

important component of such work, and in his paper Iversen discusses problems of scaling in particle-transport simulations. Despite many years of experimentation, the mechanics of saltation, the process by which most aeolian sand is transported, are still not fully understood. Willetts and Rice consider the effects of grain shape on this process, and Gillette and Stockton describe new instrumentation to measure grain momentum directly. A paper by White indicates how our perception of the fundamentals of aeolian processes can be sharpened by consideration of their operation in different environments and demonstrates in a simulated Venusian atmosphere the importance of spin in saltation paths. Likewise, the field study by McKenna-Neuman and Gilbert provides a new view of aeolian processes in cold climates.

Studies of landforms, especially dunes and their dynamics, are underrepresented in this volume, which reflects the fact that the dynamics of dunes and the controls of dune morphology are the least studied and least understood aspects of aeolian geomorphology. Significant advances in our knowledge will come only after more well-designed and carefully executed field studies have been carried out. In this volume, examples of the kind of work that needs to be undertaken are Livingstone's study of windflow patterns over a Namib linear dune, which indicates the importance of spatial variations in wind velocity in maintaining the form of the dune, and Tsoar and Møller's investigations of the effects of vegetation on linear dune form and orientation relative to the wind.

Modern aeolian sediments and ancient aeolian sandstones are often studied independently of each other. Kocurek, by integrating studies of modern and ancient dunes and their sediments, shows how the deposits of dune plinths, interdune areas, and sand sheets gave rise to the extensive low-angle strata preserved in the rock record. The importance of tectonics in the accumulation of aeolian sediments is often overlooked. Orme and Tchakerian describe how long sequences of Quaternary coastal dunes on the California coast are favored by the presence of subsiding basins.

Although dunes are arguably the most spectacular manifestations of aeolian activity, the importance of dust storms in arid areas is emphasized by Middleton, Goudie, and Wells, who assemble data from meteorological records, satellite images, and deep-sea cores to produce a global picture of the location and sources of major dust storms. Within each source area, however, dust storm frequency is controlled by local surface conditions. Brazel, Nickling, and Lee conclude that, because of its influence on

vegetation cover, the amount of winter rainfall in southern Arizona is an important control of dust frequency in Phoenix.

The contents of this volume reveal many of the strengths and weaknesses of current research in aeolian geomorphology. For example, many of the papers reporting field studies lack a significant theoretical background and do not attempt to test hypotheses. This is especially true of the several studies of human impacts on aeolian environments. It is clear that there is a need, as advocated by Greeley in his contribution, to increase interaction between field and laboratory studies of aeolian landforms and processes, to generate models for field testing, and to develop a more rigorous and multidisciplinary approach to field studies of aeolian processes and landforms.

NICHOLAS LANCASTER

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Books Received

Controversial Issues in Cardiac Pathophysiology. Erwin Riesch Symposium (July 1985). R. Jacob, Ed. Steinkopff, Darmstadt, F.R.G., and Springer-Verlag, New York, 1986. x, 251 pp., illus. \$49. Basic Research in Cardiology, vol. 81, supplement 1.

Cross-Cultural Anxiety. Vol. 3. Charles D. Spielberger and Rogelio Diaz-Guerrero, Eds. Hemisphere, New York, 1986. xii, 167 pp., illus. \$39.95. Series in Clinical and Community Psychology.

Diophantine Analysis. J. H. Loxton and A. J. Van Der Poorten, Eds. Cambridge University Press, New York, 1986. x, 170 pp., illus. Paper, \$24.95. London Mathematical Society Lecture Note Series, 109. From a convention, Kensington, N.S.W., Australia, May 1985.

Distillation Tray Fundamentals. M. J. Lockett. Cambridge University Press, New York, 1986. xxiv, 226 pp., illus. \$54.50.

The Flying Machine and Modern Literature. Laurence Goldstein. Indiana University Press, Bloomington, 1986. xvi, 253 pp., + plates. \$27.50.

The Forces of Nature. P. C. W. Davies. 2nd ed. Cambridge University Press, New York, 1986. viii, 175 pp., illus. \$39.50; paper, \$12.95.

45. Deutsche Pflanzenschutz-Tagung. (Kiel, Oct. 1986.) Parey, Berlin, 1986. xxxviii, 431 pp., illus. Paper, DM45. Mitteilungen aus der Biologischen Bundesanstalt für Land- und Forstwirtschaft, Heft 232.

The Greenland Caribou. Zoogeography, Taxonomy, and Population Dynamics, Morten Meldgaard. Commission for Scientific Research in Greenland, Copenhagen, 1986. 88 pp., illus. Paper, DKr 130. Meddelelser om Grønland, Bioscience 20.

Growth Stresses and Strains in Trees. Robert R. Archer. Springer-Verlag, New York, 1987. x, 240 pp., illus. \$110. Springer Series in Wood Science.

History of Rocketry and Astronautics. R. Cargill Hall, Ed. Univelt, San Diego, CA, 1986. 2 vols. Vol. 1, xii, 238 pp., illus. Vol. 2, xii, 489 pp., illus. \$100; paper, \$80. American Astronautical Society History Series, vol. 7, parts 1 and 2. International Academy of Astronautics History Symposia, vol. 2. From symposia, Mar del Plata, Argentina, Oct. 1969, Constance, G.D.R., Oct. 1970, Brussels, Sept. 1971, and Vienna, Oct. 1972. Reprint, 1977 ed.

Industrial Chemicals via C₁ Processes. Darryl R. Fahey, Ed. American Chemical Society, Washington, DC, 1987. x, 261 pp., illus. \$49.95. ACS Symposium Series, 328. Based on a symposium, New York, April 1986.

The Insect and Spider Collections of the World. Ross H. Arnett, Jr. et al. Brill/Flora and Fauna Publications, New York, 1986. iv, 220 pp. Spiral bound, \$19.95.

Insects and Plants. Parallel Evolution and Adaptations. Pierre Jolivet. Brill/Flora and Fauna Publications,

New York, 1986. xii, 197 pp., illus. Paper, \$19.95. Flora and Fauna Handbook no. 2. Translated from the French edition (1983).

Insulinitis and Type I Diabetes. Lessons from the NOD Mouse. Seiichiro Tarui, Yoshihiro Tochino, and Kyohei Nonaka, Eds. Academic Press, Orlando, FL, 1986. x, 294 pp., illus. \$35.

Instrumentation and Research Programmes for Small Telescopes. J. B. Hearnshaw and P. L. Cottrell, Eds. Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Norwell, MA). xxii, 482 pp., illus. \$79. International Astronomical Union. From a symposium, Christchurch, New Zealand, Dec. 1985.

Mental Representations. A Dual Coding Approach. Allan Paivio. Clarendon (Oxford University Press), New York, 1986. xii, 322 pp., illus. \$39.50. Oxford Psychology Series, 9.

Mental Retardation. Nature, Cause, and Management. George S. Baroff. 2nd ed. Hemisphere, New York, 1986. xviii, 541 pp., illus. \$44.95; paper, \$35.95.

Metal Clusters. F. Träger and G. zu Putlitz, Eds. Springer-Verlag, New York, 1986. viii, 239 pp., illus. \$70.95. From a symposium, Heidelberg, F.R.G., April 1986.

Metal Optics Near the Plasma Frequency. F. Forstmann and R. R. Gerhardt. Springer-Verlag, New York, 1986. viii, 132 pp., illus. \$39.60. Springer Tracts in Modern Physics, 109.

Methods and Special Applications in Bacterial Ecology. Jeanne S. Poindexter and Edward R. Leadbetter, Eds. Plenum, New York, 1986. xviii, 385 pp., illus. \$52.50. Bacteria in Nature, vol. 2.

Methods of Enzymatic Analysis. Hans Ulrich Bergmeyer, Jürgen Bergmeyer, and Marianne Grassl, Eds. 3rd ed. Vol. 11, Antigens and Antibodies 2. René F. Masseyeff, Ed. xxvi, 508 pp., illus. \$155. Vol. 12, Drugs and Pesticides. Michael Oellerich, Ed. xxiv, 498 pp., illus. \$155. VCH, New York, 1986.

Methods of Protein and Nucleic Acid Research. Vol. 3, Chromatography. Lev A. Osterman. Springer-Verlag, New York, 1986. xii, 505 pp., illus. \$119. Translated from the Russian edition.

Microcomputers and Physiological Simulation. James E. Randall. 2nd ed. Raven, New York, 1987. xvi, 287 pp., illus. \$29.50.

Microvascular Perfusion and Transport in Health and Disease. Paul F. McDonagh, Ed. Karger, New York, 1987. x, 253 pp., illus.

Migration Intentions and Behavior. Third World Perspectives. James T. Fawcett, Ed. Human Sciences Press, New York, 1986. 140 pp., illus. Paper, \$12.95. *Population and Environment*, vol. 8, nos. 1 and 2.

Misused Statistics. Straight Talk for Twisted Numbers. A. J. Jaffe and Herbert F. Spier. Dekker, New York, 1987. xiv, 237 pp., illus. \$29.75. Popular Statistics, 5.

Mitochondrial Physiology and Pathology. Gary Fiskum, Ed. Van Nostrand Reinhold, New York, 1986. xvi, 207 pp., illus. \$46.50. Van Nostrand Reinhold Advanced Cell Biology Series.

Model Selection. H. Linhart and W. Zucchini. Wiley, New York, 1986. xiv, 301 pp., illus. \$34.95. Wiley Series in Probability and Mathematical Statistics.

Models of Scientific Development and the Case of Nuclear Magnetic Resonance. Henk Zandvoort. Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Norwell, MA). xiv, 305 pp., illus. \$49.50. Synthese Library, vol. 184.

Pharmacokinetics. Processes and Mathematics. Peter G. Welling. American Chemical Society, Washington, DC, 1986. xiv, 290 pp., illus. \$59.95. ACS Monograph 185.

Pharmacokinetics. Theory and Methodology. Malcolm Rowland and Geoffrey T. Tucker, Eds. Pergamon, New York, 1986. xxii, 444 pp., illus. \$147.50. International Encyclopedia of Pharmacology and Therapeutics, section 122.

Practical Intelligence. Nature and Origins of Competence in the Everyday World. Robert J. Sternberg and Richard K. Wagner, Eds. Cambridge University Press, New York, 1986. x, 386 pp., illus. \$49.50; paper, \$15.95.

The Quantum Hall Effect. Richard E. Prange and Steven M. Girvin, Eds. Springer-Verlag, New York, 1987. xviii, 419 pp., illus. \$27.50. Graduate Texts in Contemporary Physics. Based on a lecture course, College Park, MD, 1985.

Quantum Mechanics from General Relativity. An Approximation for a Theory of Inertia. Mendel Sachs. Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Norwell, MA). xvi, 227 pp. \$69. Fundamental Theories of Physics.

(Continued on page 1133)

(Continued from page 1127)

Quieting Reform. Social Science and Social Action in an Urban Youth Program. Robert E. Stake. University of Illinois Press, Urbana, 1986. xviii, 174 pp., illus. \$17.95.

Radiologic Management of Musculoskeletal Tumors. Holger Pettersson, Dempsey S. Springfield, and William F. Enneking. Springer-Verlag, New York, 1987. xii, 153 pp., illus. \$89.

Reaction-Diffusion Equations and Their Applications to Biology. N. F. Britton. Academic Press, Orlando, FL, 1986. x, 277 pp., illus. \$65.

Soil Erosion in the European Community. Impact of Changing Agriculture. G. Chisci and R. P. C. Morgan, Eds. Published for the commission of the European Communities by Balkema, Accord, MA, 1986. x, 233 pp., illus. \$28. From a seminar, Cesena, Italy, Oct. 1985.

Soilborne Plant Pathogens. George W. Bruchl. Macmillan, New York, and Collier Macmillan, London, 1987. xvi, 368 pp., illus. \$38.

Somites in Developing Embryos. Ruth Bellairs, Donald A. Ede, and James W. Lash, Eds. Plenum, New York, 1986. x, 320 pp., illus. \$55. NATO Advanced Science Institutes Series A, vol. 118. From a workshop, Glasgow, Scotland, April 1986.

South-South and South-North Cooperation in Sciences. A. Hamende, M. Hassan and K. K. Phua, Eds. World Scientific, Philadelphia, 1986. xii, 507 pp., illus. \$37. From a conference, Trieste, Italy, July 1985.

Spinal Cord Injury Medical Engineering. Dhanjoo N. Ghista and Hans L. Frankel et al. Thomas, Springfield, IL, 1986. xx, 557 pp., illus. \$93.50.

Stability of Time Dependent and Spatially Varying Flows. D. L. Dwyer and M. Y. Hussaini, Eds. Springer-Verlag, N.Y., 1987. xiv, 350 pp., illus. Paper, \$28. From a symposium, Hampton, VA, Aug. 1985.

The Statistical Analysis of Compositional Data. J. Aitchison. Chapman and Hall (Methuen), New York, 1986. xvi, 416 pp., illus. \$49.95.

Tailoring Multiphase and Composite Ceramics. Richard E. Tressler et al., Eds. Plenum, New York, 1986. xii, 797 pp., illus. \$115. Materials Science Research, vol. 20. From a conference, University Park, PA, July 1985.

The Tasks of Contemporary Philosophy. Werner Leinfellner and Franz M. Wuketits, Eds. Holder-Pichler-Tempsky. Vienna, 1986 (U.S. distributor, Kluwer, Norwell, MA). 565 pp., illus. Paper, \$89. Schriftenreihe der Wittgenstein-Gesellschaft, vol. 12/1. From a symposium, Kirchberg am Wechsel, Austria, Aug. 1985. Text in English and German.

T. D. Lee. Selected Papers. G. Feinberg, Ed. Birkhauser, Boston, 1986. Vol. 1, Weak Interactions and Early Papers. xxiv, 845 pp., illus. \$59. Vol. 2, Field Theory and Symmetry Principles. xxiv, 592 pp., illus. \$49. Vol. 3, Random Lattices to Gravity. xxii, 599 pp., illus. \$49. The set, \$155. Contemporary Physicists.

Teaching Thinking Skills. Theory and Practice. Joan Boykoff Baron and Robert J. Sternberg, Eds. Freeman, New York, 1986. xii, 275 pp., illus. \$26.95; paper, \$15.95.

The Texas Bluebonnet. Jean Andrews. University of Texas Press, Austin, 1986. 64 pp., illus. \$9.95.

Theology and the Scientific Imagination. From the Middle Ages to the Seventeenth Century. Amos Funkenstein. Princeton University Press, Princeton, NJ, 1986. xii, 422 pp. \$47.50.

Theories of Group Behavior. Brian Mullen and George R. Goethals, Eds. Springer-Verlag, New York, 1987. xvi, 243 pp., illus. \$40. Springer Series in Social Psychology. Based on a symposium, Baltimore, 1984.

The Theory of A. R. Luria. Functions of Spoken Language in the Development of Higher Mental Processes. Donna R. Vocate. Erlbaum, Hillsdale, NJ, 1987. xx, 191 pp. \$27.50.

Theory of Elasticity. L. D. Landau and E. M. Lifshitz. 3rd ed. Pergamon, New York, 1986. viii, 187 pp., illus. \$27.50; paper, \$17.50. Course of Theoretical Physics, vol. 7. Translated from the Russian edition (Moscow, 1986) by J. B. Sykes and W. H. Reid.

Women with Cancer. Psychological Perspectives. Barbara L. Andersen, Ed. Springer-Verlag, New York, 1986. xviii, 326 pp., illus. \$50. Contributions to Psychology and Medicine. Based on a symposium, 1983.

Writing for Social Scientists. How To Start and Finish Your Thesis, Book, or Article. Howard S. Becker with Pamela Richards. University of Chicago Press, Chicago, 1986. xii, 180 pp., illus. \$20; paper, \$6.95.

X-Ray Emission of Auroral Electrons and Magnetospheric Dynamics. Leonid L. Lazutin. Theodore J. Rosenberg, technical editor. Springer-Verlag, New York, 1986. xiv, 220 pp., illus. \$79. Physics and Chemistry in Space, vol. 14. Translated from the Russian edition (Moscow, 1979).

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. Any deadline in ad must be at least 2 weeks after date of issue in which ad appears. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference.

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POSITIONS WANTED

Biochemist, Ph.D. Tissue culture, kidney and liver perfusion, animal studies, protein purification, enzyme kinetics, metabolism, transport, several publications. Teaching experience in biochemistry and physiology. Seeks research/teaching or industrial position. Box 52, SCIENCE. X

Biomedical Scientist, D.V.M., Ph.D. Twelve years of experience in drug/medical device industry including efficacy/safety testing and new product registration with FDA/EPA. Seeks drug/device, animal health, or biotechnology firm to utilize managerial and scientific skills as member of R&D management team. Telephone: Dr. Charles Chesney, 612-450-0045. 5/29; 6/5, 12

Creative Young Physicist, 10 years of research experience in university and government laboratory environment, seeks creative employment, United States or Australia, in arts, media, public affairs, advertising, or communication. U.K. citizen. Box 76, SCIENCE. 5/29; 6/5

POSITIONS WANTED

Cellular Immunologist/Biochemist. Ph.D. Background in biochemical mechanisms of infectious disease and inflammation. Experienced in cell culture, host-parasite interactions, phospholipid metabolism, eicosanoid synthesis, and signal transduction mechanisms. Seeking research position in the New England area. Box 75, SCIENCE. 5/29; 6/5

Living-Cell Biologist/Microscopist. Ph.D. plant cell biology 1978; research includes intercellular transport of fluorochromes and radiotracers, cytoplasmic viscosity measurement, sieve tube structure, heavy metal localization in cells, nanosecond FDA studies of membranes. Twelve years of experience with microscopical imaging including Nomarski DIC, cinemicrography, video-enhanced contrast. Teaching, supervisory, jungle expeditionary experience. Seeks teaching/research position in biology or biomedical imaging. Box 77, SCIENCE. 5/29; 6/5

Organic Chemist, Ph.D. Research on organic intermediates, polymers, monomers, dyes for textiles and hair, pigments, surfactants, textile and leather chemicals, thickeners, biocides, water repellents, fatty acid derivatives, oil well compounds, office copying papers, heterocyclic and organometallic compounds, organic electrochemistry. Development through pilot plant and commercial production. Patents and publications. Microcomputer experience. Box 78, SCIENCE. X

Organic/DNA-Protein Chemist, Ph.D. Innovative researcher with industrial experience in DNA chemistry, protein chemistry, solid phase chemistry, nonradioactive diagnostics, and DNA therapeutics. Seeking group leader position. Box 79, SCIENCE. X

Ph.D. Biophysics, Computational and Theoretical. Twenty publications; 4 years of postdoctoral experience in protein structure, polymer configuration, and conformational analysis; seeks industrial, hospital, academic, or senior postdoctoral position. Box 73, SCIENCE. X

Pharm/Tox, Ph.D. with 3-year NIH grant to start 1 July 1987 paying 100% of salary and 6 years of university/medical school and NIH experience, seeks tenure-track faculty position with University/Medical School with interest in neurotoxicology. Box 80, SCIENCE. 5/29; 6/5

Plant Physiologist, Ph.D. Postdoctoral experience. Expertise in tissue culture and hormone physiology. Recently established a forage stress physiology research program. Desire relocation to western United States in academic or industrial environment. Box 81, SCIENCE. 5/29; 6/5, 12

Protein Biochemist/Cell Physiologist. Ph.D. Ten years of experience isolating and characterizing protein for structure and function; seeks academic or industrial position. Strong background in biochemistry, electrophysiology, and retinal physiology. Box 69, SCIENCE. 5/29; 6/5

Surgeon/Ph.D. Foreign M.D., experienced surgeon, microsurgeon, U.S. Ph.D. in cellular biology. Experienced cardiovascular research in ischemic damage, nucleotide metabolism, nutrition, substrate utilization, free radical damage. Radioactive label isolated perfused working rat heart, myocyte isolation, experimental cardiovascular surgery in animal. HPLC, enzymology. Seeks postdoctoral research position at any location. Reply to: 1519 1/2 Blair Avenue, St. Paul, MN 55104. X

Tumor Virologist/Biochemist/Molecular Biologist, Ph.D. 1983. Postdoctoral research and teaching experience. Broad research background: viral/cellular oncogenes, gene expression, herpesviruses, DNA tumor viruses, tumor biology, DNA replication, transcription, nucleic acid enzymology. RNP's structure and function, protein phosphorylation. Publications. Seeks challenging research/teaching position in pharmaceutical industry/hospital/university. Box 70, SCIENCE. 5/29

Zoologist, B.S. Animal Scientist, B.S. Experience; neural-behavioral, teratology, and toxicology research. Seeks a position in any type of animal research. Will relocate. Available: 15 June 1987. Box 74, SCIENCE. 5/29; 6/5, 12

POSITIONS OPEN

RESEARCH CENTER ASSISTANT DIRECTOR

Manage the operation of a multidisciplinary research unit. Requires skills in financial management, budgeting and building operations, computer literacy, and a good understanding of research requirements. A Ph.D. in the biological sciences is preferable.

Please send curriculum vitae to: **The Director, Rosentel Basic Medical Sciences Research Center, Brandeis University, 415 South Street, Waltham, MA 02254.**

An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGY. Tenure-track position available for September 1987. Requires Ph.D. with research program. Experience teaching SEM/TEM with either botany tract courses or histology, cell structure, and molecular biology.

Send curriculum vitae and three letters of reference by 22 June 1987 to: **Dr. Alberta Albrecht, Biology Department, Manhattanville College, Purchase, NY 10577.** *Equal Opportunity Employer.* Liberal arts college just north of New York City.

ASSISTANT PROFESSOR DEPARTMENT OF UROLOGY

The Department of Urology at the Medical College of Wisconsin, in Milwaukee, has a full-time opening for a BC/BE urologist, beginning 1 July 1987. Special interest in stone disease is required. This individual will be responsible for research, teaching, and clinical activities, including the establishment of an independent research program. Applications can be made by sending your curriculum vitae to: **Russell K. Lawson, M.D., Professor and Chairman, Department of Urology, Medical College of Wisconsin, 9200 West Wisconsin Avenue, Milwaukee, WI 53226.**

ASSISTANT/ASSOCIATE PROFESSOR IN VIRAL IMMUNOLOGY. The Department of Veterinary Microbiology and Parasitology in the College of Veterinary Medicine at Texas A&M University anticipates having a vacancy for an assistant or associate professor in the area of viral immunology after 1 September 1987.

The Department is seeking an immunologist or a virologist with an interest in viral immunology. The successful candidate will have a Ph.D. degree and a record of high quality research in the area of immunology or virology as demonstrated by publications and extramural support. A D.V.M. degree is desirable but not essential.

The responsibilities of the position will include participation in immunology or virology instruction and the conduct of high quality research into viral immunity in association with an existing team of pathologists, virologists, and molecular virologists. Their principal research area involves avian viruses but studies on mammalian viruses are not excluded.

This is a full-time, tenure-track position. The rank and salary will be negotiable and competitive.

Applications will be received until 31 July 1987 or until the position is filled. They should be submitted, together with a list of publications and the names and addresses of at least three referees, to: **Dr. Ian R. Tizard, Room 119, Veterinary Medical Science Building, Veterinary Microbiology and Parasitology Department, College of Veterinary Medicine, Texas A&M University, College Station, TX 77843-4467.**

Texas A&M University is an Equal Opportunity Employer. Members of minority groups are especially encouraged to apply for this position.

AQUATIC BIOLOGIST

Immediate opening for Ph.D. aquatic biologist as program manager for aquatic mesocosm and large-scale pesticide impact studies. Successful candidate must demonstrate ability to: manage people, plan, and implement applied research and meet schedules. Exceptional writing skills are a must. Desired qualifications include expertise in all aspects of small impoundment biology including taxonomy, fish productivity, and systems function. Send résumé and salary requirements to:

**Wildlife International Ltd.
305 Commerce Drive
Easton, MD 21601
Telephone: 301-822-8600**

POSITIONS OPEN

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Immediate openings for M.S. and B.S. aquatic biologists for aquatic mesocosm and large-scale pesticide impact studies. Successful candidates must be skilled in all aspects of biological sampling procedures, along with expertise in invertebrate taxonomy, and fish productivity. Studies are located in several geographical areas. Send résumé with salary requirements to:

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305 Commerce Drive
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ASSISTANT/ASSOCIATE PROFESSORSHIPS IN PHARMACOLOGY

The University of Pittsburgh School of Medicine has embarked upon a major program to expand the Department of Pharmacology. Three tenure-track positions are available for the next academic year (1987 to 1988). Applicants will be expected to develop a vigorous research program, participate in the medical and graduate programs, and to interact with existing clinical and basic science projects. Previous experience in lung and cancer pharmacology are of particular interest, although candidates in all areas of pharmacology will be considered.

Applicants should forward a letter of application, curriculum vitae, and the names of three references to:

**Search Committee
University of Pittsburgh
School of Medicine
Department of Pharmacology
518 Scaife Hall
Pittsburgh, PA 15261**

The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer. Deadline for application is 30 June 1987. Appointment will begin September, 1987.

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Postdoctoral associates to study in established laboratory on the fundamental biochemical mechanisms involved in the initiation and regulation of chromosomal DNA replication. Studies with purified proteins include (i) the nature of protein-DNA interactions in nucleoprotein structures formed at replication origins; (ii) role of chromatin structure and transcription in regulating initiation of DNA replication; (iii) enzymology of macromolecular machines; and (iv) physiological roles of heat shock proteins. Salary \$20,000. Recent Ph.D. preferred. Send curriculum vitae and the names, addresses, and phone numbers of three references to: **Professor Roger McMacken, Department of Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205.**

COMPARATIVE BIOCHEMIST/ PHYSIOLOGIST

The Department of Biological Sciences at the State University of New York (SUNY), University Center at Binghamton, invites applications for a tenure-track faculty position in comparative biochemistry/physiology. Proficiency in metabolic/molecular techniques in areas related to environmental adaptation is desired along with an interest in contributing to the development of a center for organized research in this area of specialty. Candidates must have a demonstrated ability to successfully support a productive research laboratory, to maintain a dynamic doctoral training program, and to interact with quality undergraduate students.

Rank is open and salary commensurate with professional experience and achievements. Qualified applicants should submit a letter of application, including a statement of research and teaching interests, curriculum vitae, copies of recent publications, and the names and addresses of three referees to:

**Dr. Julian Shepherd
Search Committee Chairman
Department of Biological Sciences
SUNY Binghamton
Binghamton, NY 13901**

by 30 June 1987. *State University of New York is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

CHAIRMAN DEPARTMENT OF PHYSIOLOGY SCHOOL OF BASIC HEALTH SCIENCES VIRGINIA COMMONWEALTH UNIVERSITY

Applications are invited for the position of Chairman of the Department of Physiology on the Health Sciences campus. The successful candidate must qualify for the rank of professor and hold a Ph.D. and/or M.D., or equivalent. The candidate must have a distinguished record of research in physiology or a closely related discipline, including extramural grant support and peer-reviewed publications. The candidate must have experience in advising predoctoral students, postdoctoral research training, and health science training, and demonstrated capability for leadership. A complete job description and list of qualifications will be sent on request.

Applications, including curriculum vitae and the names of three references, should be sent to:

**Secretary, Physiology Chairman
Search Committee
MCV Station-Box 110
Richmond, VA 23298-0001**

Applications must be received by 5:00 p.m. on 6 July 1987 or until a suitable candidate is identified. *Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

NEHEMIAH AND NAOMI COHEN CHAIR OF PULMONARY RESEARCH AT GEORGETOWN UNIVERSITY

Georgetown University School of Medicine seeks a highly qualified productive scientist to hold this newly endowed Chair of Pulmonary Research in the Department of Medicine. An applicant or nominee may hold an M.D. or Ph.D. or both, may currently be a member of a basic science or clinical department, and must be actively engaged in contemporary basic or clinical investigation related to pulmonary diseases. Curriculum vitae, research summary, and references should be sent before 1 September 1987 to:

**John C. Rose, M.D.
Search Committee Chairman
Kober-Cogan 214
Georgetown University Medical Center
Washington, DC 20007**

Georgetown University is an Affirmative Action/Equal Opportunity Employer.

Position available for **CHAIRMAN OF DIVISION OF NEUROLOGY**, Department of Neuroscience, University of North Dakota School of Medicine. This position requires Board certification in neurology and credentials commensurate with a full-time academic position at the associate or full professor level. Subspecialty and research interest in behavioral neurology desirable. Applicants send curriculum vitae to: **Richard Stadter, M.D., M.P.H., Chairman, Department of Neuroscience, 1919 Elm Street North, Fargo, ND 58102.** *We are an Affirmative Action, Equal Opportunity Employer.* Position closes 15 June 1987.

CHIEF OF CLINICAL IMMUNOLOGY ROSWELL PARK MEMORIAL INSTITUTE BUFFALO, NEW YORK 14263

The Roswell Park Memorial Institute is seeking a Chief of a newly created Clinical Immunology Department, who will have responsibilities for the development of basic as well as clinical research programs in the field of immunobiology and the direction and administration of the Department. The candidate will be encouraged to develop or set up independent research projects and/or collaborative research programs with existing clinical and basic science departments of the Institute. The candidate must be Board-certified in internal medicine and have strong qualifications as an established research investigator in oncology in general and in immunobiology in particular. The qualifications include substantial academic credentials in order to qualify for appointment as associate professor or professor at SUNY at Buffalo School of Medicine. Apply by sending curriculum vitae to: **Andrew A. Gage, M.D., Associate Institute Director for Clinical Affairs, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, NY 14263.** *An Affirmative Action/Equal Employment Opportunity Employer. M/F.*

POSITIONS OPEN

UNIVERSITY OF OTAGO DUNEDIN—NEW ZEALAND CHAIR IN PSYCHOLOGY

Applications are invited for appointment to a Chair in the Department of Psychology previously held by the late Professor G. V. Goddard. Applicants should have a substantial research record in any area or areas of psychology. The successful applicant will be expected to assume the Chairmanship of the Department for an initial term of 5 years. Salary: Professorial salaries are paid within a range between \$NZ62,000 to \$NZ77,500 per annum.

Intending applicants should write for further particulars and a description of the Department, available from the undersigned, P.O. Box 56, Dunedin, New Zealand.

Applications quoting reference number A87/8 close in New Zealand on 31 July 1987. D. W. Girvan, REGISTRAR.

The University of California, Irvine, Department of Psychiatry and Human Behavior, under the direction of William E. Bunney, M.D., Professor and Chairman, is seeking a DIRECTOR of a 93-bed inpatient psychiatric facility. The position will involve overseeing the inpatient and outpatient clinical, teaching, and research activities of the hospital. This is a full-time university faculty position at the level of professor (tenured). Candidates must be board certified in psychiatry, have extensive inpatient and outpatient administrative experience, have experience administering psychiatric research units, have published extensively in biological psychiatry, and must be recognized internationally and nationally for psychiatric research accomplishments. Experience treating and conducting research in schizophrenia is desired. Salary and academic rank commensurate with qualifications and experience. Send curriculum vitae and letters of reference by 20 July 1987 in care of: William E. Bunney, M.D., Professor and Chair, Department of Psychiatry and Human Behavior, University of California, Irvine, CA 92715. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

DIRECTOR CHRISTENSEN RESEARCH INSTITUTE MADANG, PAPUA NEW GUINEA

Applications invited for above position. Independently funded institute devoted to research in marine and terrestrial biology. Applicants should have Ph.D. in a relevant subject and experience in working in tropical Third World environments. Salary PNG Kina 17,000 and residential and travel leave benefits. Send curriculum vitae and names of two referees by 5 June 1987 to: Dr. Frank Talbot, Executive Director, The California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118-9961.

DIRECTOR, TOXICOLOGY AND MICROBIOLOGY DIVISION

The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of Director, Toxicology and Microbiology Division (TMD). The position is located in the Health Effects Research Laboratory, Cincinnati, Ohio. This is a permanent full-time federal civil service position. The salary range is \$53,830 to \$69,976 per annum. Candidates having an M.D. degree may be eligible for an additional \$10,000 annual supplement.

The incumbent is responsible for directing/supervising TMD's research studies to identify, characterize, and quantify health risks that may result from exposure to biological or chemical agents found primarily in water. Appropriate epidemiological methods, animal models, and in vitro test systems are utilized to identify overt or potential effects of pollutants. The Division has a current staff of about 85 persons, 20 of whom are principal investigators trained at the doctoral level.

Desired qualifications for the position include: a Ph.D. (toxicology, biology, biochemistry, microbiology, or chemistry) or an M.D. degree; research experience including environmental and/or health effects; supervisory and managerial experience. U.S. citizenship is required.

Further information including detailed qualification requirements and an application packet may be obtained by contacting: Vicki Horsley, telephone: 513-569-7804, Monday through Friday, 7:00 a.m. to 4:30 p.m. EST. In order to receive an application packet, you must call by close of business on 5 June 1987. *An Equal Opportunity Employer.*

LOVELACE



MEDICAL CENTER

Physiologist

Postdoctoral position available October 1, 1987 for a Physiologist to study respiratory, cardiovascular, and metabolic adaptation to hypoxia. Both medical and comparative aspects are studied using standard cardiovascular methods, Doppler Flowmetry and NMR Spectroscopy. Send CV, statement of research interest, and names of three references to:

Stephen C. Wood, Ph.D.
Bioengineering
Research Division
Lovelace
Medical Foundation
2425 Ridgecrest Dr. SE
Albuquerque, NM 87108

Equal Opportunity
Employer M/F/H/V

Research Associate

Growth Factors

California Biotechnology Inc., a leading biotechnology company engaged in the development of human therapeutics has an opening for a Research Associate.

The successful candidate will work with a group that is responsible for research in the growth factors and angiogenesis. We require a B.S. or M.S. degree with a minimum of at least one year laboratory experience in techniques of molecular biology.

We offer a stimulating work environment with a competitive compensation and benefits package. Please submit resume and the names of three references to: California Biotechnology, Human Resources, Dept. MF-AP, 2450 Bayshore Parkway, Mountain View, CA 94043. An equal opportunity employer.

CAL BIO

Biology Associates

The Pathology and Toxicology Research Group of The Upjohn Company is seeking highly motivated biologists/toxicologists to

assist veterinary pathologists with drug safety and toxicity studies in laboratory animals and with basic and applied research. Qualified applicants should have a B.S. or M.S. in biological or biomedical science with experience in using laboratory equipment and handling laboratory animals, skills in scientific writing and organizing data, and must not be allergic to laboratory animals. Preference will be given to candidates with research experience in one or more of these areas: reproductive biology (testicular tissue culture), cancer biology, animal surgery and/or large animal toxicology procedures.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a rich mix of cultural, educational and recreational pursuits including numerous lakes and a four-season climate. Upjohn offers the opportunity for career growth, a competitive salary commensurate with experience, a comprehensive benefits program and relocation assistance. For confidential consideration, please call from outside of Michigan toll free 1-800-253-8600, ext. 3-6767, (inside Michigan call collect 616-323-6767) to request an employment application be sent to you immediately. Please refer to ad number 1849-A when calling.

Upjohn

Our commitment to scientific excellence continues...

An Equal Opportunity Employer M/F.

POSITIONS OPEN

DIRECTOR CLINICAL CYTOGENETICS LABORATORY

The Department of Laboratories and Pathology at Los Angeles County—University of Southern California Medical Center, the principal teaching hospital of the University of Southern California School of Medicine, seeks a Director for its Cytogenetics Laboratory. Requirements include a Ph.D. in cytogenetics or related field, experience in medical diagnostic cytogenetics and molecular genetics, and eligible for or certified by the American Board of Medical Genetics. Responsibilities include directing the cytogenetics laboratory, establishing an independent research program and participation in the teaching programs of the Department of Pathology. Faculty appointment in the University of Southern California School of Medicine at a rank commensurate with qualifications and experience.

For further information, telephone 213-226-7151. To apply, send curriculum vitae and three references to: **Edward T. Wong, M.D., Associate Director of Laboratories and Pathology, LAC/USC Medical Center, Room 2900, 1200 North State Street, Los Angeles, CA 90033.**

EMBRYOLOGIST/CELL BIOLOGIST GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE WASHINGTON, D.C.

The Department of Obstetrics and Gynecology seeks a qualified Ph.D. or equivalent, with a minimum of 2 years of postdoctoral training and experience for a full-time clinical laboratory and research position. Expertise in human in vitro fertilization, including gamete and embryo biology and tissue culture techniques is desirable. Academic rank open and commensurate with experience. Competitive salary and outstanding benefits are offered.

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

James A. Simon, M.D.
c/o Office of the Chairman
Department of Obstetrics and Gynecology
Georgetown University School of Medicine
3800 Reservoir Road, NW
Washington, D.C. 20007

Georgetown University is an Affirmative Action/Equal Opportunity Employer.

ENVIRONMENTAL RISK MANAGEMENT

Resources for the Future (RFF), an independent non-profit research and educational organization, has created a new Center for Risk Management. The Center will conduct and sponsor research and educational activities related to the identification and assessment of risks to health and the environment, the design of appropriate public and private policies to deal with them, and effective communication between policymakers and the public of information about these risks and policies.

A small interdisciplinary staff is now being recruited to help define and initiate the research agenda and other activities of the Center. Candidates should have a Ph.D. or equivalent degree (or comparable experience), a commitment to careful and impartial research, and an interest in the equitable, effective, and efficient management of risks to health and the environment.

Consideration will be given those with backgrounds in biostatistics, the life sciences, engineering, law, or the social and natural sciences. Two-year appointment with possible extension. Salary commensurate with experience; excellent benefits. Please send cover letter, curriculum vitae, and the names, addresses, and phone numbers of three professional references to: **Dr. Paul R. Portney, Director, Center for Risk Management, Resources for the Future, 1616 P Street NW, Washington, DC 20036.** RFF is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN IMMUNOLOGY—MICROBIOLOGY. University of Hawaii has a tenure-track 9-month position at the assistant or associate professor level beginning August 1988. Ph.D. or equivalent required. Application deadline: 31 December 1987. Submit curriculum vitae, names of at least three professional references, and representative publications, if available, to: **Dr. Philip C. Loh, Chairman, Department of Microbiology, University of Hawaii, Honolulu, HI 96822; telephone: 808-948-8603.** An Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION IN BIOCHEMICAL ENGINEERING. The Department of Chemical Engineering invites applications for a full-time faculty position in the area of biochemical engineering at the assistant professor level. The appointed faculty member will also be associated with the Tufts Biotechnology Engineering Center, a multidisciplinary teaching and research program involving engineering and biochemical sciences. The facilities of the Center include an advanced pilot plant fermentation and separations facility and a fully equipped laboratory for cell culture.

Applicants should have the capability of developing programs of sponsored research and a strong interest in teaching courses at the undergraduate and graduate levels. Industrial experience is desirable but not essential. Applicants must have a doctoral degree in chemical engineering or a closely related field. Starting date: 1 September 1987.

In order to ensure full consideration, applications must be received by 15 June 1987. Interviews will be conducted during the application period. Applications will be accepted after 15 June 1987 until the position is filled. Send résumés and names of references to: **Professor Gregory Botsaris, Department of Chemical Engineering, Tufts University, Medford, MA 02155.** An Affirmative Action/Equal Opportunity Employer.

TUFTS UNIVERSITY Medford/Somerville

FACULTY POSITION REMOTE SENSING SCIENTIST COLLEGE OF FORESTRY AND NATURAL RESOURCES COLORADO STATE UNIVERSITY

The Department of Forest and Wood Sciences and the Natural Resource Ecology Laboratory are seeking a highly qualified remote sensing scientist to fill a position (9-month, tenure-track) at the associate or full professor rank, beginning on or after 20 August 1987, and subject to the availability of funds. The scientist will teach remote sensing and related courses in the Department of Forest and Wood Sciences, and will initiate and participate in cooperative research activities with other Departments in the College, including the Natural Resource Ecology Laboratory.

Responsibilities will include developing a strong research and graduate training program related to broad-scale inquiries, such as analysis of global and regional ecosystems, and applications of geographic information systems. A proven set of research credentials is essential. A Ph.D. and achievement record in subject areas broadly related to Natural Resources are required.

Résumé and names of three references should be sent by 30 June 1987 to: **Philip N. Omi, Department of Forest and Wood Sciences, Colorado State University, Fort Collins, CO 80523.**

Colorado State University is an Equal Employment Opportunity/Affirmative Action Employer. E.O. Office, 314 Student Services Building.

TWO FACULTY POSITIONS IN MARINE BIOLOGY/ BIOLOGICAL OCEANOGRAPHY UNIVERSITY OF SOUTHERN CALIFORNIA

As part of the reorganization of Marine Science Programs at the University of Southern California (USC), applications are invited for two tenure-track faculty positions in the Marine Biology Research Section of the Department of Biological Sciences. One is at a senior level (associate or full professor), and a second at a junior level (assistant professor); one position will be available beginning in the 1987 to 1988 academic year; the second position in 1988 to 1989. Teaching responsibilities will be in specialty areas for undergraduate and graduate students. Salaries are based on a 9-month appointment and are at a level commensurate with experience of the candidates appointed. Candidates with demonstrated scholarly accomplishments and a vigorous research program in the following areas are encouraged to apply: Organismic, cellular, or molecular approaches to solving problems in either experimental marine biology or biological oceanography. The positions will remain open until candidates are appointed. To apply send a cover letter and two copies of a résumé to: **Dr. Cornelius W. Sullivan, SEARCH, Marine Biology Research Section, Department of Biological Sciences, Los Angeles, CA 90089—0371. Telephone: 213-743-6904.**

Candidates are encouraged to apply regardless of gender or ethnic origin. University of Southern California is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS: BIOCHEMISTRY/MOLECULAR BIOLOGY. Applications are invited for two positions as assistant professor beginning 1 September 1987. Candidates must have Ph.D., postdoctoral experience, and a plan for an independent research program. Positions involve teaching at undergraduate, graduate, and medical school levels. Send curriculum vitae and references to: **Chairman, Search Committee, Department of Biochemistry, Science Research Building, North Texas State University, Denton, TX 76203.** NTSU/TCOM is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION: Tenure-track position at the instructor or assistant professor level in the Department of Physical Therapy in the School of Health Related Professions at the University of Mississippi Medical Center. M.S. in anatomy required, Ph.D. in anatomy preferred. The successful candidate will teach gross anatomy in the semester and neuroanatomy in the spring semester to physical therapy students. Additional responsibilities include advising students, participating on committees and in research projects. Salary very competitive; rank commensurate with experience. If the successful candidate has the M.S. degree, there is the potential for further graduate work in the basic biomedical sciences. The possibility exists for a joint appointment in the Department of Anatomy in the School of Medicine. **Neva Greenwald, Department of Physical Therapy, School of Health Related Professions, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.** The University of Mississippi Medical Center is an Equal Opportunity Employer, M/F/H/V.

HISTOLOGY RESEARCH SCIENTIST

Collagen Corporation is engaged in the research, development, production, and marketing of differentiated biomedical products. Our state-of-the-art environment combined with the clinical relevance of our core technology presents a challenging opportunity for a research scientist with histology experience.

Functioning as a resource person for our soft-tissue program, you will be responsible for interpreting histological specimens for the efficacy of collagen-based materials in soft-tissue augmentation and wound healing. This will involve implementing new histological, histochemical, and/or analytical procedures or techniques; designing and conducting experimental studies, and preparing reports suitable for submission to the FDA. A Ph.D. in a medical or related discipline, a minimum of 1 year of post-degree experience, and extensive training in microscopic anatomy are required. Background in connective tissue research, pathobiology of wound healing, and/or dermatology desirable.

Collagen Corporation strongly encourages and rewards professional contribution. To learn more about this position, please send your curriculum vitae, bibliography and the names of several references to: **S. Hansen, Human Resources, Collagen Corporation, 2500 Faber Place, Palo Alto, CA 94303.** We are an Equal Opportunity Employer.

COLLAGEN Corporation

PENN STATE HUMAN GENETICIST. The Department of Anthropology seeks human molecular geneticist for its Anthropological Genetics Laboratory. This tenure-track position provides an opportunity for a serious scientist who prefers an academic environment to take a leadership role in the application of modern methods to the genetic basis, origins, and evolution of human variation, open but not restricted to biomedical traits. Exceptional living conditions accompanied by excellent resources and an established interdepartmental Graduate Program in Genetics. Our department has two members of U.S. National Academy of Science and tradition of academic leadership. Send curriculum vitae and names of three references to: **Kenneth Weiss, Head, Department of Anthropology, Penn State, Box S. 409 Carpenter, University Park, PA 16802 (telephone 814-865-2509).** Apply by 15 August; search will remain open until candidate has been found. An Equal Opportunity/Affirmative Action Employer.

DEAN

SCHOOL OF ALLIED HEALTH PROFESSIONS

Hahnemann University
Philadelphia, PA

Applications and nominations are invited for the position of Dean of the School of Allied Health Professions (SAHP). Programs offered in the SAHP lead to Associate or Baccalaureate degrees in Biomathematics, Humanities and Social Sciences, Laboratory Science, Mental Health Technology, Nursing, Physician Assistant, and Radiologic Technology. The SAHP is accredited by the Middle States Association of Colleges and Schools.

The applicant must possess an earned doctorate and have substantial proven administrative experience. Achievement in scholarship and experience teaching in an academic health center is important. The Dean reports to the Vice President for Academic Affairs.

The deadline for application is July 1, 1987; the position is available September 1, 1987. Applications should include a current curriculum vitae and a list of at least 5 references. Nominations and applications should be sent to:

Peter S. Amenta, Ph.D.
Chair, Search Committee, Dean SAHP
Department of Anatomy



MS 408, Broad & Vine, Phila., PA 19102-1192

Hahnemann University is an Affirmative Action/Equal Opportunity Employer

Plant Biotechnology Research

The Plant Genetics Department at Pfizer Central Research, in conjunction with numerous plant breeding stations worldwide, conducts research and development for DeKalb-Pfizer Genetics, a leading agricultural seed company. We have openings for PhD level scientists to join a multidisciplinary research program working on the genetic improvement of corn. Individuals with experience in the following areas should apply: physiology of desirable agronomic traits; tissue culture and plant regeneration; transformation technology.

These positions offer excellent opportunities for professional recognition and career growth. We offer an excellent salary, benefit and relocation package plus an attractive southeastern Connecticut shore location. Qualified applicants should submit their resume, including the names, addresses and phone numbers of three professional references, to: Dr. J.K. Larson, Manager of Employment, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.



An equal opportunity employer.

DRUG METABOLISM

The Squibb Institute for Medical Research is recognized as an international leader in the research and development of pharmaceuticals and related health care products. We currently have two exceptional opportunities in the Department of Drug Metabolism.

RESEARCH INVESTIGATOR PhD in Pharmacology

The successful candidate will participate in preclinical research aimed at the discovery of new drugs. The individual selected will work closely with other Drug Metabolism scientists and with pharmacologists and medicinal chemists. Qualified candidates should have Ph.D. in Pharmacology or related field and 0-3 years of postdoctoral experience in Drug Metabolism. Familiarity with modern analytical instruments including GLC, HPLC, GC/MS and LSC is required, as well as expertise in developing and running assays for isotopically labeled and unlabeled drugs and metabolites in biological fluids. He/she should also possess excellent oral and written communication skills and should have the ability to work as part of a multi-disciplinary team of scientists.

RESEARCH INVESTIGATOR PhD Biochemistry/ Analytical Chemistry

The successful candidate will participate in preclinical research and development studies of drug candidates. The individual selected will be responsible for developing and performing assays of drugs and their metabolites in biological material and the isolation and identification of drug metabolites. Qualified candidates should have a Ph.D. in Biochemistry, Analytical Chemistry, or related field. Familiarity with modern analytical instruments including GLC, HPLC, GC/MS, and LSC is essential. Familiarity with the use of radiolabeled compounds, and with applied pharmacokinetics would be additional assets. Excellent written and oral communication skills are essential.

The Squibb Institute is located in Princeton, NJ a pleasant semi-rural setting convenient to both Philadelphia and New York. In addition to an excellent salary and comprehensive benefits package, we can offer the opportunity for exceptional scientists to pursue stimulating careers. For confidential consideration, please submit your curriculum vitae to: **The Squibb Institute for Medical Research, Human Resources Department 508, P.O. Box 4000, Princeton, NJ 08543-4000. Please indicate which position is desired.** An Equal Opportunity Employer.



SQUIBB

Where science comes to life.

POSITIONS OPEN

IMMEDIATE OPENING

A position to establish a cell culture laboratory for growing cerebral endothelium and tumor cell types. Additional experience in electron microscopy and in vivo techniques is desirable. Salary is commensurate with experience.

Richard Broadwell, Ph.D.
Division of Neurological Surgery
University of Maryland
Medical School Teaching Facility
10 South Pine Street; Room 634
Baltimore, MD 21201
Telephone: 301-328-5482

IMMUNOLOGIST

Mercer University School of Medicine invites applications for a tenure-track position in immunology. Applicants must possess a Ph.D. and/or M.D. with postdoctoral training. The successful candidate will participate as a tutor in a problem-based curriculum and be expected to develop an active research program. Applications will be accepted until 15 June 1987. Applicants are requested to submit curriculum vitae, a brief statement of professional objectives and research interests, and the names and addresses of three references to: **Dr. Robert Moon, Chairman, Division of Basic Medical Sciences, Mercer University School of Medicine, Macon, GA 31207.** An Equal Opportunity/Affirmative Action Employer.

MICROBIOLOGIST

Tenure-track position at the assistant professor level beginning 1 September 1987 or 1 January 1988. Ph.D. required. Teaching duties include microbiology at the undergraduate and graduate levels. Research specialty in microbial metabolism, physiology, or genetics preferred. Submit curriculum vitae, statement of research interest, names and phone numbers of three references to: **Dr. James M. Dooley, Department of Biology, Adelphi University, Box 701, Garden City, NY 11530** by 15 June 1987. Equal Opportunity/Affirmative Action Employer, M/F.

POSITIONS OPEN

MICROBIOLOGIST. Tenure-track position, rank and salary negotiable and dependent upon qualifications. Requirements: Ph.D. and documented training in the area of infectious diseases essential; D.V.M. (or equivalent), evidence of recent research productivity, and postdoctoral experience involving use of current techniques in infectious disease research preferred. Successful candidate will develop an independent research program in infectious diseases, contribute to teaching in the professional and graduate curriculum in bacteriology, and may collaborate with other faculty on projects related to bacterial infections. Opportunity for a progressive scientist to interact with others in a department with strong interdisciplinary programs in infectious diseases. Laboratory facilities and technical support provided. Send curriculum vitae and names of at least three references to: **Dr. Richard Wescott, Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, Washington 99164-7040** by 1 September 1987.

Washington State University is an Equal Opportunity/Affirmative Action Employer. Members of ethnic minorities, women, Vietnam-era or disabled veterans, persons of disability and/or persons between the ages of 40 and 70 are encouraged to apply.

MOLECULAR BIOLOGY HORMONES AND GROWTH FACTORS

Individuals with a strong background in molecular biology and a Ph.D. degree are invited to apply for **POSTDOCTORAL FELLOW AND/OR RESEARCH ASSOCIATE** position in an established molecular endocrinology laboratory. Projects include the study of the structure, function, and regulation of newly discovered members of the prolactin family of hormones, and pituitary growth factors. Applicants should send curriculum vitae, a brief description of their research interest, and three letters of reference to: **Dr. Henry G. Friesen, Department of Physiology, University of Manitoba, 770 Bannatyne Avenue, Winnipeg, Manitoba, Canada R3E 0W3.** Both men and women are encouraged to apply. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

POSITIONS OPEN

MOLECULAR BIOLOGIST at assistant professor level with Ph.D. to establish cellular and genetic strategies for the study of primary brain tumors. Submit curriculum vitae and three references by 15 June 1987 to: **Dr. Dennis D. Spencer, Chief, Neurological Surgery, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510.** Minorities and women are urged to apply. Yale University is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR BIOLOGY/NEUROPHARMACOLOGY: Assistant professor, tenure-track positions (2) in the general area of molecular biology as applied to neuropharmacology. Candidates should have an M.D. or Ph.D. in pharmacology, biochemistry, molecular biology, neurobiology, or a related subject and at least 2 years of postdoctoral experience in cloning and expression of receptors, enzymes, peptides, etc. of excitable tissues and/or protein biochemistry/immunology of these tissues. Positions include joint appointments in pharmacology and in new Medical Biotechnology Center and involve teaching medical and graduate students and developing strong independent research programs, with many opportunities for collaborations. Salaries will be commensurate with experience. Send curriculum vitae, statement of research interests, reprints of key publications, and names of three references by 1 July 1987 to: **Dr. David Burt, Head, Molecular Biology Search Committee, or Dr. E. X. Albuquerque, Chairman, Department of Pharmacology and Experimental Therapeutics, University of Maryland School of Medicine, Baltimore, MD 21201.** An Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST/VIROLOGIST

Lofstrand Laboratories, Ltd., has position for a Senior Molecular Biologist. The applicants must have a Ph.D. (or equivalent degree) and at least 3 years of postdoctoral research, with a strong expression system. The successful applicant will be expected to carry out independent research with outside collaborators as well as assume responsibilities as Department Head. Estimated starting date: 1 September 1987. Send curriculum vitae, list of publications, and three letters of reference to: **Lofstrand Laboratories, Ltd., 8042 Cessna Avenue, Gaithersburg, MD 20879.**

Ph.D. Protein Chemist/ Biotechnologist

The Pharmaceutical Development Division of Biogen Research Corp. is seeking a research scientist to fill a position in the Process Development Department.

The applicant should have or be about to gain a Ph.D. in the field of protein chemistry. Postdoctoral or industrial experience of 1-5 years would be advantageous. Candidates should have a proven ability to conduct original research and have an interest in the purification of proteins.

Specific responsibilities will include the development of large scale processes for the manufacture of recombinant proteins for therapeutic uses and supervising the implementation of such processes in a production environment.

The candidate will be joining an established and expanding research team and will be expected to interact with Production, Quality Assurance and Regulatory personnel. In this permanent position, the candidate will need to be a "self starter" and have an ability to motivate others.

Biogen offers an excellent compensation and benefits package. Please forward your resume to **Dept. PCB 5/87, Manager of Human Resources, Biogen, 14 Cambridge Center, Cambridge, MA 02142.** An equal opportunity employer.

BIOGEN

RESEARCH OPPORTUNITIES IN PLANT GENETIC ENGINEERING

The Dow Chemical Company, in Midland, Michigan, is a recognized global leader in the agricultural chemical industry. Expanded research efforts in the area of plant genetic engineering have created an immediate need within the Biotechnology Laboratory in the Central Research Department for qualified researchers in the following areas:

PLANT MOLECULAR BIOLOGY/ GENE CLONING

The successful candidate will have a Ph.D. and two or more years of postdoctoral experience in molecular genetics. Experience in gene isolation, cloning and expression is required; experience with construction of plant cloning vectors is highly desirable. Research efforts will be directed toward introduction of genes into crop plants, with an increasing emphasis on commercially important monocots.

The above candidate must also possess strong communications skills and a desire to carry out independent research while functioning as part of an interdisciplinary research team.

The Dow Chemical Company offers a stimulating work environment and a competitive salary and benefits package.

Send resume to:
**Technical Recruiting
Department PG
P.O. Box 1655
Midland, MI 48641-1655**



The Dow Chemical Company is an Equal Opportunity Employer.

MICROBIOLOGY Product Development

DIFCO Laboratories, a world leader in products for the microbiology laboratory since 1895, seeks scientists/developers for an expanding effort in immunodiagnostics and microbial metabolism at the new, state-of-the-art, research and development facility in Ann Arbor, Michigan.

Scientists, Immunodiagnostics

Scientists are sought with backgrounds in virology, immunology or chemistry to direct groups involved in development of rapid infectious disease tests. Experience in assay format and automation is desired. Candidates should have a Ph.D. with 1-6 years of postdoctoral experience.

Scientists, Microbial Metabolism

Positions are open for scientists with fundamental training in bacteriology relating to microbial metabolism, clinical or food microbiology. Candidates should have a M.S. or Ph.D. with solid training in bacteriology and/or biochemistry for projects directed at infectious disease testing and industrial based assay systems.

Specialist, Technical Resources

Position entails sourcing, negotiation and acquisition of outside products. Candidates should have good people skills and a thorough understanding of current technologies in microbiology and infectious disease testing. B.S. through Ph.D. levels of education will be considered.

Difco Laboratories offers a competitive salary in a company poised for substantial growth. Please send your resume and salary requirements to:



Quality Products
for Microbiology

D.J. Schafer
DIFCO LABORATORIES
Research and Development Center
1180 Ellsworth Road
Ann Arbor, MI 48108 USA
EOE M/F

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WRITE TO:

**SCIENCE MAGAZINE
NEW LAB SERVICE DEPT.
1515 BROADWAY
NEW YORK, N.Y. 10036**

PROGRAM MANAGER

OCEANIC BIOLOGY

The Office of Naval Research is seeking a highly qualified individual to plan and manage the university/private industry contract research program in Oceanic Biology. This is a Civil Service position at the GM-13/14/15 levels (\$38,727-\$69,976) depending on qualifications.

The incumbent will initiate, organize, and coordinate broad research projects of both long and short range nature that are essential to the U.S. Navy/Department of Defense in determining its ability to accomplish its mission in the ocean environment. Present major areas of interest to the Oceanic Biology Program are research in marine bioluminescence and optics, arctic oceanography, coastal oceanography, biofouling, extreme environmental habitats, bioacoustics, environmental sensory biology, particle dynamics, and remote sensing. The incumbent may develop new areas.

Applicants must have a Ph.D. or equivalent in biological oceanography and at least one year of professional experience or have acquired a minimum of three years of progressively responsible professional experience. A background including the following is strongly preferred: (1) research experience at sea, (2) an outstanding research publication record, (3) significant management experience in directing/executing research, (4) knowledge of theoretical, observational, experimental, and modeling techniques in biological oceanography including research applications of modern technology, and (5) the ability to manage interdisciplinary oceanographic research programs.

Interested persons should send a list of publications and a resume or Standard Form 171, Application for Federal Employment, (available at Federal Job Information Centers or from the address below), to:

OFFICE OF THE CHIEF OF NAVAL RESEARCH

Civilian Personnel Division, Code 01242P, Attn: Announcement #87-37 (S)
800 North Quincy Street, Arlington, VA 22217-5000

Applications will be accepted through 3 July 1987 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (202) 696-4705.

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POSITIONS OPEN

MANAGER SUPERCOMPUTING SUPPORT CENTER

Syracuse University (SU) Academic Computing Services invites highly qualified candidates to apply for a new position in its Research Computing Services group to establish and manage a Supercomputing Support Center dedicated to helping researchers use supercomputers in their work. Responsibilities include: facilitate access to remote supercomputing facilities, coordinate SU's participation in supercomputing consortia, consult with researchers in access and use of remote systems, create and maintain a library of user documentation, monitor new developments in supercomputing, and plan for future growth and development of the service. Syracuse University offers a comprehensive benefits package, educational opportunities, competitive salaries, and an exciting computing environment that includes several major new research facilities. Minimum education qualifications and experience include a master's degree in physical sciences or engineering, with 5 years of programming experience, including experience using supercomputers. Candidates will be evaluated on the basis of the following skills and characteristics: experience with Fortran programming using supercomputers, understanding of algorithm design and implementation for parallel architectures, understanding of theoretical concepts in physical sciences and engineering, and strong human relations, verbal and written communication, and managerial skills. Deadline for acceptance of applications is 15 June 1987 and the appointment should be made by 30 June 1987. Send résumé, letter of application, and arrange for three letters of recommendation to be sent directly to: **Office of Human Resources, Syracuse University, Skytop Office, Syracuse, NY 13244-5300.**

Syracuse University is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR NEUROBIOLOGIST

Postdoctoral position available for a nucleic acid molecular biologist interested in learning electrophysiology or membrane biophysics. Our laboratories pursue collaborative research on ion channels and neurotransmitter receptors. Recent studies have utilized *Xenopus* oocyte expression; but other systems are of interest as well. [See: Goldin *et al.*, *PNAS* 83, 7503 (1986); Leonard *et al.*, *J. Neurosci.* 7, 875 (1987); Lübbert *et al.*, *J. Neurosci.* 7, 1159 (1987); *PNAS* 84 (June 1987).] Please contact: **N. Davidson or H. A. Lester, Division of Biology 156-29, California Institute of Technology, Pasadena, CA 91125.** *Equal Opportunity/Affirmative Action.*

OPPORTUNITIES FOR DOCTORAL STUDY IN DEVELOPMENTAL NEUROSCIENCE

The College of Staten Island (CSI) and the Institute for Basic Research in Developmental Disabilities (IBR) have agreed to cooperate closely in a joint program to provide a multidisciplinary environment for doctoral and postdoctoral education in molecular, cellular, and developmental neurobiology; in neurobehavior and in the psychology of developmental disabilities. Qualified students interested in neurobiology will be admitted to the Ph.D. Program in Biology of The City University of New York and will work with investigators at IBR and CSI, as well as with other faculty in the CUNY doctoral sub-program in physiology and neuroscience (biology). Research opportunities range from basic topics in modern neurobiology to highly targeted studies related to neurodevelopmental and neurodegenerative disease.

A limited number of attractive fellowships funded by the N.Y. State Office for Mental Retardation and Developmental Disabilities (OMRDD) are available.

For further information write to: **Dr. David Soifer, CSI/IBR, 1050 Forest Hill Road, Staten Island, NY 10314.**

POSTDOCTORAL POSITION for a biochemist or molecular biologist with expertise in site-specific mutagenesis. Expertise in bacterial expression systems desirable. Position with potential for advancement. Send curriculum vitae and three letters of reference to: **R. W. Mahley, M.D., Ph.D., Gladstone Foundation Laboratories for Cardiovascular Disease, University of California, P.O. Box 40608, San Francisco, CA 94140-0608.**

POSITIONS OPEN

PATHOLOGIST—MOLECULAR. The Department of Pathology at the University of California, Los Angeles (UCLA) School of Medicine has a position available at the assistant professor level to start on or before 1 January 1988. Qualifications include an M.D. degree, Board eligibility or certification in anatomic and clinical pathology, eligibility for California licensure, and demonstrated research ability. Specialized training in molecular genetics and/or cell biology is required, and the individual selected will be expected to develop independent diagnostic and research programs in this area. Other duties will include teaching of undergraduate and graduate students and residents. Applications including curriculum vitae, summary of research interests, and names and addresses of four references should be sent to: **P. A. Cancilla, M.D., Chairman, Department of Pathology, UCLA School of Medicine, Los Angeles, CA 90024.** *UCLA is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.*

PLANT MOLECULAR BIOLOGISTS

Two anticipated tenure-track positions available as early as fall 1987 in an established Plant Molecular Biology Research Center with appointment(s) in the Departments of Biological Sciences and/or Chemistry.

Assistant Professor. Candidates must have a demonstrated competence in plant molecular biology and experience in a field of plant biology such as biochemistry, genetics, tissue culture, or recombinant DNA technology. Postdoctoral experience is required. Development and maintenance of a vigorous research program with external funding is expected. Other duties will include a limited amount of formal teaching and the supervision of master's/doctoral students.

Northern Illinois University is a comprehensive university of 25,000 students located in a pleasant, attractive community 65 miles west of Chicago. Send curriculum vitae, statement of research goals, and three letters of reference by 15 July 1987 to: **Dr. Arnold Hampel, Director, Plant Molecular Biology Center, Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115. Telephone: 815-753-1753.** *The University is an Affirmative Action/Equal Opportunity Employer.*

PLANT PHYSIOLOGIST

The University of Montréal, Biological Science Department, invites applications for a tenure-track position at the assistant or associate professor level. The successful candidate will join an emerging Biotechnology research group located at the Montréal Botanical Garden and will be expected to develop or maintain an active research program. Individuals with research experience and expertise in molecular and cell biology are especially encouraged to apply. Undergraduate teaching responsibilities (in French) will include a course in plant physiology. Salary competitive and commensurate with experience. The post is now open and will be filled immediately. Send curriculum vitae, copies of recent publications, and the names of three referees no later than 15 July 1987 to: **Dr. Roch Carbonneau, Director, Department of Biological Science, University of Montréal, C. P. 6128-Succursale "A," Montréal (Québec) Canada, H3C 3J7.**

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

POSITION IN RESPIRATORY PHARMACOLOGY

A sabbatical or postdoctoral position is available for suitably qualified persons to study the nervous regulation of bronchomotor tone, with emphasis being placed on the nonadrenergic noncholinergic inhibitory system. The position is funded by a NIH grant and will be available starting 1 July 1987 for a period of 1 to 3 years. Applicants should have experience in biochemical, immunological, physiological, or pharmacological aspects of airway smooth muscle regulation. Send curriculum vitae and the names of three referees to: **Dr. Louis Diamond, School of Pharmacy, University of Colorado, Boulder, CO 80309-0297.** *The University of Colorado has a strong institutional commitment to the principle of diversity. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including women, members of minorities, and disabled individuals.*

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE ANIMAL CELL CULTURE

Postdoctoral research associate to work on the effects of liquid shear on macromolecular synthesis, recombinant protein expression, and cell morphology in large-scale cell culture. Research involves both anchorage-dependent and suspended cells. A degree and 1 to 2 years of postdoctoral experience in cell biology or a closely related field required. Experience with expression vector systems in animal cells, electron microscopy, and large-scale cell culture is required. Funding guaranteed for 2 years. Starting salary range \$22,000 to \$27,000. Send curriculum vitae and list of three references to: **Dr. E. T. Papoutsakis, Department of Chemical Engineering, Rice University, P.O. Box 1892, Houston, TX 77251.** *An Equal Opportunity Employer.*

POSTDOCTORAL ASSOCIATE/FELLOW

A position is available to investigate the molecular cell biology of intestinal lactase. The primary focus is upon microsequence, intracellular processing, and gene cloning. Send curriculum vitae, statement of research interests, and the names of three references to: **Dr. Richard J. Grand, Pediatric Gastroenterology and Nutrition, New England Medical Center, Box 213, 750 Washington Street, Boston, MA 02111.**

POSTDOCTORAL

Postdoctoral position available in biophysics to study lipid-protein interactions, transfer of lipids between membranes and proteins, and enzymatic processes using NMR spectroscopy of different nuclei and 2D-NMR methods. NMR experience is preferred. Ph.D. in biophysics, biochemistry, chemistry, or related field required. Please send curriculum vitae and three letters of recommendation to: **Dr. James A. Hamilton, Biophysics Institute, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118.** *Boston University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION AVAILABLE for studies concerning multi-drug resistance in human leukemia cells. Relevant experience in molecular biology and membrane structure desired. Annual salary begins at \$22,000. Send curriculum vitae, description of research activities, and the names of two references to: **Dr. Melvin Center, Division of Biology, Kansas State University, Manhattan, KS 66506; telephone: 913-532-6661.** *An Affirmative Action Employer.*

POSTDOCTORAL POSITION/NORTHWESTERN UNIVERSITY MEDICAL SCHOOL: A funded postdoctoral position is available immediately, involving the molecular analysis of genes with altered expression in human myeloid leukemias; current focus is on myeloperoxidase, recently cloned in our laboratory [*Proc. Natl. Acad. Sci.* 84, 2057-2061 (1987)]. Experience in molecular biological techniques is essential. Send curriculum vitae, summary of research experience, and names of three references to: **Dr. Susan C. Weil, Departments of Pathology and Medicine, Northwestern University Medical School, Wesley Pavilion Room 323, 250 East Superior Street, Chicago, IL 60611; telephone: 312-908-2687.**

POSTDOCTORAL POSITIONS

Available immediately to join a research project involving in vivo and cell culture experiments on pattern formation and growth control in developing mouse limb buds. Ph.D. required, with experience in one or more of the following: cell culture, growth factor biology, extracellular matrix, protein chemistry, molecular biology. Submit curriculum vitae and statement of research interests, and ask three individuals to write letters of recommendation to:

**Dr. Susan Bryant
Developmental Biology Center
University of California, Irvine
Irvine, CA 92717**

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

Macromolecular Crystallography

The Protein Engineering Group at Monsanto's World Headquarters and Research Center is seeking a Ph.D. Protein Crystallographer as part of its expanding research program in understanding protein structure-function relationships.

The successful candidate must have a Ph.D. in a relevant discipline and a strong background in the practical aspects of Protein Crystallography, including crystallization, data collection, structure solution and refinement and molecular modeling.

Responsibilities of this position emphasize collaboration with Monsanto scientists on problems of protein structure and design. This is an opportunity to work within a group of established Protein Crystallographers.

Monsanto, a leader in biotechnology, offers one of the best equipped crystallographic and molecular modeling laboratories in the country. Equipment includes two Rigaku 12 KW rotating anode X-ray generators with one AFC5 single counter diffractometer and a dual chamber area detector system with a dedicated VAX 11/750 computer. Computing facilities include two VAX 11/780 computers with three Evans and Sutherland PS300 graphics terminals, and an FPS-264 array processor.

Interested candidates should send their resume to: **John Bussen; MONSANTO COMPANY; BB5B-PSC; 700 Chesterfield Village Parkway; Chesterfield, MO 63198.** An Equal Opportunity Employer M/F/H/V.

Monsanto

Postdoctoral Position Available At Wyeth Laboratories

A postdoctoral fellow position is immediately available at our headquarters facility in Radnor, PA, an attractive Main Line suburb of Philadelphia.

This position is available in vaccine research and protein engineering. Candidates should have expertise in recombinant DNA technology and experience with fermentors and/or protein purification. Applicant should have a degree in molecular biology, microbiology or biochemistry.

This position offers an attractive salary and benefits, is immediately available for a one year appointment and can be renewed for another year.

Qualified candidates are invited to submit curriculum vitae: **Recruitment Manager,**

Wyeth Laboratories



P.O. Box 8299
Philadelphia, PA 19101

Equal Opportunity Employer, M/F/H/V

R&D CAREER OPPORTUNITIES

THE AMES DIVISION OF MILES LABORATORIES, INC., a leading clinical diagnostics company, has several research scientist positions available in its Research and Development Department. The work involves innovative approaches to the development of dry phase clinical systems. Candidates must have proven expertise with strong communication skills and a desire to work as part of an interdisciplinary team. Positions are available at the B.S., M.S., and Ph.D. levels.

COATING CHEMIST/POLYMER CHEMIST/ MEMBRANE TECHNOLOGY

Position 1 - Background and experience in composition of coating systems and coating techniques. Ability to apply rheology concepts to solve coating application problems. Research experience in rheological modification of solution and dispersion coatings.

Position 2 - Development of synthetic polymeric membranes for diagnostic applications with emphasis on formulation chemistry, physicochemical properties and materials science methods. A strong background in film forming polymers and porous membranes (extrusion cast, phase inversion, hydrogels, etc.) is required. Knowledge of analytical chemistry and biochemistry would be beneficial.

MATERIAL SCIENTIST

Position 3 - Strong background in biomaterials including polymers, membranes and adhesives. The applicant should have research experience in material science with background and experience in plastics, injection molding techniques and design of biomedical devices.

BIOCHEMIST/BIO-ORGANIC CHEMIST/ BIOPHYSICIST

Position 4 - Bio-Organic Chemist or Biochemist with background and experience in enzyme chemistry and surface active systems. Research experience in using detergents and surface active materials to construct bio-analytical test systems.

Position 5 - Biochemist/Biophysicist with background and experience in photochemistry and enzyme chemistry appropriate to development of clinical diagnostic products. The applicant must have a demonstrated high level of technical creativity.

Position 6 - Experience in design and development of clinical diagnostics reagent products. The incumbent will have proven ability in analytic and biochemistry with knowledge of enzymology, protein chemistry and redox systems. Prior development experience, especially in the area of dry phase reagent systems, would be beneficial.

Located in Elkhart, Indiana, we offer varied recreational and educational facilities as well as convenient accessibility to the Chicago area. Starting salary commensurate with experience, plus an excellent benefits program. Relocation benefits paid by the company. Please send a complete resume indicating the position number you are applying for in confidence to:

Linda A. Heiland
Sr. Personnel Representative
Department 237
Miles Laboratories, Inc.
P.O. BOX 40
Elkhart, Indiana 46515



An Equal Opportunity Employer M/F/H

Ph.D. MOLECULAR VIROLOGISTS

Merck Sharp & Dohme Research Laboratories is currently seeking two senior level Molecular Virologists to join the department of Virus and Cell Biology. The selected candidates will be expected to supervise the efforts of a research group in the discovery, design, and development of antiviral drugs. Merck Sharp & Dohme Research Laboratories envisions a long term commitment to the development of antiviral drugs, and is looking for exceptional scientists with the ability to contribute to our expanding research program.

Requirements include a Ph.D., M.D. or the equivalent with postdoctoral training and experience as head of a virology research laboratory. Candidates should have an established publication record and experience with either Herpesviruses or Retroviruses. Experience in directing other scientists and a high degree of self-motivation, as well as demonstrated communication skills, are also required.

An excellent salary and benefits program accompany this position at our superb research facility located northwest of Philadelphia.

Please send your resume and salary requirements in complete confidence to:

Mr. Jacques P. Kueny

Merck Sharp & Dohme Research Laboratories

Research Personnel (W42-2)
West Point, PA 19486

EEO/AA/VH Employer



Merck & Co., Inc.

DEPUTY DIRECTOR

ASSOCIATED WESTERN UNIVERSITIES, INC.

Applications and nominations are invited for the position of Deputy Director, Associated Western Universities, Inc. (AWU). AWU is a non-profit corporation funded by the Department of Energy and functioning as liaison among 36 universities and 30 DOE research facilities. The Association provides support for academic scientists and engineers to conduct basic research at DOE laboratories. AWU has an annual budget in excess of \$1.5 million, and over the past 20 years has provided over 4,000 appointments to faculty, post-graduates, and undergraduates in energy-related research programs.

Applicants should possess proven administrative and management skills, excellent communicative capability, a strong record of research, an earned doctorate in science or engineering, and experience in an academic setting (or equivalent education/experience). Additionally, experience in, or extensive interaction with, one or more government agencies is desirable.

The Deputy Director will assist the Executive Director in all phases of the AWU operation, including contract negotiation, review of applications for research participation, and development of interaction among member universities, research laboratories and DOE. This is a 12-month position with excellent benefits and a salary range to \$50,000, depending on qualifications and experience.

Qualified candidates should send their resumes by July 31, 1987 to:



Associated
Western
Universities
Incorporated

Dr. James J. Brophy, Chairman
AWU Board of Directors
Associated Western Universities, Inc.
142 East 200 South, Suite 200
Salt Lake City, UT 84111-1519

AWU is an equal opportunity, affirmative action employer. Ethnic minorities and women are expressly invited to apply.

RESEARCH MANAGERS

PHYSICAL OCEANOGRAPHY

The Office of Naval Research is seeking highly qualified and motivated individuals to plan and manage a significant portion of the contract research program in physical oceanography. The research sponsored is conducted principally at universities and oceanographic institutions. These are Civil Service positions at the GS-13/14/15 levels (\$38,727-\$69,976), depending on qualifications.

The incumbents will establish goals for and conceive, organize, direct and market research programs in unexplored areas involving fundamental concepts in the field of physical oceanography. The ultimate goal is to determine the fundamental constraints which the ocean environment places on the ability of the Navy to accomplish its mission. Research will be directed to complex multi-disciplinary problems in the global marine environment on all space and time scales.

Applicants must have a Ph.D. or equivalent in oceanography or in a physical science area related to physical oceanography and at least one year of professional experience or have acquired a minimum of three years of progressively responsible professional experience. Applicants should have significant research and/or management experience in physical oceanography (e.g. remote sensing, numerical modeling and meso or small scale processes).

Interested persons should send a list of publications and a resume or Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), to:

OFFICE OF THE CHIEF OF NAVAL RESEARCH

Civilian Personnel Division, Code 01242P, Attn: Announcement #87-24 (S)
800 North Quincy Street, Arlington, VA 22217-5000

Applications will be accepted through 10 July 1987 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (202) 696-4705.

U.S. CITIZENSHIP REQUIRED • AN EQUAL OPPORTUNITY EMPLOYER

1988

AAAS — Scientific Freedom and Responsibility Award

To Encourage Scientists and Engineers to Reflect Upon the Social Implications of their Professional Actions

The AAAS Scientific Freedom and Responsibility Award of \$1000, established by the AAAS Board of Directors in 1980, is awarded annually to scientists and engineers who have:

- acted to protect the public's health, safety, or welfare; or
- focused public attention on important potential impacts of science and technology on society by their responsible participation in public policy debates; or
- established important new precedents in carrying out the social responsibilities or in defending the professional freedoms of scientists and engineers.

You are invited to submit nominations now for the 1988 award, to be presented at the 1988 AAAS Annual Meeting in Boston. A recipient of the award is selected by a panel of judges appointed by the AAAS Board of Directors. The deadline for receipt of entries is 31 August 1987.

Requests for nomination forms and more information should be sent to: **Scientific Freedom and Responsibility Award, AAAS, 1333 H Street, NW, Room 1108, Washington, DC 20005.**

CHIEF FINANCIAL OFFICER

The American Association for the Advancement of Science, located in downtown Washington, D.C. has an immediate opening for a seasoned CHIEF FINANCIAL OFFICER. You will report directly to the EXECUTIVE OFFICER and will be responsible for the general and grant fund accounting (includes advertising receivables), budgeting (over \$24 million), reporting and financial analysis for the Association.

The Association is a non-profit international professional membership and publishing organization, with program activities that are funded in part from private foundations and government organizations.

We require a minimum of 10 years experience (5 years in the non-profit sector) at the supervisory or controller level. Experience in accounting for periodical publishing a plus. A related degree is required. Competitive salary and benefits offered. Send resume and salary requirements to:

**Personnel Manager
A.A.A.S.**

1333 H St. NW, Washington, D.C. 20005

An Equal Opportunity Employer

THE SCIENCE RECRUITMENT

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NOW YOU CAN SEE YOUR AD IN SCIENCE FOUR DAYS AFTER SUBMISSION

Scientific Recruiters can now advertise positions almost as soon as the need arises. Instead of reserving space a month or more in advance, you can now place your ad four days before the magazine mailing date. SCIENCE is mailed on the cover date.

Film (right-reading, emulsion face down) or full camera ready art and insertion order must reach: SCIENCE, Short Close Desk, 1515 Broadway, New York, NY 10036 by NOON Mondays (except for legal holidays when material must reach New York by Noon Fridays). Because space is limited, the four-day close page will be reserved on a first-come, first-served basis, at a 15% premium. 1/4 and 1/2 page ads only.

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CURRENT DISTRIBUTION 160,000

Assistant Manager Regulatory Affairs

An excellent opportunity is now available with a highly respected manufacturer of plasma/pharmaceutical products.

At this time we are seeking an individual with the following qualifications:

- BS degree in Biological or Physical Sciences;
- 2-3 years experience in regulatory affairs;
- Working knowledge of FDA policies and regulations as they apply to drugs, devices and biological products;
- Experience in actual new product development; and
- Familiarity with GMPs, clinical research principles, auditing, etc.

For immediate consideration send your resume, including salary history and requirements, to **Dave Calliham.**

 **Alpha**
THERAPEUTIC CORPORATION
5555 Valley Blvd.
Los Angeles, CA 90032
Equal Opportunity Employer M/F

POSITIONS OPEN

YALE MEDICAL SCHOOL DEPARTMENT OF PHYSIOLOGY

POSTDOCTORAL POSITIONS are available immediately to study the molecular mechanism of Na,K-ATPase in red cell, kidney, and cloned enzyme preparations. Approaches include membrane biochemistry, kinetics of intermediates and transport, subunit interactions, involvement of anions and electrical parameters in purified preparations, ghosts, vesicles, and reconstituted systems. Background in biochemistry and cellular physiology desirable. Send curriculum vitae and three letters of reference by 15 June 1987 to: **Joseph F. Hoffman, Department of Physiology, Yale Medical School, 333 Cedar Street, New Haven, CT 06510. Yale University is an Equal Opportunity Employer.**

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

POSTDOCTORAL POSITION available immediately in an immunology laboratory. The candidate should have strong background in biology/recombinant DNA technology, with experience in DNA and RNA blotting, nucleic acid analysis, cDNA cloning and expression analysis. HIV or retroviral molecular genetic experience preferred. United States citizenship or permanent resident status required. Send curriculum vitae and names of three references to: **Dr. Arye Rubinstein, Department of Pediatrics, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Room F405, Bronx, New York, NY 10461. We are an Equal Employment Opportunity Employer.**

POSTDOCTORAL POSITION available now to study the role of DNA topology and topoisomerases on DNA replication and transcription. Long-term funding on NIH grant. Experience in molecular biology and/or enzymology preferred. Send curriculum vitae and names of references to: **Dr. M. V. Simpson, Department of Biochemistry, SUNY Stony Brook, Stony Brook, NY 11794. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.**

POSTDOCTORAL POSITION AVAILABLE FOR A BIOCHEMIST, CHEMIST, OR CELL BIOLOGIST to engage in the development of a novel single-cell assay for specific proteinases utilizing immobilized fluorogenic substrates and the application of this method to answering important medical questions such as the role of proteinases in cancer metastasis and lung emphysema. Send résumé and three letters of recommendation to: **Professor C. W. Wu, Department of Pharmacological Sciences, SUNY Stony Brook, Stony Brook, NY 11794. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.**

POSTDOCTORAL POSITION IN MARINE NATURAL PRODUCTS CHEMISTRY

Postdoctoral position available July/August to isolate and structurally define (i) new eicosanoids related to leukotrienes from seaweeds, and (ii) novel anticancer cyclic peptides and polyaromatics from blue-green algae. Expertise in HPLC, 2D-NMR, and HRMS methodology is essential: experience with in vitro bioassay systems desirable. Send curriculum vitae, statement of research interests and names/addresses of three references by 12 June 1987, to: **Dr. William Gerwick, College of Pharmacy, Oregon State University, Corvallis, OR 97331. Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.**

POSTDOCTORAL POSITION available August 1987. Studies involve synthesis and expression of peptidase mutants by site-directed mutagenesis. Experience in molecular biology preferred. Salary commensurate with experience. Send curriculum vitae and list of references to: **Dr. Louis Hersch, Department of Biochemistry, University of Texas Health Science Center, 5323 Harry Hines Boulevard, Dallas, TX 75235. An Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION for a physical biochemist with experience in protein chemistry to study the three-dimensional structure of apolipoproteins. Expertise in x-ray crystallography desirable. Position with potential for advancement. Send curriculum vitae and three letters of reference to: **R. W. Mahley, M.D., Ph.D., Gladstone Foundation Laboratories for Cardiovascular Disease, University of California, P.O. Box 40608, San Francisco, CA 94140-0608.**

Two pre- and/or postdoctoral positions available to study a. the molecular mechanism of the initiation of carcinogenesis and b. carcinogen-DNA adduct dosimetry in rodent and human cells. For the postdoctoral position(s), candidates with experience in chromatin structure or carcinogenesis are desirable. Send résumé, reprints if available, a brief summary of research experience and objectives, and names of three referees to: **Dr. R. Gupta, Department of Pharmacology, Baylor College of Medicine, Houston, TX 77030. Equal Opportunity Employer.**

Educational institution needs **POSTDOCTORAL RESEARCHER** to work on project related to sequence-specific DNA developmentally regulated genes in eukaryotic cells and in Herpes simplex virus (HSV-1) infected cells. Job requires Ph.D. degree in botany, zoology, microbiology, molecular biology, or biochemistry and 2 years of experience in protein purification, chromatography, tissue culture, and other biochemical techniques. Forty hours per week, \$18,240 per year. Qualified applicants reply immediately to: **A. MacLean, JO# 3030763, Ohio Bureau of Employment Services, P.O. Box 1680, Columbus, OH 43216. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH FELLOW IN EXPERIMENTAL NEUROPSYCHOLOGY, Cornell University Medical College, Division of Cognitive Neuroscience. One to two years at \$21,000. Ph.D. or A.B.D. required. 1 September 1987 start date. Send curriculum vitae and names of three references to:

**Michael S. Gazzaniga, Ph.D.
Department of Neurology
Division of Cognitive Neuroscience
Cornell University Medical College
1300 York Avenue, S-919
New York, NY 10021**

STANFORD UNIVERSITY SCHOOL OF EARTH SCIENCES

Nominations and applications are requested from distinguished scholars and academic administrators for the post of **PROFESSOR AND DEAN OF THE SCHOOL OF EARTH SCIENCES**, effective no later than September 1988. We seek individuals with outstanding scholarly careers as scientists, a broad knowledge of the earth sciences, and demonstrated potential for academic leadership and administration.

The School of Earth Sciences includes the Departments of Applied Earth Sciences, Geology, Geophysics, and Petroleum Engineering. The Dean of the School must have the vision and leadership capability to maintain and further develop the scholarly excellence of the School in theoretical science, technology, and undergraduate and graduate training. As the senior officer of the School, the Dean is responsible for the operation of the School and hence must have the capability to administer programs, engage the advice of the School's faculty, supervise staff, and manage effectively in a complex administrative environment.

Stanford is eager not to overlook qualified candidates who are women or members of ethnic minority groups and welcomes nominations and applications from them.

Address inquiries, nominations, and applications to meet the deadline of 1 July 1987 to: **Albert H. Hastorf, Professor of Psychology and Chair of the Search Committee, Department of Psychology, Building 420, Stanford University, Stanford, CA 94305.**

RESEARCH ASSISTANT/ASSOCIATE position in cancer pharmacology/tumor biology laboratory. Need B.Sc. plus 2 years of experience in cell culture and tumor stem cell assays. Advanced degree or knowledge of HPLC, microspectrofluorometry, molecular biology, and flow cytometry desirable. Salary range: \$18,000 to \$24,000. Contact: **Dr. Thomas Chan, Lynn Hall, Purdue University, West Lafayette, IN 47907. Purdue University is an Equal Employment/Affirmative Action Employer.**

POSITIONS OPEN

RESEARCH ASSISTANT/TECHNICAL SPECIALIST: Full-time position available for mechanical, electrical, or biomedical engineer; B.S. required, M.S. preferred. Knowledge of computer modeling, image processing, and materials science desirable. Duties include day-to-day management of research protocols, development of new experimental parameters, harvesting and analysis of specimens. Contribute to ongoing research projects on models of osteoporosis and the mechanism responsible for functional adaptation in bone. Please send résumé no later than 12 June 1987 to: **Clinton Rubin, Ph.D., Director, Musculoskeletal Research Lab, Department of Orthopaedics, SUNY Stony Brook, Stony Brook, NY 11794. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.**

RESEARCH ASSOCIATE GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE WASHINGTON, D.C.

The Department of Obstetrics and Gynecology, Division of Reproductive Endocrinology and Infertility, has an opening for a research associate involving primate and non-primate in vitro fertilization, and advanced tissue culture techniques. Prior cell and tissue culture experience and the ability to work with small laboratory animals is desirable. A B.S. or equivalent, and a minimum of 3 years of experience is required. Competitive salary and outstanding fringe benefits are offered.

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

**James A. Simon, M.D.
c/o Office of the Chairman
Department of Obstetrics and Gynecology
Georgetown University School of Medicine
3800 Reservoir Road, NW
Washington, D.C. 20007**

Georgetown University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE

Applications are invited for a postdoctoral position for M.D. or Ph.D. Research involves characterization of site-specific peptide prohormone-converting endopeptidases (PCEs). Recombinant DNA methodology will be used to obtain sequence information. Enzyme specificity will be explored using introduction of transfection vectors for the PCEs and substrates into cultured cells. Regulation of PCE expression and activity will also be studied. Send curriculum vitae and three letters of recommendation to: **Dr. Bryan D. Noe, Department of Anatomy and Cell Biology, Emory University School of Medicine, Atlanta, GA 30322.**

Emory University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE position available for work on tissue specificity and physiological control of respiratory chain enzymes. Experience in mitochondrial research and/or protein chemistry essential. Ph.D. required. Salary according to NIH guidelines. Send résumé to: **Dr. R. Capaldi, Department of Biology, University of Oregon, Eugene, OR 97403. Closing date: 15 June 1987. The University of Oregon is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW—Position available immediately for a molecular biologist to study molecular neurobiology of neuron-specific and developmentally regulated gene expression, CNS-steroid interactions, or Alzheimer's Disease. Send curriculum vitae, list of references, and representative publications to: **Ivan Lieberburg, Ph.D., M.D., Fishberg Center for Neurobiology, Mount Sinai School of Medicine, One Gustave L. Levy Place, Box 1065, New York, NY 10029. An Equal Opportunity Employer.**

RESEARCH ASSOCIATE needed to study the mass cultivation of microalgae at scientific station in Roswell, NM. Ph.D. or equivalent experience required. Must be able to work independently, design experiments, and prepare reports. Previous experience in algal physiology or ecology desired. Salary: \$30,000 per year, starting 1 July 1987. Send résumé with names and addresses of three references to: **Dr. Joseph C. Weissman, Microbial Products, Inc., 408A Union Avenue, Fairfield, CA 94533. Equal Opportunity Employer.**

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The successful candidate will be responsible for a group comprising a postdoctoral fellow and appropriate assistants.

• **Postdoctoral Fellows**— (1) Biochemist with hands-on experience in second messengers and mechanism of signal translation. Competence in measuring calcium fluxes, receptor function, and tissue culture techniques advantageous.

(2) Biochemist with experience in protein chemistry to isolate and characterize novel CNS proteins for Alzheimer's project. Versatile in state-of-the-art methods for isolation, purification, and assay of proteins and enzymes. Competence in antibody assay or cell culture advantageous.

One or two year appointments renewable by mutual consent. Presentation at national and international meetings and publication of findings will be encouraged.

• **Junior Pharmacologists**— Several B.S. or M.S. positions in biology or biochemistry with experience in neurobiology or cell biology to work on receptor binding techniques, catecholamine metabolism, and mechanism of cellular function. Familiarity with HPLC, tissue culture techniques is desirable.

CNS

• **Neurophysiologist**— B.S./M.S. in Neurobiology with experience in Neurophysiology. Assist in design and execution of pharmacological studies to identify drugs for central nervous system disorders. Proficient in electrophysiological techniques (stereotaxic surgery, histology, extracellular single unit recording, iontophoresis, brain slice). Knowledge of electronics and computer science.

RENAL

• **Pharmacologist**— B.S. or M.S. with basic foundation in renal physiology/pharmacology with 2-3 years in micropuncture and microanalytical techniques. Hands-on experience in animal surgery necessary.

• **Pharmacologist**— B.S./M.S. in life sciences to work on *in vitro* tests using isolated tissues for characterization of pharmacological activity of compounds. Familiarity with solute and electrolyte transport and membrane physiology, along with *in vitro* experience in epithelial tissue advantageous.

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RESEARCH SCIENTIST GASTROINTESTINAL DISEASES

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This scientist will collaborate with multidisciplinary scientists to develop and execute research programs and strategies and will supervise and direct the research of 4-6 scientists. This individual will be expected to have or acquire a thorough working knowledge of GI physiology, pathology and pharmacology and to utilize computer-aided drug design as a research tool.

A Ph.D. in organic chemistry and minimum 5-7 years industrial or academic research experience in organic synthesis and/or medicinal chemistry are required. Supervisory experience is desirable but not required.

This position offers excellent salary and benefits package. Searle is located in a northern suburb adjacent to Chicago. Our location offers access to a variety of cultural and recreational facilities, several fine universities and an active science community. Qualified candidates may respond in strict confidence to: G.D. Searle & Co., R & D Professional Staffing, Dept. PWC, 4901 Searle Parkway, Skokie, IL 60077. An Equal Opportunity Employer.

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Senior Research Endocrinologist (Physiologist/Pharmacologist)

The LILLY RESEARCH LABORATORIES, a division of Eli Lilly and Company, is seeking highly qualified candidates for a Senior Scientist position in the Endocrinology Research Division.

Applicants must have a doctoral degree in physiology/pharmacology with at least two years postdoctoral training. A strong background in intermediary metabolism or carbohydrate and lipid homeostasis is required. The Senior Scientist will be expected to use existing animal models as well as develop new animal models to study the effects of novel therapeutic agents for use in the treatment of metabolic abnormalities such as diabetes and obesity.

Qualified candidates should send their curriculum vitae to:



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

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POSITIONS OPEN

RESEARCH ASSISTANT AND/OR TECHNICIAN

Position available immediately in a molecular immunology lab. Job requires facility with basic biochemical procedures and some management skills. Significant prior laboratory experience preferred, especially in the area of molecular cloning, DNA sequencing, or tissue culture. Send résumé to:

Dr. A. Bothwell
Howard Hughes Medical Institute
Yale Medical School
310 Cedar Street
New Haven, CT 06510

RESEARCH ASSOCIATE to develop a laser altimeter, and measure laser backscatter from atmospheric aerosols. Design and test LD-pumped Nd:YAG lasers; perform data acquisition and analysis with a CO₂ LIDAR. Requires Ph.D. in Electrical Engineering; demonstrated ability with eight plus journal publications (all first author) related to remote sensing; experience with LIDAR, LD-pumped lasers, and CO₂ lasers. Salary: \$30,000 per year, 40 hours per week. Send résumé, copies of publications, and advertisement to: **Department of Employment and Training, 1123 North Eutaw Street, Room 201-B, Baltimore, MD 21201; job order #6030303; job location: Greenbelt, MD.**

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW—An independent investigator with M.D. and/or Ph.D. with extensive research experience in recombinant DNA technology is being sought for an expanding research division of pediatric gastroenterology. Current investigations center on the roles of purines/pyrimidines and procollagen gene expression in the differentiating hepatic and intestinal epithelium. Applicants are required to be familiar with all technical aspects of molecular genetics. Send curriculum vitae and names or letters of two references to: **Neal S. LeLeiko, M.D., Ph.D., Chief, Division of Pediatric Gastroenterology, Department of Pediatrics, Mount Sinai School of Medicine, One Gustave L. Levy Place, Box 1198, New York, NY 10029. Women and minorities are encouraged to apply. Mount Sinai is an Equal Opportunity Employer.**

RESEARCH SCIENTIST FOR NOVEL DRUG FORMULATIONS

Position requires a Ph.D. in biochemistry, biophysics, pharmacy, or polymer chemistry; familiarity with physical chemistry or immunology desirable. Research includes the development of controlled-release microcapsule formulations for the delivery of drugs. To apply, send résumé to: **Denise Johnson, Southern Research Institute, Department A203, P.O. Box 55305, Birmingham, AL 35255-5305. Equal Opportunity Employer.**

RESEARCH TECHNICIANS

Our **SURGICAL ONCOLOGY DIVISION** is looking for a degreed individual to work with monoclonal antibodies in immunohistochemical assays (breast and colon cancer): small amount of histology and tissue culture. One to 2 years of related experience is required.

Our **DIVISION OF GASTROENTEROLOGY** seeks a technician for new Gastroenterology Research Laboratories to assist in ongoing studies of the pharmacology and electrophysiology of the intestine. Ideal candidate will have or be about to complete a B.S. involving courses in physiology/biology, statistics, and chemistry. Some computer knowledge and previous experience in handling laboratory animals would be an advantage.

Our **DIVISION OF PULMONARY AND CRITICAL CARE MEDICINE** seeks a technician skilled in laboratory procedures including biochemistry and cell biology. Graduate-level training and experience in cell culture with skills for handling small laboratory animals is preferred.

Winthrop-University Hospital is a progressive Long Island teaching hospital offering individualized orientation, excellent benefit package and competitive salaries commensurate with experience. Please apply: **Human Resources Department, Winthrop-University Hospital, 259 First Street, Mineola, Long Island, NY 11501. Equal Opportunity Employer.**

POSITIONS OPEN

The University of Arizona has an opening for a **RESEARCH SCIENTIST** with experience in molecular modeling and macromolecular structure. Applicants should have a Ph.D. equivalent degree. Duties will involve managing a computer graphics and modeling facility and conducting independent research. The successful applicant will be expected to apply for grants to support his/her research program. Position is continuing or continuing eligible, depending upon qualifications. Salary is open, subject to negotiation. Applications will be examined after 15 June 1987 but will be accepted until the position is filled. *The University of Arizona is an Equal Opportunity/Affirmative Action Employer.* Address applications to: **Dr. John H. Law, Director, Biotechnology Center, Biosciences West, University of Arizona, Tucson, AZ 85721.**

RESEARCH TECHNICIAN position available immediately. B.S. or M.S. in biochemistry or cell biology desired. Experience in screening of monoclonal antibodies preferred. Send résumé and three letters of reference to: **Dr. Michael G. Hahn, Complex Carbohydrate Corporation, 2351 College Station Road, Suite 512, Athens, GA 30605 (telephone: 404-546-7797).**

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

STEROL METABOLISM RESEARCH GROUP ELEANOR ROOSEVELT HEALTH TECHNOLOGIES

We are assembling a group to study biochemical genetic aspects of mammalian sterol metabolism. Positions for research scientists with the following backgrounds are available:

BIO-ORGANIC CHEMIST—responsibilities will include synthesis of cholesterol biosynthetic enzyme substrates and inhibitors.

PROTEIN CHEMIST AND ENZYMOLOGIST—responsibilities will include studies on kinetics and regulation of enzymes late in the cholesterol biosynthetic pathway. Experience in protein purification also desirable.

YEAST BIOCHEMICAL GENETICIST—responsibilities will include isolation of yeast mutants in cholesterol biosynthesis and fundamental studies on the role of isoprenoids in cell division.

MOLECULAR BIOLOGIST—responsibilities will include studies of control of expression of genes of cholesterol biosynthesis. Translational control is of particular interest.

Funding for this program is secure for at least 3 years. Salary range: \$30 to \$50,000 per year depending on prior experience. Please write to: **Dr. Michael Sinensky, Head, Sterol Metabolism Research Group, Eleanor Roosevelt Health Technologies, Inc., 1899 Gaylord Street, Denver, CO 80206.**

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

SYSTEMATIC BOTANIST

The Department of Botany, Smithsonian Institution, has a 3-year term staff position open for a specialist in terrestrial Pacific botany. Candidates must be U.S. citizens, and have an active and documented research program on monographic and floristic botany. Successful candidates will be expected to spend 50% time on research and curation of existing Pacific island collections. Salary will be at the GS-11/13 level (\$27,172 to \$38,727). Applicants should submit curriculum vitae, statement of general research goals, OPM Standard Form 171 (available on request), set of reprints, and names of three references to: **Office of Personnel Administration, Announcement No. 87-300-F, 900 Jefferson Drive SW, Smithsonian Institution, Washington, DC 20560 by 31 July 1987. Indicate Announcement Number 87-300-F on the SF-171. The Smithsonian Institution is an Equal Opportunity Employer.**

POSITIONS OPEN

TEMPORARY VISITING ASSISTANT PROFESSOR position for academic year 15 August 1987 to 15 May 1988, to teach courses in introductory microbiology and immunology. Preference will be given to individuals with research interests in anaerobic prokaryotes or host-pathogen interactions. Send curriculum vitae and three letters of recommendation to: **Dr. Leonard Beevers, Chair, Department of Botany and Microbiology, University of Oklahoma, 770 Van Vleet Oval, Room 135, Norman, OK 73019. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.** Deadline for applications is 30 June 1987.

VIROLOGIST (M.D. OR Ph.D.) with interest in mechanisms of disease or development of viral detection techniques, to establish a research program. Must be capable of obtaining independent research funds and eligible for medical school faculty appointment. Send curriculum vitae and outline of proposed research programs to: **Sherrill J. Slichter, M.D., Scientific Director, Puget Sound Blood Center, Terry at Madison, Seattle, WA 98104.**

FELLOWSHIPS

HARVARD UNIVERSITY

POSTDOCTORAL FELLOWSHIP is available to investigate the molecular nature of mutation in human cells. Studies will center on how chemical and physical agents induce genetic alterations at hemizygous and heterozygous gene loci. Please send a letter of inquiry, curriculum vitae, and the names of three references to: **Drs. Howard L. Liber and John B. Little, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115. Due to federal government requirements, this position is limited to U.S. citizens or permanent residents. Applications from minority and women candidates are particularly encouraged.**

POSTDOCTORATE FELLOWSHIP— MOLECULAR GENETICS

Department of Agronomy, University of Missouri, Columbia Campus. Research will involve isolating and characterizing "species specific" dispersed repeated sequences from wild *Oryza* species and assess their "species specificity" relative to cultivated rice. This project is part of a grant from the Rockefeller Foundation on genetic engineering of rice. Salary commensurate with qualifications. Send a statement of research interests, résumé and transcripts, and arrange to have three letters of reference sent as soon as possible to: **Dr. J. P. Gustafson, Department of Agronomy, 208 Curtis Hall, University of Missouri, Columbia, MO 65211; telephone: 314-882-7318. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP available immediately in the Department of Laboratory Medicine, Yale University School of Medicine, to study molecular mechanisms of transplacental transfer of cytomegalovirus in guinea pigs. Applicant should be a Ph.D. in immunology. Experience with monoclonal antibody production and characterization, protein purification, molecular biology methods, and broad knowledge of cellular immunology are essential. Opportunity to interact with a large community of scientists at the Yale University School of Medicine. Applicants should provide curriculum vitae, academic transcripts, and names, addresses, and telephone: numbers of three references. For more information contact: **Dr. Brigitte P. Griffith, Virology Laboratory, 151B, V.A. Medical Center, West Haven, CT 06516. Telephone: 203-932-5711, extension 744.**

POSTDOCTORAL FELLOWSHIP in endocrinology research. Group is part of NIH-funded diabetes-endocrinology research center. Focus is on pancreatic islet research. Applicants must possess M.D. or Ph.D. degree with background in biochemistry, physiology, or cell biology. Stipend is competitive. Send curriculum vitae, description of current research interests and objectives, and three letters of recommendation to: **Postdoctoral Search Committee, Department of Biochemistry, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01605. Affirmative Action/Equal Opportunity Employer.**

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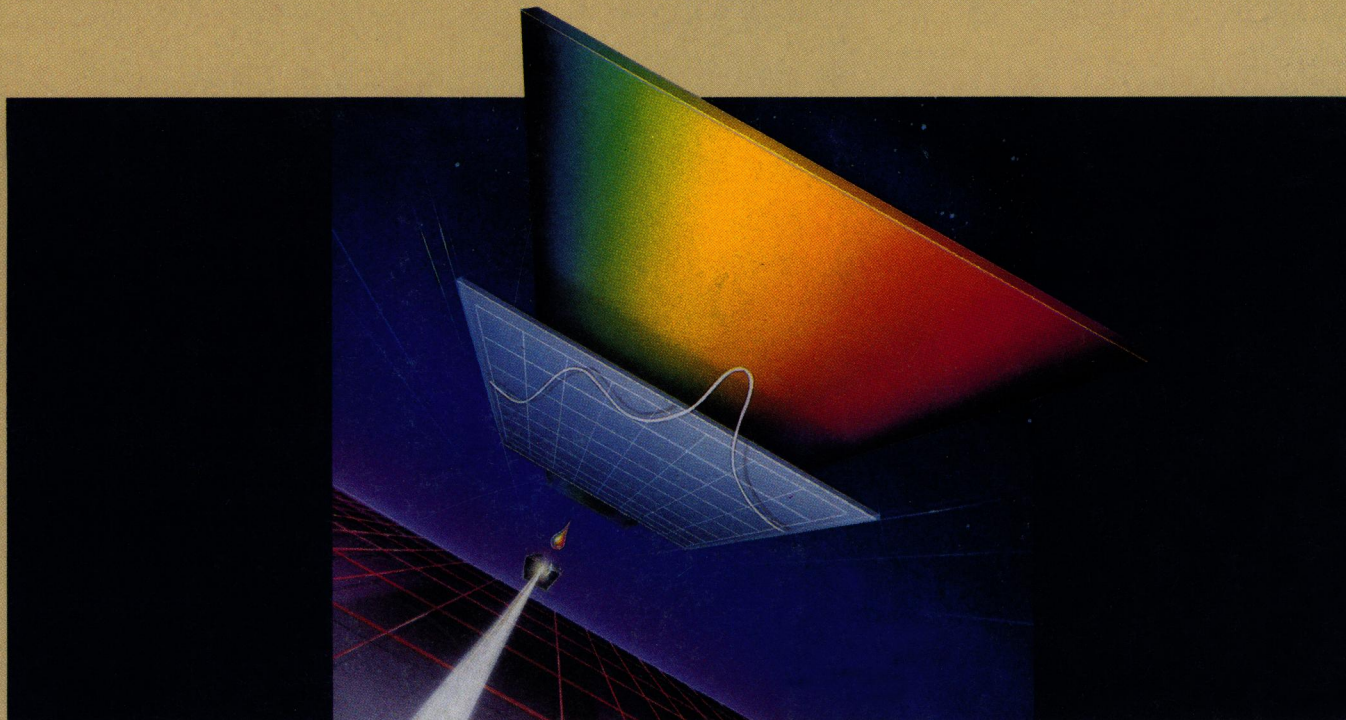
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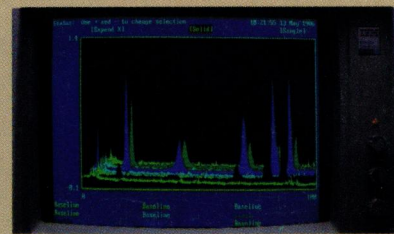
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