and the evaluation of both classical and functional end points of development toxicity. A primary goal is to provide a sound basis for interspecies extrapolation and eventual definition of valid mechanisms and mathematical models for the extrapolation of animal data to man.

The NCTR is a multidisciplinary toxicology research facility which has ongoing programs of scientific excellence in teratogenesis, carcinogenesis, mutagenesis, cell biology, and chemistry as well as excellent research support facilities in animal husbandry, diet preparation and analysis, pathology, microbiology, chemistry, and others. The Center has over 300 civil service employees and another 250 contract personnel and is located in a rural, wooded area between Little Rock and Pine Bluff, Arkansas.

This is a Civil Service position. The salary will be determined by a Peer Review evaluation and will range from \$30,549 to \$50,495 per annum, depending upon the experience of the incumbent. Send curriculum vitae to: FDA-NCTR, Personnel Office, Jefferson, Arkansas 72079. The FDA is an Equal Opportunity Employer. For further information, telephone: Mr. King at 501-541-4475.

The Third Carolina Conference on

Gene Transfer & Expression

Carolina Conference 1984 will be held October 21 through 24 at the Quail Roost Conference Center, North Carolina. The chairs will be Yakov Gluzman of Cold Spring Harbor Laboratory (Vectors), Jeffrey Frelinger of the University of North Carolina at Chapel Hill (Structure and Expression of MHC and Ig Genes), Ronald Evans of the Salk Institute (Gene Expression in Nervous Tissue), Eric Hunter of the University of Alabama at Birmingham (Protein Trafficking), and Marshall Hall Edgell of the University of North Carolina at Chapel Hill (Functional Aspects of Repetitive Sequences).

The total cost for room, board and registration is \$300. Apply by August 30 to Diane Lawton, Program in Molecular Biology and Biotechnology, 125 MacNider Building 202H, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27514.



University of
North Carolina
at Chapel Hill

Program in Molecular Biology & Biotechnology

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DIRECTOR OF INSTRUCTIONAL AND RESEARCH SUPPORT

The Uniformed Services University of the Health Sciences (USUHS) invites applications for the position of director of instructional and research support in the F. Edward Hebert School of Medicine.

The director of instructional and research support is responsible for a range of activities and organizations which directly support the teaching and research efforts of the faculty and faculty of the School of Medicine. Included in these responsibilities are the direction and oversight of the School's Multidisciplinary Laboratories, its Laboratory Animal Facilities, the Audio-Visual Center, and environmental health and occupational safety efforts.

Candidates must possess a professional degree in the biomedical sciences (for example, M.D., D.O., D.V.M.), and have substantial experience in medical teaching, educational administration, and scientific research activities. Candidates must have academic credentials which meet the requirements for appointment as associate professor in an academic department of the School of Medicine. This position requires demonstrated skill in the management of a varied scientific/academic organization. Prior experience in the Federal service is highly desirable.

The University offers excellent facilities and a salary commensurate with experience. Address applications with complete curriculum vitae and bibliography to: The Civilian Personnel Office, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Maryland 20814-4799. To be considered, applications must be in the personnel office by 1 September 1984.

USUHS is an Equal Opportunity/Affirmative Action Employer.



SUPERVISORY RESEARCH POULTRY SCIENTIST

This is a Research Leader Position

Excellent opportunity to lead a comprehensive program and conduct personal research on physiological and biochemical mechanisms that regulate carcass fat deposition and skeletal muscle development in order to improve the quality of lean tissue of poultry. The individual will serve as Location Leader at Georgetown, Delaware.

Candidate should have a background in fat and muscle biology and be familiar with sophisticated physiological, biochemical, histochemical, histologic, autoradiographic and morphometric techniques and principles.

Ph.D. is desirable.

Salary is based on qualifications and experience. Salary ranges:

GM-13	\$36,327-\$47,226
GM-14	\$42,928-\$55,807
GM-15	\$50,495-\$65,642

Additional information about the position or qualifications and application forms may be obtained by writing to:

**USDA-ARS-PD
Personnel Operations Branch
Room 107, Bldg. 003, BARC-West
Beltsville, MD 20705
(301) 344-2944**

ALL APPLICATION FORMS MUST BE RECEIVED BY
AUGUST 31, 1984

U.S. Citizenship is required
An Equal Opportunity Employer

POSITIONS OPEN

THE UNIVERSITY OF SYDNEY RESEARCH APPOINTMENT IN DEVELOPMENTAL NEUROBIOLOGY (Reference Number 28/01) NEUROBIOLOGY RESEARCH CENTRE

The Australian Government has established this Centre under the directorship of Professor M. R. Bennett, F.A.A. Research projects are aimed at elucidating the mechanisms which govern the development of motoneurons and retinal ganglion cells, together with their synaptic connections. Applicants are now invited for the position of senior protein biochemist at the research fellow or postdoctoral level.

The successful applicant will be required to play a leading role in a project which is aimed at the isolation and purification of trophic factors that support neurons. Applicants should therefore have expertise in all aspects of protein separation and purification. Experience in molecular biology would be an advantage since the project will interface with our Molecular Biology Unit.

Salary range: research fellow: A\$24,840 to A\$32,634 per annum; postdoctoral fellow: A\$21,411 to \$23,903 per annum.

This position is available for the period to December 1987.

Applications, quoting reference number, including detailed curriculum vitae, bibliography (and three selected reprints), together with the names and addresses of three referees, should be sent to: The Registrar, University of Sydney, N.S.W. 2006, Australia, by 31 August 1984.

RESEARCH ASSISTANT PROFESSOR/VISITING ASSISTANT PROFESSOR. Applications and nominations are invited for this 12-month, non-tenure-track position of research assistant professor/visiting assistant professor of pharmacology, with primary interest in neuropharmacology of development and aging. A doctoral degree and postdoctoral training, preferably in pharmacology and/or neurochemistry is required. The candidate should be interested to participate in a collaborative study of mechanisms of brain development and/or aging (Alzheimer) which is part of a basic-clinical interdisciplinary project. The major focus is in neurochemistry and molecular pharmacology of brain development (metabolic disorders) and/or brain aging (Alzheimer). All applicants should have demonstrated an outstanding potential for research and teaching. The successful candidate will be expected to establish an active research program and eventually seek external funding in due course. Earliest possible starting date will be 1 October 1984. Send curriculum vitae, names of three references, and a statement of projected research activities to: E. Giacobini, M.D., Ph.D., Chairman of Search Committee, Department of Pharmacology, Southern Illinois University School of Medicine, P.O. Box 3926, Springfield, Illinois 62708. Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL POSITION to evaluate neonatal and recently weaned piglets as a model for studying changes in ovalbumin uptake during the course of an enterotoxigenic *Escherichia coli*-mediated diarrheal episode. Experience in standard microbiological procedures; immunological techniques, particularly RIA and ELISA; and electrophoretic transfer techniques is highly desirable. Forward curriculum vitae and three references to: W. N. Eigel and M. D. Pierson, Department of Food Science and Technology, Virginia Tech, Blacksburg, Va. 24061. An Equal Opportunity/Affirmative Action Employer.

RESEARCH SPECIALIST II/EMORY UNIVERSITY, Atlanta, Georgia. Challenging full-time position available in Emory University, School of Medicine. Work involves developing a tumor animal model to study the effects of growth factors and antibodies on the growth of human tumor cells in nude mice. Develops radioreceptor assays to characterize growth factor receptors; supervises tissue culture technician in the use of cultured human tumor cells to produce growth factors; purifies and characterizes growth factors by HPLC and electrophoresis. Applicants must have a master's degree in a field related to research area or bachelor's degree in field related to research and 2 years of related experience. Five years of research experience and postgraduate work highly desirable. Thorough knowledge of HPLC and electrophoresis preferred. To apply, send résumé to: J. Saliers, Emory University, Personnel Department, Atlanta, Georgia 30322, or telephone: 404-329-7611 for more information.

POSITIONS OPEN

RESEARCH POSITION

Ph.D. or M.D. with research experience in cardiovascular physiology wanted to work in a research laboratory in a university-affiliated, suburban New York hospital. This is an opportunity for an independent and motivated scientist with good communication skills to work in conjunction with an active clinical cardiovascular team, to participate in ongoing research, and to initiate new avenue of investigation. The hospital, located on Long Island, houses extensive research facilities. A research building is under construction to provide support and core services as well as an interchange of ideas between investigators in different fields. The research laboratory is fully equipped and staffed. This is a stimulating work environment with an excellent and fully funded salary. The successful applicant will be expected to apply for grants. Experience beyond the doctoral level is required and a full benefits package is provided. A letter, including a summary of research goals, and a résumé should be submitted to: Dr. Roy Nelson, Division of Cardiovascular Surgery, North Shore University Hospital, Manhasset, New York 11030.

FULL-TIME RESEARCH POSITION

Assistant/associate professor at upper-level and graduate school, effective September 1984. Research will be mammalian reproductive physiology, heavily oriented in immunochemistry. Postdoctorate required. Search will continue until acceptable candidate is found. Submit application, curriculum vitae, course work, and names of three references to: Dr. James R. Stewart, Chairman, Department of Biology, University of Texas at Tyler, Tyler, Texas 75701. Equal Opportunity/Affirmative Action Employer, M/F.

STAFF OFFICER

The Polar Research Board of the National Research Council seeks candidates with a broad knowledge of scientific and resource-related activities in the polar regions. Incumbent will work under the staff director to plan and direct a series of multidisciplinary studies.

Applicants should have a Ph.D. or equivalent in one of the physical sciences related to the polar regions, and 5 years of progressive multidisciplinary experience in research analysis, project development, and management. Excellent written communications skills are required. Please submit résumé to:

**W. Timothy Hushen
Staff Director
Polar Research Board
National Academy of Sciences
2101 Constitution Avenue, NW
Washington, D.C. 20418
An Equal Opportunity Employer, M/F**

TUMOR IMMUNOLOGIST

Program Resources, Inc., the operations and technical support contractor for the National Cancer Institute (NCI)-Frederick Cancer Research Facility has an immediate opening for a tumor immunologist with 1 to 2 years of postdoctoral experience in the pre-clinical testing of biological response modifiers for the treatment of cancer. The Preclinical Screening Laboratory encompasses a broad-based screening program using a system of sequential and progressing studies designed to determine the therapeutic potential of a BRM and understand the mechanism of activity, defining their effects on T cells, B cells, NK cells, and macrophage function; the BRM's are also evaluated for their ability to treat preexistent experimental and spontaneous metastases from syngeneic animals whose primary tumors have been surgically excised. Agents found effective in these hosts are evaluated for therapeutic efficacy in rodents bearing autochthonous tumors and emphasis is placed on synthetic immunomodulators and recombinant lymphokines.

Applicants for this position should have a Ph.D. in a biological science and 1 to 2 years of experience with in vitro assays of cell-mediated immunity and in vivo tumor therapy models.

This position offers a salary commensurate with education and experience, and company benefits including relocation assistance.

For consideration, please send curriculum vitae, three reference letters, and list of publications to:

**NCI-Frederick Cancer Research Facility
P.O. Box B, Building 244
PR #5-0347
Frederick, Maryland 21701
Equal Opportunity Employer, M/F**

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TERATOLOGIST/ REPRODUCTIVE TOXICOLOGIST

Stauffer Chemical Company, an international leader, is seeking a Teratologist/Reproductive Toxicologist to conduct a variety of teratology, reproduction and special studies. Responsibilities include participation in study design, preparation of protocols, implementation and overall supervision of studies, evaluation and interpretation of results, and preparation of written reports and summaries.

The position offers excellent opportunity for collaborative work in the pathogenesis of toxic effects with veterinary pathologists and staff in general toxicology and biochemistry.

The successful applicant will have an M.S. or Ph.D. degree or equivalent experience in reproductive biology, anatomy, physiology, toxicology, pharmacology or biochemistry.

Stauffer provides an excellent salary and outstanding benefits. The Stauffer Environmental Health Center is adjacent to the University of Connecticut Health Center, in one of the state's most attractive semi-rural towns. To apply, please send your curriculum vitae, a brief description of your experience and salary requirements in complete confidence to:



Mrs. P. Frutchey
Stauffer Chemical Company
400 Farmington Avenue
Farmington, Conn. 06032

An Equal Opportunity Employer M/F

SCIENCE

News Department Reprint Series

Catalysis

"There is no area in chemistry today more exciting than catalysis." [George Pimentel, chairman of the National Academy of Sciences/National Research Council Committee to Survey Opportunities in the Chemical Sciences]

This survey of the most active areas of catalysis conveys that excitement while explaining some of the unusual forces that have combined to drive studies of catalysis forward. Among the topics covered: Heterogeneous catalysis, cluster chemistry, activation of carbon-hydrogen bonds, asymmetric synthesis, photocatalytic production of fuels and electricity, modification of enzymes, and immobilization of enzymes.

This collection of recent articles from *Science* by Thomas Maugh II is now available for use by professionals, teachers, researchers, and anyone interested in this field.

Single copies \$2.00; twenty or more \$1.00 each.
Orders under \$10.00 must be prepaid.

Write to AAAS, Dept. CAT, 1515 Massachusetts Ave., N.W., Washington, D.C. 20005.

POSITIONS OPEN

Scripps Institution of Oceanography has an opening for a **RESEARCH ENGINEER** to be responsible for major ocean developmental project in acoustics. Requires extensive experience in acoustics, oceanography, digital electronics systems design, software, and data processing. Acoustic experience must include hardware design as well as extensive ocean-going experimental work. Ph.D. level or equivalent required in one of above areas. Candidate should have experience as principal investigator and interaction with funding agencies, particularly Navy. U.S. citizenship required. Salary range: \$42,400 to \$51,200. Send curriculum vitae and names of references to: **K. M. Watson, Director, or F. H. Fisher, Marine Physical Laboratory, Scripps Institution of Oceanography, University of California, San Diego, California 92152.** Closing date: 31 August 1984. *The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.*

SENIOR SCIENTIST, GYNECOLOGIC CANCER RESEARCH (Ph.D. or M.D.). Memorial Sloan-Kettering Cancer Center is establishing the Avon Chair for research in a field related to or applicable to the problems of gynecologic cancers. The scientist will direct a laboratory-based research program and need not be a clinician in gynecologic cancer. The incumbent of the Avon Chair, whose research will address problems related to gynecologic malignancies, will interact with other research scientists and with the Division of Gynecology of the Department of Surgery. Other responsibilities will include training of postdoctoral and research fellows. Salary to be negotiated. Please send curriculum vitae and biography to: **Search Committee, c/o John L. Lewis, Jr., M.D., Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, N.Y. 10021.** *An Equal Opportunity/Affirmative Action Employer.*

The College of Chemistry, University of California, Berkeley, invites applications for a position at the level of **SPECIALIST** which is to start 1 October 1984. The specialist is to direct the College of Chemistry Mass Spectrometry Laboratory. The laboratory is equipped with Kratos (AEI) MS-50, MS-12, MS-9, CEC 21-110, and Finnigan 4000 mass spectrometers, and three associated data systems.

The successful candidate must have a Ph.D. in physical or analytical chemistry or equivalent experience and should have specific background in techniques of high resolution, GC/MS, chemical ionization, and particle bombardment ionization mass spectrometry. Maintenance and program development of Incos and DS55 data systems will be part of the operational responsibility in this capacity. The candidate should have some supervisory experience since the incumbent will supervise two technical associates.

The College wishes to maintain a state-of-the-art facility. The candidate will have the opportunity to develop research support proposals for new instruments independently or in collaboration with College of Chemistry faculty. The candidate is expected to maintain expertise at the research state-of-the-art in mass spectrometry.

Candidates should submit curriculum vitae (including a list of publications) and three letters of reference to: **Assistant Dean R. Myers, College of Chemistry, University of California, Berkeley, California 94720.** The deadline for receipt of applications is 1 September 1984.

The University is an Equal Opportunity/Affirmative Action Employer.

REQUEST FOR PREPROPOSALS

The U.S. Environmental Protection Agency, Corvallis Environmental Research Laboratory, is seeking **PREPROPOSALS** for research on the effects of acidic deposition on the chemistry of surface waters. The purpose of the research will be to improve our understanding of the mechanisms of surface water acidification with the ultimate goal of predicting such effects of acidic deposition on regional and national scales. Specific areas of research to be addressed are (i) retention of sulfate within soils; (ii) flux of base cations from soils; (iii) hydrologic response of watersheds; and (iv) development/application of watershed-scale model for prediction of future effects. Written requests for information on preproposal submission are to be received not later than 14 September 1984, and are to be forwarded to: **Dr. Raymond G. Wilhour, Chief, Air Pollution Effects Branch, U.S. Environmental Protection Agency, 200 Southwest 35th Street, Corvallis, Oregon 97333.** Please specify research area of interest.

SYMPOSIUM

HOW TO MAKE MICROCAPSULES—A HANDS ON COURSE

A 3-day laboratory course designed to teach the art and science of microcapsule making. Suitable for biologists, pharmacists, chemists, life scientists, and engineers. Enrollment limited to nine. Lectures and laboratory sessions by **Dr. Curt Thies, Professor of Chemistry Engineering at Washington University in St. Louis.** One fall session: 3 to 5 October 1984. For information, telephone: 314-889-6066.

AWARDS

ROSENSTIEL AWARD IN OCEANOGRAPHIC SCIENCE NOMINATIONS. The award, which is in **BIOLOGICAL OCEANOGRAPHY** this year, recognizes outstanding achievement in marine-related sciences, and is particularly concerned to recognize superior younger scientists whose early contributions suggest a continued role of leadership in the field. The award consists of a cash prize (\$5000), gold medal, and invitation to the Rosenstiel School of Marine and Atmospheric Science (RSMAS), where the award ceremony is held. Nominations should be directed to: **Dean Alan Berman, RSMAS, University of Miami, 4600 Rickenbacker Causeway, Miami, Fla. 33149,** and should include a brief justification, relevant references, and curriculum vitae if possible.

TRAINING PROGRAM

POSTDOCTORAL TRAINING PROGRAM

The Research Division of The University of Texas System Cancer Center at Smithville has been awarded a postdoctoral training grant from National Cancer Institute in the molecular and cellular mechanisms of carcinogenesis. Trainees must have completed a Ph.D., M.D., or D.V.M. degree and must be U.S. citizens or permanent residents. For further information and application forms, write: **Dr. Thomas J. Slaga, Director, University of Texas System Cancer Center, Science Park-Research Division, P.O. Box 389, Smithville, Texas 78957.** *An Equal Opportunity/Affirmative Action Employer.*

FELLOWSHIPS

UNIVERSITY OF TORONTO ERINDALE CAMPUS

The Department of Survey Science, University of Toronto, invites applications from Canadian citizens and permanent residents to be sponsored for an **NSERC UNIVERSITY RESEARCH FELLOWSHIP** to be held at Erindale College. Candidates must hold a doctoral degree and should have expertise in one or more of the following areas: land information systems, database management, digital cartography, remote sensing, geodesy, hydrography, photogrammetry, or metrology.

The position is of 5-year duration but is subject to satisfactory evaluation in the third year.

Applications, together with curriculum vitae, should be sent by 24 August 1984 to:

**Professor R. C. Gunn
Survey Science
Erindale College**

Mississauga, Ontario, Canada L5L 1C6

POSTDOCTORAL FELLOWSHIP. Immediate position available for research in monoclonal antibody-mediated magnetic cell separation for use in bone marrow transplantation. Applicant should have a Ph.D. and experience in immunology and biochemistry or biophysics. Send curriculum vitae and telephone numbers of references to: **Dr. C. L. Reading, Monoclonal Antibody Laboratory, M.D. Anderson Hospital, Box 179, 6723 Bertner, Houston, Texas 77030.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP available for Ph.D. with expertise/interest in protein chemistry and in the characterization and modification of red cell membrane proteins and proteo-lipids involved in the expression of Rh antigenicity to join group study in removal of blood group antigens from the red cell surface. Send curriculum vitae and names of three references to: **Dr. Jack Goldstein, Cell Biochemistry Laboratory, Lindsley F. Kimball Research Institute, New York Blood Center, 310 East 67 Street, New York, N.Y. 10021.** *Equal Opportunity Employer.*

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**Dr. Peter Rubenstein
Department of Biochemistry, BSB
University of Iowa
Iowa City, Iowa 52242**

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ERINDALE CAMPUS UNIVERSITY OF TORONTO

The Department of Zoology, University of Toronto, invites applications from Canadian citizens and permanent residents to be sponsored for an **NSERC UNIVERSITY RESEARCH FELLOWSHIP** to be held at Erindale College. Candidates should have expertise in molecular biology with interests in cell and/or developmental biology.

Please send, by 24 August 1984, curriculum vitae and letters of support from three referees to: **Dr. D. H. O'Day, Department of Zoology, University of Toronto, Erindale College, Mississauga, Ontario, Canada L5L 1C6.**

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

ADVANCED GENETIC SCIENCES, INC. POSTDOCTORAL FELLOWSHIPS

Advanced Genetic Sciences invites candidates for its competitive postdoctoral fellowships for 1985. Candidates should have, or be expecting to complete, a Ph.D. degree in 1984.

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- (20) Plant genetic engineering with John Bedbrook to study expression of bacterial genes in plants.
- (21) Plant molecular biology with Pamela Duns-muir to study regulation of plant gene expression.
- (22) Molecular genetics with Gary Warren to study the transfer and expression of genes conferring ice nucleation properties in bacteria.
- (23) Plant pathology with Trevor Suslow to study soil microbiology and biological control of plant disease.
- (24) Plant biochemistry with Kit Steinback to study whole plant stress physiology especially as it pertains to photosynthesis.

Send curriculum vitae with names of referees to: **Personnel Manager (Code Number), Advanced Genetic Sciences, 6701 San Pablo Avenue, Oakland, Calif. 94608.**

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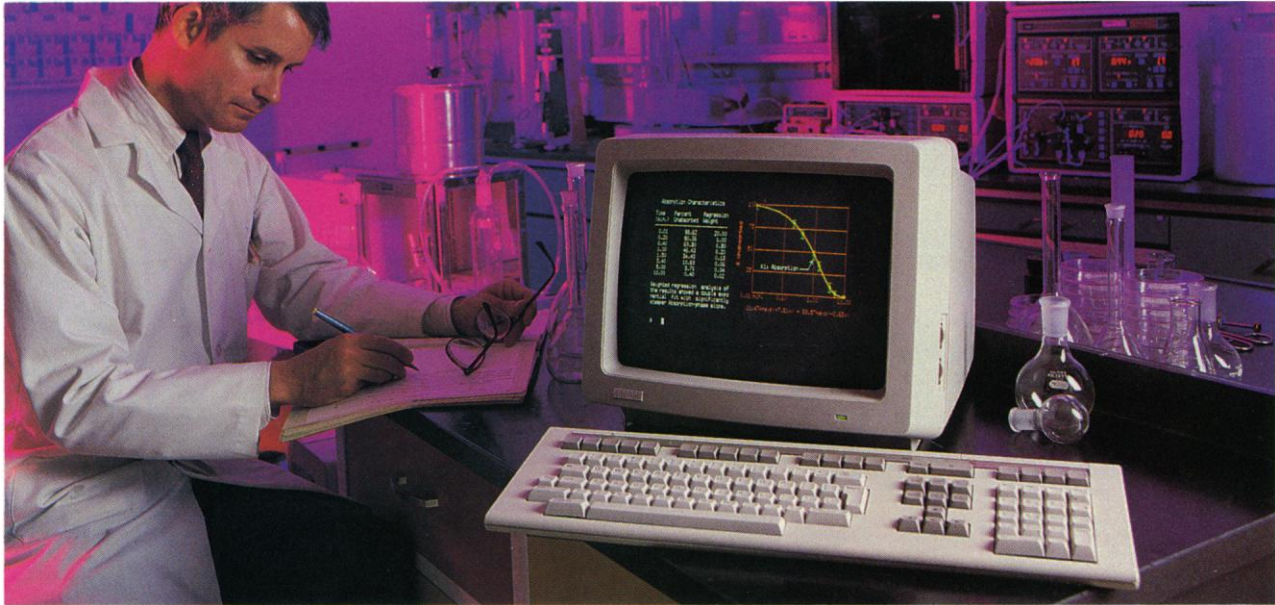
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Deadline for submission of completed applications is 31 December 1984.

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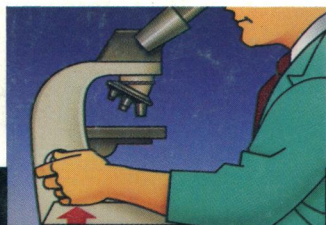
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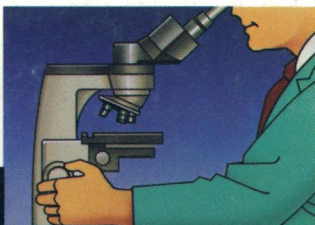
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