

tight labor controls. In these cases, economic rationality can support loosely structured work. This book would be stronger if Hirschhorn explicitly characterized the conditions under which sociotechnical designs are most likely to be adopted and to succeed.

These problems limit the capacity of *Beyond Mechanization* to teach us something central about technology and work life in our economy as a whole. Influential professionals often underestimate the range of possible choices in designing jobs, however, and in providing a sympathetic introduction to sociotechnical design, the book helps expand one's understanding of the possibilities of improving jobs.

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Reverse Osmosis and Ultrafiltration. S. Sourirajan and Takeshi Matsura, Eds. American Chemical Society, Washington, D.C., 1985. xii, 508 pp., illus. \$89.95. ACS Symposium Series, 281. From a symposium, Philadelphia, Aug. 1984.

Ring-Chain Tautomerism. Raimonds E. Valters and Wilhelm Flitsch. Alan R. Katritzky, Ed. Plenum, New York, 1985. xii, 278 pp., illus. \$45. Translated from the Russian edition.

Risk Analysis in the Private Sector. Chris Whipple and Vincent T. Covello, Eds. Plenum, New York, 1985. x, 506 pp., illus. \$75. Advances in Risk Analysis, vol. 3. From a workshop, New York, July 1983.

Science and the Bible in a Troubled World. W. W. Crouch. Vantage, New York, 1985. x, 102 pp. \$8.95.

Science and the Enlightenment. Thomas L. Hankins. Cambridge University Press, New York, 1985. viii, 216 pp., illus. \$29.95. Cambridge History of Science.

Selected Works of Paul J. Flory. Leo Mandelkern *et al.*, Eds. Stanford University Press, Stanford, Calif., 1985. Three volumes. xvi, 2633 pp., illus. \$165.

Semiconductors and Semimetals. Vol. 22, Lightwave Communications Technology, Part C. W. T. Tsang, Ed. Academic Press, Orlando, Fla., 1985. xx, 342 pp., illus. \$55.

Sensory Perception and Transduction in Aneural Organisms. Giuliano Colombetti, Francesco Lenzi, and Pill-Soon Song, Eds. Plenum, New York, 1985. viii, 330 pp., illus. \$52.50. NATO ASI Series A, vol. 89. From an institute, Pisa, Italy, Sept. 1984.

Sex and Repression in Savage Society. Bronislaw Malinowski. University of Chicago Press, Chicago, 1985. xvi, 285 pp. Paper, \$10.95. Reprint, 1927 edition.

Sharing Research Data. Stephen E. Fienberg, Margaret E. Martin, and Miron L. Straf, Eds. National Academy Press, Washington, D.C., 1985. viii, 225 pp. Paper, \$17.50.

Sixth Symposium on Biotechnology for Fuels and Chemicals. Charles D. Scott, Ed. Interscience (Wiley), New York, 1985. viii, 697 pp., illus. Paper, \$74.95. Biotechnology and Bioengineering Symposium no. 14. (Gatlinburg, Tenn., May 1984.)

Sleep. Neurotransmitters and Neuromodulators. A. Wauquier *et al.*, Eds. Raven, New York, 1985. xviii, 344 pp., illus. \$57. From a workshop, Antwerp, Aug. 1984.

The Social Construction of the Person. Kenneth J. Gergen and Keith E. Davis, Eds. Springer-Verlag, New York, 1985. xii, 276 pp. \$35. Springer Series in Social Psychology. From a symposium, Swarthmore, Pa., April 1983.

The Software Catalog: Science and Engineering. 2nd ed. Elsevier, New York, 1985. xxx, 544 pp. Paper, \$45.

Soil Erosion and Conservation. S. A. El-Swaify, W. C. Moldenhauer, and Andrew Lo, Eds. Soil Conservation Society of America, Ankeny, Iowa, 1985. xxviii, 793 pp., illus. \$35. From a conference, Honolulu, Jan. 1983.

Solar-UV Actions on Living Cells. John Jagger. Praeger, New York, 1985. xviii, 203 pp., illus. \$37.95.

Solid State Chemical Sensors. Jifí Janata and Robert J. Huber, Eds. Academic Press, Orlando, Fla., 1985. x, 211 pp., illus. \$49.

Somatostatin. Yogest C. Patel and Gloria S. Tannenbaum, Eds. Plenum, New York, 1985. xx, 524 pp., illus. \$75. Advances in Experimental Medicine and Biology, vol. 188. From a symposium, Montreal, June 1984.

Sound Color. Wayne Slawson. University of California Press, Berkeley, 1985. xxvi, 267 pp., illus. \$30.

Space Debris, Asteroids and Satellite Orbits. D. J. Kessler, E. Grün, and L. Sehnal, Eds. Published for the Committee on Space Research by Pergamon,

New York, 1985. vi, 229 pp., illus. Paper, \$49.50. *Advances in Space Research*, vol. 5, no. 2. From a meeting, Graz, Austria, June 1984.

Space Station Program. Description, Applications, and Opportunities. Space Station Task Force, National Aeronautics and Space Administration. Noyes, Park Ridge, N.J., 1985. xxx, 754 pp., illus. \$67.

Sporopollenin Dinoflagellate Cysts. Their Morphology and Interpretation. William R. Evitt. American Association of Stratigraphic Palynologists Foundation, 1985 (distributor, Robert T. Clarke, c/o Mobil Research, P.O. Box 819047, Dallas, Tex. 75381). xvi, 333 pp., illus. \$30.

Statistical Methods for Meta-Analysis. Larry V. Hedges and Ingram Olkin. Academic Press, Orlando, Fla., 1985. xxii, 369 pp. \$49.50.

Statistical Physics II. Nonequilibrium Statistical Mechanics. R. Kubo, M. Toda, and N. Hashitsume. Springer-Verlag, New York, 1985. xvi, 279 pp. \$29.50. Springer Series in Solid-State Sciences, 31. Translated from the Japanese edition (Tokyo, 1978).

The Status of Ecological Reserves in Canada. P. M. Taschereau. Canadian Council on Ecological Areas, Ottawa, and Institute for Resource and Environmental Studies, Dalhousie University, Halifax, 1985. viii, 120 pp., illus. Paper, \$8.

A Strange Virus of Unknown Origin. Jacques Leibowitch. Ballantine, New York, 1985. xviii, 172 pp. Paper, \$4.95. Translated from the French edition (1984) by Richard Howard.

Structure and Function of Sarcoplasmic Reticulum. Sidney Fleischer and Yuji Tonomura, Eds. Academic Press, Orlando, Fla., 1985. xxviii, 597 pp., illus. \$49. From a symposium, Kobe, Japan, Nov. 1982.

Structure Determination by X-Ray Crystallography. M. F. C. Ladd and R. A. Palmer. 2nd ed. Plenum, New York, 1985. xxiv, 502 pp., illus. \$39.50.

The Structure of Surfaces. M. A. Van Hove and S. Y. Tong, Eds. Springer-Verlag, New York, 1985. xii, 435 pp., illus. \$49. Springer Series in Surface Sciences, vol. 2. From a conference, Berkeley, Calif., Aug. 1984.

Substance Abuse and Psychopathology. Arthur I. Alterman, Ed. Plenum, New York, 1985. xiv, 397 pp. \$42.50. Applied Clinical Psychology.

Subviral Pathogens of Plants and Animals. Viroids and Prions. Karl Maramorosch and John J. McKelvey, Jr., Eds. Academic Press, Orlando, Fla., 1985. xiv, 550 pp., illus. \$49.50. From a symposium, Bellagio, Italy, June 1983.

Surveying Subjective Phenomena. Charles F. Turner and Elizabeth Martin, Eds. Russel Sage Foundation, New York, 1985 (distributor, Basic Books, New York). Two volumes. Vol. 1. xvi, 495 pp. \$37.50. Vol. 2. xvi, 617 pp. \$46.50. The set, \$75.

Symmetries for Dynamical and Hamiltonian Systems. H. M. M. ten Eikelder. Centre for Mathematics and Computer Science, Amsterdam, 1985. viii, 195 pp. Paper, Dfl. 27.40. CWI Tract 17.

Technological Frontiers and Foreign Relations. Anne G. Keatley, Ed. National Academy Press, Washington, D.C., 1985. viii, 306 pp. Paper, \$19.95. From a symposium.

Textile Identification, Conservation, and Preservation. Rosalie Rosso King. Noyes, Park Ridge, N.J., 1985. xvi, 361 pp., illus. \$39.

Trace Residue Analysis. Chemometric Estimations of Sampling, Amount, and Error. David A. Kurtz, Ed. American Chemical Society, Washington, D.C., 1985. x, 284 pp., illus. \$59.95. ACS Symposium Series, 284. From a symposium.

Use-Wear Analysis of Flaked Stone Tools. Patrick C. Vaughan. University of Arizona Press, Tucson, 1985. viii, 204 pp., illus. \$49.50.

Vasopressin. Robert W. Schrier, Ed. Raven, New York, 1985. xxiv, 577 pp., illus. \$95.

Veterinary Immunology. P. M. Outteridge. Academic Press, Orlando, Fla., 1985. xvi, 280 pp., illus. \$45.

Visions of Apocalypse. End or Rebirth? Saul Friedländer *et al.*, Eds. Holmes and Meier, New York, 1985. iv, 268 pp. \$28.50; paper, \$15.50.

VLSI Electronics. Microstructure Science. Vol. 10, Surface and Interface Effects in VLSI. Norman G. Einspruch and Robert S. Bauer, Eds. Academic Press, Orlando, Fla., 1985. xii, 383 pp., illus. \$65.

Water and Ions in Biological Systems. Alberte Pullman, V. Vasilescu, and L. Packer, Eds. Plenum, New York, 1985. xvi, 823 pp., illus. \$110. From a conference, Bucharest, Sept. 1982.

The Web of Adaptation. Bird Studies in the American Tropics. David W. Snow. Comstock (Cornell University Press), Ithaca, N.Y., 1985. xvi, 176 pp., illus. Paper, \$7.95. Reprint, 1976 ed.

What's in a Name? An Essay in the Psychology of Reference. John M. Carroll. Freeman, New York, 1985. xviii, 204 pp. \$23.95. A Series of Books in Psychology.

World-Wide Weather. K. Takahashi, Ed. Balkema, Rotterdam, 1985. xvi, 252 pp., illus. \$26. Translated from the Japanese (Tokyo, 1975).

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ASSISTANT PROFESSOR OF BIOCHEMISTRY

The search has been extended for a molecular biologist to fill a tenure-track position currently available in the Department of Biochemistry at the University of Tennessee. Preference will be given to candidates with two or more years of postdoctoral experience and established record of productivity. Candidates conducting research in an area which involves the use of recombinant DNA techniques are encouraged to apply. Duties will involve teaching graduate and/or introductory level biochemistry and molecular biology courses. The appointment is for 9 months at an excellent salary level. Please submit curriculum vitae, research synopsis (two to three pages), and letters of recommendation from three references by 15 January 1986. Send material to: **Dr. Leaf Huang, Chairman, Search Committee, Department of Biochemistry, University of Tennessee, Knoxville, Tenn. 37996-0840.**

BIOCHEMIST (MOLECULAR) (Ph.D., D.O. or M.D.) with possible training in **NEUROBIOLOGY OR NEUROPHARMACOLOGY OR NEUROPHYSIOLOGY** to work independently and collaboratively with other research faculty. Research 80 percent; teaching 20 percent. Multiyear contracts available. Salary commensurate with academic rank, training, and grant track record. Please send résumé, curriculum vitae with publications list, and past and present grant support information to: **SEARCH COMMITTEE, Dr. Arnold L. Nagler, Associate Dean, Preclinical Medical Education, New York College of Osteopathic Medicine, Old Westbury, N.Y. 11568.**

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POSITIONS OPEN

ANATOMIST—OHIO UNIVERSITY. The Program in Anatomy, Development and Neurobiology seeks to fill a tenure-track assistant or associate professorship. We are searching for a research-oriented individual to join a group more biologically oriented than basic scientists at most medical schools. Research area is open, although we may give preference to a muscle biologist. Our program includes strong research groups in functional and comparative morphology, neurobiology, ultrastructure, and exercise physiology. Teaching duties involve participation in the gross anatomy course for medical students and offering one course in the Department of Zoological and Biomedical Sciences. A Ph.D. degree, postdoctoral experience, and previous teaching experience in human gross anatomy area are required. This will be a joint appointment in the College of Osteopathic Medicine and in the Department of Zoological and Biomedical Sciences with a starting date of 1 July 1986. Ohio University, with a student body of 15,000, is located in a small, picturesque town in the hills of rural southeastern Ohio. Salary and start-up funds are competitive, and the costs of living and housing in Athens are moderate. Letter of application, curriculum vitae, description of current and future research plans, copies of most significant publications, statement of teaching experience, and three letters of recommendation must be received by 1 February 1986. Address to: **Dr. Joseph Eastman, Anatomy Search Committee, College of Osteopathic Medicine, Irvine Hall, Ohio University, Athens, Ohio 45701-2979. Telephone 614-594-6401, extension 323. Ohio University is an Affirmative Action/Equal Opportunity Employer.**

We invite scientists with Ph.D. and/or M.D. degrees to apply for tenure-track positions at the **ASSISTANT PROFESSOR** level. The Department of Biochemistry is committed to a strong research effort in genetic approaches to problems of cellular growth, differentiation, and control mechanisms. The department is in a modern building with well-equipped laboratories. Current faculty research interests include gene regulation, hormone structure and function, neurochemistry, and enzyme regulation. Appointees will be expected to maintain an independent, externally funded research program that addresses eukaryotic cellular and organismic problems in terms of gene structure and regulation. Opportunities exist for teaching in our Ph.D. and M.D. programs. Applicants should submit curriculum vitae, reprints, an outline of planned research, and should arrange to have letters of support from three individuals sent to: **D. James McCorquodale, Ph.D., Chairman of Search Committee, Department of Biochemistry, Medical College of Ohio, C.S. Number 10008, Toledo, Ohio 43699. An Equal Opportunity Employer.**

The Department of Pharmacology at Oral Roberts University School of Medicine, Tulsa, Oklahoma, invites applicants for **TWO** tenure-track **ASSISTANT PROFESSOR POSITIONS**. Candidates must have 2 years of postdoctoral training and a record of research accomplishment. Candidates must be committed to developing a strong, independent, fundable research program and participating in medical and graduate teaching. Send curriculum vitae, brief statement of research interests, and the names and addresses of three references to: **Dr. J. L. Valentine, Chairman, Department of Pharmacology, Oral Roberts University School of Medicine, 8181 South Lewis, Tulsa, Okla. 74137. Oral Roberts University is a Christian ministry that employs without regard to race, color, sex, age, handicap, national origin, or status as a veteran.**

ASSISTANT PROFESSOR

University of California, Irvine, Department of Pathology, is recruiting for a faculty position at the **assistant professor** level. Required: M.D., licensure for practice in California, certification in anatomic and clinical pathology, and hematopathology fellowship training. Experience in organizing and management of immunohematology service laboratory. Established documented research experience in immunohematology. Duties: Mount an independent research program in the production of monoclonal antibody for the development of diagnostic procedures in hematology. Instructing medical students and residents in pathology. Supervising and organizing a hematopath fellowship training program. Present conferences for medical staff and residents in a teaching hospital. Send curriculum vitae and references to: **E. R. Arquilla, M.D., Ph.D., Professor and Chair, University of California Irvine, Department of Pathology, 101 City Drive South, Orange, California 92668, by 6 January 1986. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

ASSISTANT PROFESSOR. Applications are invited for a position at the level of assistant professor in the Laboratory of Tumor Virus Genetics at the Dana-Farber Cancer Institute. Academic appointment will be in the Department of Microbiology and Molecular Genetics, Harvard Medical School. The individual will be expected to develop an active, independent research program in the area of genetics and molecular biology of large DNA tumor viruses. Applicants should submit by 1 January 1986 a résumé, bibliography and brief description of research plans, and arrange to have three letters of reference sent to: **Search Committee, Laboratory of Tumor Virus Genetics, Dana-Farber Cancer Institute, 44 Binney Street, Boston, Mass. 02115. An Affirmative Action/Equal Opportunity Employer.**

NORTHWESTERN UNIVERSITY DEPARTMENT OF BIOCHEMISTRY, MOLECULAR BIOLOGY AND CELL BIOLOGY

Several new positions are available at the level of **ASSISTANT/ASSOCIATE PROFESSOR** beginning fall 1986. Outstanding candidates with exceptional promise in research and teaching in the areas of **CELL BIOLOGY, MOLECULAR GENETICS, DEVELOPMENTAL BIOLOGY, AND MACROMOLECULAR STRUCTURE** are encouraged to apply. Candidates should submit curriculum vitae, list of publications, reprints and preprints, a statement of research objectives, and request three letters of reference to be sent to: **Faculty Search Chairman, Department of Biochemistry, Molecular Biology and Cell Biology, Northwestern University, Evanston, Illinois 60201.**

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ASSISTANT/ASSOCIATE PROFESSOR OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS AT CHICAGO COLLEGE OF MEDICINE

The Department of Biological Chemistry is seeking applications for a tenure-track assistant/associate professor position, effective academic year 1986. Applicants should have a Ph.D. and at least 2 years of postdoctoral experience. We are seeking candidates with a strong commitment to developing an independent research program using contemporary approaches to fundamental problems in biochemistry. The department is well-equipped and well-funded, having 22 full-time faculty members. The department is particularly strong in nucleic acid structure-function and gene regulation, membrane and cellular biochemistry, and lipid metabolism. Applicants should provide curriculum vitae, at least three letters of reference, and a brief statement of research interests and plans by 1 January 1986. Send applications to: **Secretary, Biochemistry Search Committee, Department of Biological Chemistry, University of Illinois at Chicago, College of Medicine, 1853 West Polk Street, Chicago, Ill. 60612.**

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

TULANE UNIVERSITY SCHOOL OF MEDICINE—FULL-TIME ASSISTANT PROFESSOR OF MEDICINE in the Endocrine Section of the Department of Medicine. The individual selected must be internal medicine Board-certified or Board-eligible with endocrine/metabolic Board or eligibility. The position involves teaching, patient care, and research responsibilities. Apply to: **C. Y. Bowers, M.D., Tulane School of Medicine, 1430 Tulane Avenue, New Orleans, La. 70112. Include updated curriculum vitae. Deadline is 13 December 1985. Tulane University is an Affirmative Action/Equal Opportunity Employer.**

ASSOCIATE PROFESSOR OF IMMUNOLOGY

The Department of Microbiology, Biochemistry, and Molecular Biology, School of Medicine, University of Pittsburgh, invites applications for a senior tenure-track position. In addition to a primary appointment in the department, the position also includes an affiliation with the Pittsburgh Cancer Institute. Candidates for this position must have established a productive research program in cellular or molecular immunology and have an interest in the teaching of immunology to medical and graduate students. Please send curriculum vitae, a description of research plans, and the names and addresses of three references to: **Dr. N. P. Curthoys, Department of Microbiology, Biochemistry, and Molecular Biology, School of Medicine, University of Pittsburgh, Pittsburgh, Pa. 15261.**

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POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR: The Marine Sciences Research Center of the State University of New York (SUNY) is seeking a benthic ecologist with interests in animal-sediment interactions and geomicrobiological processes. Full-time position with one-half academic year support provided by a state, nontenure generating line. One-half academic year and full summer support to be provided by candidate through grants and contracts. Initial appointment is for 3 years subject thereafter to annual renewal. Successful candidate must have in hand one-half academic year support for the first year. Preference given to candidates with three or more years of experience in an academic setting and with a proven record of securing sponsored research support. Successful candidate will be expected to teach one course per year and to direct and support graduate students. Send résumé, statement of research interests, and names of three references to: **J. Mackin, Marine Sciences Research Center, SUNY, Stony Brook, Stony Brook, N.Y. 11794-5000. Salary range \$25,000 to \$33,000 per academic year/full-time. Closing date 20 December 1985.**

SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. AK Number 320-85.

ASSISTANT PROFESSOR—ENTOMOLOGY. Tenure-track with extension responsibilities (70 percent) in arthropod pests of apple, tomato, other fruits and vegetables in western North Carolina and research responsibilities (30 percent) in arthropod pests of vegetables. Position located at Research Station near Asheville, N.C., and responsible to Department of Entomology at North Carolina State University, Raleigh. Requires Ph.D. in entomology or related area. Send letter, résumé, transcripts, thesis abstract, reprints, and names of three references by 15 January 1986 to: **R. J. Kuhr, Department of Entomology, Box 7613, North Carolina State University, Raleigh, N.C. 27695. Affirmative Action/Equal Opportunity Employer.**

ASSOCIATE/ASSISTANT PROFESSOR OF PHYSIOLOGY, probationary (tenure-track) position is available beginning 1 July 1986. The successful candidate should have a Ph.D. or M.D. or equivalent, would contribute to teaching programs in medicine, science, dentistry, and graduate studies, and will be expected to establish an independently funded research program in an area broadly related to existing interests of the department (cardiovascular, endocrine, gastrointestinal, autonomic, renal, integrative, and motor). Send (i) curriculum vitae, (ii) selected reprints, (iii) outline of research interests, and (iv) names and addresses of three references to: **The Chairman, Department of Physiology, The University of Western Ontario, London, Ontario, Canada N6A 5C1.**

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. An Equal Opportunity Employer. Position is subject to budget approval.

NATIONAL SCIENCE FOUNDATION (NSF)

NSF's Division of Cellular Biosciences is seeking qualified applicants for the position of **ASSISTANT PROGRAM DIRECTOR for the CELL BIOLOGY PROGRAM**. This position is exempted from the competitive civil service and will be filled on a rotator/temporary or permanent basis, salary ranges from \$35,000 to \$50,000 per annum. The program focuses on the basic mechanisms underlying the growth, division, and functions of prokaryotic and eukaryotic cells. Applicants should have a Ph.D., plus 3 to 4 years of independent research experience beyond the Ph.D., and a broad understanding of current research in the program areas of the division. For details on application procedures, telephone: **Stuart Solomon at 202-357-7840. For technical information, telephone: Dr. Bruce L. Uminger, Acting Division Director at 202-357-7905. Hearing impaired individuals should telephone: 202-357-7492. NSF is an Equal Opportunity Employer.**

BIOCHEMIST

Vascular Laboratory, Tufts University School of Medicine, seeks a protein chemist for a full-time research position. Applicant should have experience with proteolytic enzymes. Candidates with a background in fibrinolytic enzymes will be given preference since our laboratory is engaged in the characterization, mode of action, and biological function of pro-urokinase. Salary dependent on experience and seniority. Send curriculum vitae and at least two references to: **Dr. Victor Gurewich, Director, Vascular Laboratory, St. Elizabeth's Hospital, Boston, Mass. 02135.**

UNIVERSITY OF MINNESOTA PLANT MOLECULAR BIOLOGY/GENETICS

The Plant Molecular Genetics Institute invites applications for one or two new tenure-track faculty positions. The position(s) will probably be filled at the assistant professor level; however, outstanding candidates for the associate professor level are urged to apply.

Applicants for assistant professor must have a doctorate, minimum of 1 year of postdoctoral training, demonstrated research ability, and a strong background in molecular biology/genetics. Applicants for associate professor must have a doctorate, minimum of four years of professional experience, demonstrated ability to develop an independent research program in molecular biology/genetics, and a strong record of publication.

The appointee will be expected to maintain a research program in plant molecular biology/genetics and to be involved in teaching and advising. Research areas of particular interest to the Institute are gene transfer, molecular biology of plant diseases, hormonal control of gene expression, and interaction of nuclear and organellar genomes. Interactions with faculty in the Departments of Agronomy and Plant Genetics, Horticulture, and Plant Pathology (College of Agriculture) and Biochemistry, Botany, and Genetics and Cell Biology (College of Biological Sciences) are expected and encouraged. Appointments will be held in one of these departments.

The position is available in the fall of 1986; salary is negotiable. Substantial start-up funds will be provided.

Send curriculum vitae, two-page statement of your research and teaching experience and goals, relevant reprints, and three professional letters of reference by January 15, 1986 to: Dr. Carolyn D. Siffow, Chair, Search Committee, Plant Molecular Genetics Institute, 250 Biological Sciences Center, 1445 Gortner Avenue, St. Paul, MN 55108-1095.

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

ENVIRONMENTAL EPIDEMIOLOGIST/BIostatistician

The Institute of Environmental Studies of the University of Illinois at Urbana-Champaign has up to two tenure-track openings for an environmental epidemiologist and/or a biostatistician. The positions are being primarily considered at the assistant professor level. Appointments at the associate or full professor level may be possible for persons with outstanding qualifications and sufficient experience. These positions are to fill needs in a growing program in environmental toxicology, and the candidates should have a strong interest in the impacts of environmental toxins and their relationship to human disease. The epidemiologist should have interests in quantitatively oriented chronic disease studies. The biostatistician should have interests in the relationship between disease risks and population pollutant exposures. A Ph.D. in an appropriate biomedical science is required and postdoctoral experience is desirable. The faculty member will have responsibility for the development of an independent research program, as well as interacting with a multidisciplinary team studying a variety of environmental problems. Mutual acceptance by another department such as Health and Safety Studies, Veterinary Pathobiology, Statistics, or Medical Information Science of the College of Medicine can result in a joint appointment. Salary open. Apply by sending curriculum vitae, a description of research interests, and a list of at least three references to: Dr. Philip K. Hopke, Institute for Environmental Studies, University of Illinois, 1005 West Western Avenue, Urbana, Ill. 61801, Telephone: 217-333-6230. Position available 21 August 1986; closing date for applications is 15 February 1986 or until filled. Candidates may be called to interview before the closing date. All candidates who apply before 16 February 1986 will receive full consideration. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

THERE'S EVERYTHING YOU NEED...AT ORTHO

Principal Scientist Biochemical Biological Research

Ortho Pharmaceutical, a member of the Johnson & Johnson Family of Companies, is a total pharmaceutical health care and research organization committed to improving the quality of life through the development of pharmaceuticals, dermatologicals, consumer products and immunological breakthroughs. In short, we're a diversified leader - an ideal place for scientists who want to work in an environment where their creativity, their opinions and their judgments are valued and rewarded. Right now, we have a unique opportunity for an experienced scientist, with a strong background in biological research.

We are looking for a biochemical pharmacologist to conduct research in the area of lipid mediators of inflammation. The research will include studies with *in vitro* systems and animal models and involve interactions with our immunopharmacology, cardiovascular and central nervous system research groups. Experience with subcellular and *in vivo* assays for lipoxigenase inhibitors and leukotriene antagonists is preferred, but not essential. Working knowledge of radioreceptor assays, cell culture methods, radioimmunoassays and high performance liquid chromatography (HPLC) techniques is desirable.

We desire an individual with a Ph.D. in biochemical pharmacology or pharmacology and up to 5 years' postdoctoral training. Industrial experience would be helpful. The position offers the opportunity for professional growth through scientific publications and an active role in our drug discovery program.

In return, we offer a stimulating work environment, a competitive salary and the exceptional benefits of a Johnson & Johnson Company. For prompt and confidential consideration, please submit your resume with salary requirements to: Dept. 35, Attn: Robin Engard Seiz, ORTHO PHARMACEUTICAL CORPORATION, Box 300, Route 202, Raritan, NJ 08869-0602. We are an equal opportunity employer.

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Physiological Pharmacologist



An equal opportunity employer

An opportunity exists for a physiological pharmacologist with a broad range of *in vivo* and *in vitro* preparative skills to join the General Pharmacology Research Section of Pfizer Central Research. A PhD in pharmacology or physiology with subsequent postdoctoral, industrial or equivalent experience is essential. Demonstrated hands-on experience with prototype pulmonary, renal, cardiovascular and smooth-muscle preparations is required along with an interest in solving novel preparative problems. Industrial experience in preclinical physiological pharmacology is desirable; however, a broad knowledge of contemporary industrial pharmacology is more important.

In this position, you will join a multidisciplinary group responsible for broad physiological/pharmacological profiling of a diverse group of potential drug candidates. It offers an excellent opportunity 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.

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHARMACOLOGY

The Department of Pharmacology of The Ohio State University, College of Medicine, invites applications for a tenure-track faculty position at the assistant professor level. Applicants should have at least 2 years of postdoctoral training and hold the Ph.D. and/or M.D. degree(s). They should have the potential for developing a strong, independent research program and be willing to participate in medical and graduate student teaching. Opportunities will exist for collaborative research also. The candidate should have proven research experience in cardiovascular research (vasoactive peptides, ionic fluxes, cellular electrophysiology) as applied to the understanding of drug and transmitter action at the cellular level.

Submit curriculum vitae, a statement of research interests, representative publications, and the names of three references to: **Norton H. Neff, Ph.D., Professor and Chairman, Department of Pharmacology, The Ohio State University, College of Medicine, 333 West Tenth Avenue, Columbus, Ohio 43210-1239.**

Closing date: 31 December 1985

An Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR OF PLANT BIOLOGY

The Department of Biology at the University of Pennsylvania invites applications for a tenure-track position. Candidates should have strong backgrounds in plant biology and research programs that apply molecular and biochemical techniques to problems in physiology, development, or pathology. Outstanding scholar-teachers in related areas are also invited to apply. Becoming an effective teacher of plant biology is an essential aspect of this position. The position is affiliated with the Plant Science Institute which, along with the Biology Department, is a component of a major biomedical research complex. *The University of Pennsylvania is an Equal Opportunity Employer.* Applications, including curriculum vitae, bibliography, selected reprints, a statement of current research goals, and a list of three potential recommenders should be sent to: **Plant Biology Search Committee, Department of Biology, University of Pennsylvania, Philadelphia, Pa. 19104-6018.**

ASSISTANT PROFESSOR PLANT MOLECULAR BIOLOGIST

Applications are invited for the tenure-track position of assistant professor in the 40-member Department of Molecular and Cell Biology, College of Liberal Arts and Sciences, The University of Connecticut. Candidates should have a strong research record in molecular approaches to the physiology, development, or genetics of plants, and should be prepared to teach at the graduate and undergraduate levels in these areas. Candidates with postdoctoral training are preferred. Review of applications will begin 15 November 1985, with an appointment anticipated by September 1986. Applicant should submit curriculum vitae, bibliography, and three references to: **Hallie M. Krider, Chairperson, Molecular and Cell Biology Search Committee, U-131, Room 321, 354 Mansfield Road, Storrs, Conn. 06268. Affirmative Action/Equal Opportunity Employer.** (Search Number 6A18).

UNIVERSITY OF CONNECTICUT

PH.D. BIOCHEMIST with skills in immunological techniques, subcellular fractionation, and chemical/protein interaction areas. The candidate must have a Ph.D. in biochemistry and at least 2 years of postdoctoral experience. The position focuses on design/discovery of new fungicides which act as mechanism-based inhibitors of key metabolic processes in plant pathogenic microorganisms. Expertise in membrane transport, membrane biochemistry, biochemical characterization of membrane transport proteins in microorganisms, and eukaryotes is required. Salary is \$3000 to \$3500 per month. Send résumé, including list of publications to: **Thelma Jones, Division of Employment and Training, Delaware State Department of Labor, 3301 Lancaster Pike, P.O. Box 2168, Wilmington, Delaware 19899.** Job Reference Number 601230.

POSITIONS OPEN

ASSISTANT PROFESSOR—SOIL PHYSICS. Position is 65 percent research/35 percent teaching. Appointee will develop research programs and supervise graduate student training in fluid, solute, and heat transport in soils. A Ph.D. specializing in soil physics, with strong physics and mathematics competence required. Teaching includes a lecture course, a seminar, and a team-taught laboratory course. Apply by 17 January 1986. Send résumé, transcripts, names of three references, and important reprints to: **C. B. Tanner, Chair, Department of Soil Science, University of Wisconsin, Madison Wis. 53706; Telephone: 608-263-5691. An Equal Opportunity/Affirmative Action Employer.**

UNIVERSITY OF ROCHESTER, SCHOOL OF MEDICINE AND DENTISTRY DEPARTMENT OF PHYSIOLOGY ASSOCIATE PROFESSOR/PROFESSOR

Applications for a tenured research and teaching position are invited. Physiologists and biophysicists studying transport mechanisms in epithelial cells and/or regulation of cellular processes will be considered. Applicants should be involved in the development of new concepts or techniques or their application to situations not previously studied. Specific area of interest is less important than creative work at the forefront of the field. Curriculum vitae, description of research interests, and a list of four or more references should be sent to: **Dr. Paul Horowitz, Department of Physiology, Box 642, University of Rochester, School of Medicine and Dentistry, Rochester, N.Y. 14642. Equal Opportunity Employer, M/F.**

ASSOCIATE RESEARCH SCIENTIST. Department of Therapeutic Radiology. To develop the water calorimeter for radiation therapy dosimetry in order to establish the accuracy of dose determination for x-ray and electron beams. In addition, to evaluate the properties of and develop a lyoluminescent dosimetry. Applicant must have a Ph.D. in either physics or radiation biophysics, as well as prior experience in ionization-chamber dosimetry, thermoluminescent dosimetry, and with electron accelerators. Full-time position with annual salary of \$24,300. Interested applicants should submit their résumés to: **Dr. R. J. Schulz, Department of Therapeutic Radiology, Yale University School of Medicine, 333 Cedar Street, New Haven, Conn. 06510. Yale University is an Equal Opportunity/Affirmative Action Employer.**

CARDIOVASCULAR—EXERCISE PHYSIOLOGIST. Ohio University has an opening for a full-time, tenure-track assistant or associate professor jointly with the Department of Zoological and Biomedical Sciences and the College of Osteopathic Medicine. We are seeking a broadly trained physiologist with special expertise in cardiovascular and exercise physiology. A Ph.D. degree and postdoctoral experience are required. Primary responsibility is for the teaching of cardiovascular physiology to medical students, along with undergraduate and graduate teaching in an expanding exercise/environmental physiology program and the development of an independent extramurally fundable research program. Collaborative opportunities and current research interests in the physiology program exist in the areas of exercise physiology, hypertension, neuropsychology, muscle biology, endocrinology, and pharmacology. Ohio University has a student body of 15,000 undergraduates and is located in a small university town in rural southeastern Ohio. Salary and start-up funds are competitive, and the cost of living, including housing, is moderate.

Letters of application, curriculum vitae, description of current and proposed research, and names and addresses of three references to be received by 15 February 1986. Address to: **Dr. R. A. DiCaprio, Physiology Search Committee, College of Osteopathic Medicine, Irvine Hall, Athens, Ohio 45701-2979. Telephone 614-594-6401, extension 294. Ohio University is an Affirmative Action/Equal Opportunity Employer.**

CELLULAR-MOLECULAR BIOLOGIST

(Science Division) Full-time faculty position. Direct undergraduate program in molecular biology-biochemistry. Teach two undergraduate courses, conduct research in cellular and molecular biology. Rank open; salary dependent on qualifications. Ph.D. and postdoctoral experience in biochemistry, molecular biology, or related area required. Submit curriculum vitae, statement of research interests, and names of three references to: **Personnel Coordinator, Long Island University, Brooklyn Campus, Brooklyn, N.Y. 11201. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

BIOCHEMIST/PHARMACOLOGIST

Applications are invited for the position of **POST-DOCTORAL RESEARCH ASSOCIATE.** The successful applicant will conduct research on brain membrane lipid metabolism and its response to neurotoxicants, particularly cholinesterase inhibitors. A strong background with a Ph.D. in biochemistry/pharmacology or a related field is required. Experience and interest in phospholipid metabolism, analysis, receptor-mediated events, and cholinergic and noncholinergic mechanisms are desirable. The research environment includes fully equipped, modern biochemical laboratories, analytical instrumentation (GC/MS, AA, HPLC, autoradiographic analysis), cell culture, and animal surgery facilities. The position is a multiyear opportunity in the Biochemistry Department of the School of Medicine and the University of Minnesota Chemical Toxicology Research Center. Salary is competitive and commensurate with experience and training. Send curriculum vitae, a description of research interests, and names of three references by 13 December 1985 to: **The Search Committee, c/o Dr. Lester R. Drewes, Department of Biochemistry, University of Minnesota School of Medicine, Duluth, Minn. 55812. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

BIOCHEMISTRY/NEUROCHEMISTRY/PHARMACOLOGY/

Applications are invited for the full-time, non-tenure-track position of **ASSISTANT PROFESSOR OF BIOCHEMISTRY.** The successful applicant will conduct research on cerebral metabolism and blood-brain transport and their response to neurotoxicants, particularly cholinesterase inhibitors. A strong background with a Ph.D. in biochemistry/pharmacology or a related field is required. Experience and interest in cholinergic and non-cholinergic mechanisms, regional autoradiographic techniques for metabolism, blood flow, and receptors, or mechanisms of seizure genesis are desirable. Previous postdoctoral experience is preferred. The research environment includes fully equipped, modern biochemical laboratories, analytical instrumentation (GC/MS, AA, HPLC, autoradiographic analysis), cell culture, and animal surgery facilities. The position is a multiyear opportunity with optional participation in faculty academic activities of the Biochemistry Department and the University of Minnesota Chemical Toxicology Research Center. Salary is competitive and commensurate with experience and training. Send curriculum vitae, a description of present and future research interests, and names of three references by 13 December 1985 to: **The Search Committee, c/o Dr. Lester R. Drewes, Department of Biochemistry, University of Minnesota School of Medicine, Duluth, Minn. 55812. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

AVIAN HEALTH CHAIR

The Department of Veterinary Pathobiology, College of Veterinary Medicine, University of Minnesota, invites applications and nominations for the recently established Benjamin S. Pomeroy Endowed Chair in Avian Health. The chair was endowed by more than 100 donors from all segments of the avian industries. This is a position at the full or associate professor level. Minimum qualifications are a Ph.D. or D.V.M. (or equivalent foreign degree). At the full professor level the appointment will be with indefinite tenure. Minimum experience is at least 6 years of demonstrated national/international recognition in research and teaching. At the associate professor level the appointment will be either indefinite tenure or tenure-track. The minimum experience is 5 years of demonstrated effectiveness in research and teaching. Primary emphasis is on the development of a funded research program focused on avian health. Related teaching and advising of graduate students are expected. The position requires a person with leadership qualities who is familiar with health concerns of the poultry industry, and whose special interests and expertise will strengthen the current research efforts of the Avian Health Research program. Applicants should submit letter of application, curriculum vitae, and names of five references by 31 January 1986 to: **Dr. Martin E. Bergeland, Chair, Avian Health Search Committee (G), College of Veterinary Medicine, University of Minnesota, 1943 Carter Avenue, St. Paul, Minn. 55108. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

RESEARCH TECHNICIANS

At Amoco, Research Is Everything

We're seeking talented Research Technicians who want to join our progressive Biotechnology Division.

BIOCHEMIST—Must be experienced in protein biochemistry and enzymology. Individual will be involved in the development of novel nonisotopic detection systems (fluorescent, colorimetric) for in-vitro diagnostics.

ORGANIC CHEMIST—Satisfy your keen interest in organic synthesis assisting in the chemical production of nucleic acid components required for molecular biological experiments.

MOLECULAR BIOLOGIST—Candidate will be directly involved in the development of new nucleic acid hybridization methodology for identification of microorganisms & viruses. A solid laboratory background and ability to work with minimum supervision is essential.

For all of the above positions, candidates must possess a Bachelor's degree coupled with 2 years previous laboratory experience. A Master's degree is preferred.

Amoco Research Center offers highly competitive salaries, exceptional benefits and a convenient suburban Chicago location. Please forward resume in complete confidence to:



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AMOCO RESEARCH CENTER

P.O. Box 400, Dept. JML/11-22
Naperville, IL 60566

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Marine Chemists/ Organic Geochemists

Battelle, one of the world's leaders in contract R&D, has created several new positions in Marine Chemistry and Geochemistry within the Ocean Sciences Center. We are seeking candidates to participate in and lead technical efforts in coastal pollution monitoring, ocean disposal studies, fossil fuel exploration, and marine organic geochemical research. The individual must have strong academic credentials, experience in designing and conducting programs and a commitment to a high level of quality assurance/quality control. A strong background in technical writing is required.

In addition, we are seeking an experienced laboratory manager to oversee all operations in the Marine Chemistry Laboratory. This position requires experience in the scheduling of analytical work and people on a diversity of projects, a proven track record in the implementation of strict QA/QC and a strong background in analytical environmental chemistry.

We offer an excellent opportunity for career development, competitive salary, and generous benefits. Send curriculum vitae, descriptions of relevant experience, and references to:

Joan Sundstrom, 397 Washington St., Duxbury, MA 02332.
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Battelle



The Howard Hughes Medical Institute and

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The Program for Research Opportunities for Medical Students

1986-87

HHMI-NIH Research Scholars can spend 9-12 months in one of the 1,000 research laboratories located at the NATIONAL INSTITUTES OF HEALTH, Bethesda, MD.

Salary, fringe benefits and travel will be provided.

Further information and application forms may be obtained by writing to the Howard Hughes Medical Institute, P.O. Box 330837, Coconut Grove, FL 33133

Your request for the application information should be received by December 2nd, 1985.

Final deadline for return of all application materials is January 15th, 1986.

PROJECT SCIENTIST

Ph.D. in virology, molecular biology, or related field with demonstrated competence in conducting molecular biological assays including the preparation and use of nucleic acid probes and immunoassays for tracking the fate of viral antigens and nucleic acids. Will conduct molecular biological research on viruses, some of which are used as pesticides, and will perfect, standardize, and validate mammalian cell culture tests and viral assays used in predicting human health risks of microbial pesticides. Will publish findings in scientific literature. Will also obtain and maintain cell stocks, test cultures, and virus stocks. Please send curriculum vitae including salary history and present salary requirements, copies of recent publications, and statement of research interests in confidence to:

Human Resources

NORTHROP SERVICES, INC.
Environmental Sciences
P.O. Box 12313
Research Triangle Park, N.C. 27709
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SUPERCOMPUTER GRAPHICS AND MOLECULAR DYNAMICS UNIVERSITY OF MINNESOTA

The Medicinal Chemistry Department invites applications for a tenure-track position in the specialty of molecular dynamics and computer-aided drug design. The facilities, which include two Cray-2 and Cyber 205 super-computers and connecting fiber optic network to the Health Sciences Center, represent a unique opportunity for the successful candidate to develop a research program at the cutting edge of molecular dynamics and its application to investigating relationships between molecular structure and function. The working environment will provide an excellent opportunity for interaction with scientists in the health sciences and with other faculty of the university. Also, opportunities are available for establishing relationships with industry.

Candidates will possess a doctoral degree in a chemically oriented discipline and have a strong background in semi-empirical quantum mechanics and molecular mechanics as applied to molecules of biological relevance. Experience in molecular modeling of small molecules and biopolymers and proven capability in carrying out and developing new research projects in these areas are highly desirable. It is essential that the candidate be a good communicator and possess the ability to work both independently and as a member of interdisciplinary groups. Academic rank and salary are open and will be commensurate with background and experience.

Send application letter, résumé, and the addresses and telephone numbers of three references by 1 February 1986 to: **Professor Philip S. Portoghesi, Department of Medicinal Chemistry, College of Pharmacy, University of Minnesota, 308 Harvard Street, S.E., Minneapolis, Minn. 55455.** The University of Minnesota is an Equal Opportunity Educator and Employer, and specifically invites and encourages applications from women and minorities.

POSITIONS OPEN

BIOLOGY—ECOLOGY

Rider College seeks applications for a tenure-track assistant professor position to begin September 1986. Applicants will be expected to teach introductory ecology, an advanced course, and contribute to our freshman biology offerings. A strong commitment to undergraduate teaching and the development of a research program involving undergraduates is expected. The applicant should be broadly trained in ecology with a strong interest in interactions at the molecular level. The possibility exists for participation in the biochemistry and/or marine science programs. Ph.D. required. Rider College, a private, 4-year institution of 3500 students located between New York and Philadelphia, stresses excellence in undergraduate education and close student-faculty interaction. Salary dependent upon background and experience. Letter of application, résumé, and three letters of reference should be sent by 15 January 1986 to: **Dr. James H. Carlson, Chairman, Department of Biology, Rider College, 2083 Lawrenceville Road, Lawrenceville, New Jersey 08648.** An Affirmative Action/Equal Opportunity Employer, M/F/H.

BOTANY AND ANATOMY/CELL BIOLOGY

The Department of Biology of the University of North Carolina (UNC) at Greensboro has two tenure-track positions at the assistant professor level to be filled by August 1986. One position is for a botanist who will be expected to teach in the introductory biology program. The second position is for a cell biologist with experience in transmission electron microscopy who will also teach mammalian anatomy. Successful applicants will be expected to develop independent research programs and to teach graduate and undergraduate courses within their areas of specialty. Initial applications should include: curriculum vitae, three letters of reference, a statement of research and teaching interests, and a list of all science courses completed. Applications should be sent to: **Dr. William K. Bates, Head, Department of Biology, UNC-Greensboro, Greensboro, N.C. 27412.** Application deadline: 15 January 1986. An Equal Opportunity Employer.

The Queen's University of Belfast CHAIR OF BIOLOGICAL SCIENCES

The Senate of the Queen's University of Belfast invites applications for appointment to a newly created chair of biological sciences in a School of Biological Sciences established from 1 October 1985. The School embraces the departments of Zoology, Genetics, and Botany (including at present a sub-department of Microbiology). Candidates in any branch of biological science will be considered and the professor appointed will become foundation chairman of the school. Salary within the professorial range, with contributory pension rights under USS.

Further particulars may be obtained from: **The Personnel Officer, The Queen's University of Belfast, BT7 1NN, Northern Ireland.** Closing date: 31 December 1985. (Please quote Reference 85/S.)

CLINICAL DIRECTOR AND VICE-CHAIR THE DEPARTMENT OF RADIATION THERAPY THE UNIVERSITY OF TEXAS MEDICAL BRANCH GALVESTON, TEXAS

The Department of Radiation Therapy at The University of Texas Medical Branch is seeking a radiation therapist who will have responsibilities as clinical director and vice chair. Candidates must be Board-certified in therapeutic radiology, have a record of achievement in clinical and/or nonclinical research, and be recognized as having demonstrated clinical expertise in radiation therapy. Qualifications include satisfying the requirements of The University of Texas Medical Branch for a faculty appointment at the associate or professorial level (with tenure). The appointee will have responsibility and authority for the clinical, educational, and clinical research activities of the department and will represent the chair at institutional and departmental levels as appropriate. Interested individuals are invited to submit their curriculum vitae and the names of at least three references to:

James A. Belli, M.D.
Professor and Chairman
Department of Radiation Therapy
The University of Texas Medical Branch
Galveston, Texas 77550

UTMB is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

THE UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES has established a **CHAIR IN ALCOHOL AND DRUG ABUSE** supported with a one-million dollar endowment. The chair is to be within the Department of Internal Medicine and the person selected for the position will develop a program of instruction, patient care, and research to involve medical students, house staff and faculty. This activity will evolve as a section within the Department of Medicine and will expand to include additional faculty and physician trainees.

Applicants should have experience in the treatment of substance abuse and demonstrated competence as a scientific investigator with publications in the field.

Nominations and applications should be sent to: **Joseph H. Bates, M.D., Department of Medicine, College of Medicine, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, Arkansas 72205.**

The University of Arkansas for Medical Sciences is an Affirmative Action/Equal Opportunity Employer.

CHAIRMAN, DEPARTMENT OF INTERNAL MEDICINE—Yale University School of Medicine and Yale-New Haven Hospital invite applications and nominations for the position of chairman and chief of the Department of Internal Medicine. Candidate must be qualified for faculty appointment at the rank of professor and must be a recognized leader in the field with proven ability as a scholar, clinician, teacher, and administrator. Appointment is to be effective July 1986 or as soon thereafter as possible. Applications should be submitted prior to 15 January 1986. *Qualified women and minority group members are encouraged to apply.* Curriculum vitae and bibliography should be sent to: **The Chairman of the Search Committee: Dr. Vincent T. Marchesi, Department of Pathology, Yale University School of Medicine, 333 Cedar Street, P.O. Box 3333, New Haven, Connecticut 06510.**

DEAN OF THE COLLEGE OF AGRICULTURE AND BIOLOGICAL SCIENCES SOUTH DAKOTA STATE UNIVERSITY (SDSU)

Dean, College of Agriculture and Biological Sciences, available 1 July 1986. **Responsibilities:** Leadership for faculty, quality of programs, and research. Overall responsibility for budget and public relations. May have direct supervision for the Cooperative Extension Service. **Qualifications:** Earned doctorate in discipline recognized in the college and distinguished record in at least two of the three areas of teaching, research, or extension required. Qualification for rank as a professor (10 years of relevant experience), significant administrative experience, demonstrated activity in professional organizations, and U.S. citizenship or permanent visa also required. Familiarity with latest national and international trends in agriculture and biological sciences and with Land-Grant philosophy desired. **Salary:** negotiable/commensurate with qualifications. Send curriculum vitae and names and addresses of five references to: **Carol J. Peterson, Ph.D., Chairperson, Agriculture and Biology Search, South Dakota State University Box 2275, Brookings, S.D. 57007.** Deadline 15 January 1986 or until suitable candidate found. *SDSU is an Affirmative Action/Equal Opportunity Employer (female/male). Women and minorities encouraged to apply.*

DIRECTOR OF AGRICULTURE AND ENVIRONMENTAL SCIENCES. Texas Department of Agriculture seeking person to provide leadership to professional and clerical staff who are responsible for administering and enforcing laws pertinent to plant disease, pest management, and pesticide registration and use. Master's or Ph.D. preferred with proven managerial and policy-making experience. **Salary:** mid \$40's, depending on qualifications. Submit résumé to: **TDA, P.O. Box 12847, Department RP, Austin, Texas 78711.** *Equal Opportunity Employer.*

ENTOMOLOGY

ASSISTANT PROFESSOR/ASSISTANT ENTOMOLOGIST, Department of Entomology, Mississippi State University. Primary research emphasis will be placed on host-pest interactions of insect and mites on tree fruits and nuts. **Qualifications:** Ph.D. in entomology (or related biological science) with research experience in the area of host-pest interactions. Further information may be obtained from: **T. J. Helms, Head, Department of Entomology, P.O. Drawer EM, Mississippi State, Miss. 39762.** Telephone: 601-325-2085.

POSITIONS OPEN

DEVELOPMENTAL BIOLOGIST AND BIOCHEMIST Alma College

Two tenure-track faculty positions are available September 1986. Ph.D. and college teaching experience required: rank and salary commensurate with experience. Appointees expected to pursue active research programs involving undergraduate students and attracting external support. Commitment to teaching excellence in a liberal arts atmosphere is essential.

Developmental Biologist with interests in plant and/or animal systems. Research experience in cellular, molecular, or genetic approaches to studying problems in development and differentiation is desirable, but not required. The successful candidate will be expected to teach laboratory courses in developmental biology, comparative anatomy, an advanced course in the area of specialization, and contribute to the general biology course.

Biochemist is sought for a new, joint position in the Departments of Biology and Chemistry to establish a modern, interdisciplinary biochemistry program following the 1981 guidelines of the American Society of Biological Chemists. The successful candidate will teach biochemistry courses and contribute to related areas in biology and chemistry.

Deadline for applications is 15 January 1986. Send credentials, including three letters of reference, to: **Search Committee, Dow Science Office, Alma College, Alma, Michigan 48801.** *As an Equal Opportunity/Affirmative Action Employer, Alma College encourages women and minority candidates to apply.*

DIRECTOR OF PHARMACOLOGY

We are seeking a motivated, innovative, and experienced scientist to direct our existing pharmacology and toxicology facility. Applicants must have a Ph.D. in pharmacology with at least 5 years of postdoctoral experience, as well as documented supervisory skills. Requirements include demonstrated experience in acute and subchronic toxicology, pharmacology, and CNS active drugs. This is an exciting and challenging opportunity for an experienced pharmacologist.

We are a Massachusetts-based company with exceptional growth potential. We offer a competitive salary, as well as complete fringe benefits. Please send résumé in confidence to: Box 254, **SCIENCE.**

FACULTY POSITION IN GEOPHYSICS

The Geophysics Program at the University of Washington invites applications for a tenure-track position at the assistant professor level. Applicants must have a Ph.D. and will be expected to teach courses primarily at the senior and graduate student level and to establish innovative, forward-looking research programs in seismology. Curriculum vitae and four letters of reference should be sent prior to 9 January 1986 to: **Professor John Booker, Chairman, Recruitment Committee, Geophysics Program, AK-50, University of Washington, Seattle, Wash. 98195.** *The University of Washington is an Affirmative Action/Equal Opportunity Employer.*

GENETICS. Assistant or associate professor for a tenure-track appointment to begin fall term 1986. Teaching responsibilities include courses in (i) genetics for biology majors, (ii) human genetics for non-science majors, and (iii) an advanced course in genetics. Primary consideration given to individuals with a commitment to excellence in undergraduate teaching. Pursuit of funding to support a molecular genetics research program involving undergraduates expected. Send curriculum vitae, a brief statement of professional goals, and three letters of reference by 6 January 1986 to: **Dr. W. Hubert Keen, Chairperson, Department of Biological Sciences, State University of New York (SUNY), P.O. Box 2000, Cortland, N.Y. 13045.** *(SUNY) College at Cortland is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

EXERCISE PHYSIOLOGY: Professor, and established investigator, with background in temperature regulation with exercise to direct graduate environmental physiology emphasis. Must be mechanistic-oriented, and have proven scholarship and grantsmanship. Submit letter of application, curriculum vitae, three reprints, and three letters of recommendation to: **Charles M. Tipton, Ph.D., Head, Department of Exercise and Sport Sciences, University of Arizona, Tucson, Arizona 85721.** Application deadline: 10 February 1986. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

DIRECTOR IN VITRO FERTILIZATION LABORATORY

Position available for a Ph.D. specializing in embryology to direct a private in vitro fertilization laboratory in Louisville, Kentucky. Must have experience in tissue and embryo or oocyte culture techniques. A junior faculty position at the University of Louisville will be available. Salary will be commensurate with experience. Excellent opportunity to be a part of a growing multidisciplinary center. Send curriculum vitae to: **Dr. Christine L. Cook, Department of Obstetrics and Gynecology, University of Louisville, School of Medicine, 550 South Jackson Street, Louisville, Kentucky 40292.** Telephone: 502-588-7906.

Equal Opportunity Employer

ELECTRON MICROSCOPIST

Responsible for the operation and supervision of the Electron Microscopy Laboratory. Requires 3 years of experience in electron microscopy laboratory and bachelor of science degree in related field, or certification in medical technology and/or histotechnology. Prefer five or more years of appropriate experience and registration and certification with the American Society of Clinical Pathologists and/or the Electron Microscopy Society of America. Send résumé by 15 December 1985 to: **Personnel Office, Oklahoma College of Osteopathic Medicine, 1111 West 17 Street, Tulsa, Okla. 74107.** *An Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION-DEPARTMENT HEAD

The Department of Biology at Berry College invites applications for a tenure-track position for associate professor/professor, available beginning September 1986. Depending upon qualifications, the position will include department head. A Ph.D. is required and the applicant should have sufficient full-time teaching experience to recognize the scope of activities suitable to a liberal arts biology department. He or she should also have an active interest in a research program which involves undergraduates and makes use of a 28,000-acre campus consisting of forests, lakes, pasture, crops, and cattle. The applicant should be specialized in one of the biological sciences. Candidates should submit a résumé and three letters of reference to: **Dr. John McDowell, Department of Biology, Berry College, Mt. Berry, Georgia 30149.** Application deadline: 1 January 1986. *Equal Opportunity Employer.*

FACULTY POSITION-AVIAN PATHOLOGIST

The Department of Animal Sciences at Rutgers University invites applications for a tenure-track assistant professorship. Candidates for this position must have a D.V.M., and preferably a D.V.M./Ph.D. degree. The individual will be expected to provide diagnostic services to the New Jersey Poultry Industry, and develop a research program in the area of animal disease capable of attracting competitive outside funding. Salary is negotiable and commensurate with experience. Candidates should submit by 1 January 1986 an application, including curriculum vitae and three letters of recommendation, to: **J. P. Advis D.V.M., Ph.D., Department of Animal Sciences, Rutgers University, New Brunswick, New Jersey 08903.** *Rutgers University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION, MOLECULAR BIOLOGIST. The Department of Microbiology, University of Connecticut Health Center, invites applications for a tenure-track faculty position at the rank of assistant or associate professor. Preferred areas of research interest include protein-nucleic acid interactions, biochemical mechanisms of cellular growth control, or membrane/organelle biogenesis. Candidates must have a Ph.D. or M.D. degree and at least 2 years of postdoctoral experience and must demonstrate clear potential to develop a productive, high quality, independent research program. In addition, the successful candidate should be an effective teacher in medical school and graduate courses. Applicants must submit curriculum vitae and bibliography, a statement of research accomplishments and future research plans, reprints of most significant work if available, and three or more letters of recommendation. Send to: **Dr. M. J. Osborn, Department of Microbiology, L-2034, University of Connecticut Health Center, Farmington, Conn. 06032.** *An Affirmative Action/Equal Opportunity Employer M/W/H.*

POSTDOCTORAL RESEARCH APPOINTMENTS IN PULMONARY BIOLOGY- TOXICOLOGY

The Life Sciences Division of the Laboratory is seeking candidates for appointments as postdoctoral researchers in the Pulmonary Biology-Toxicology Program at Los Alamos. Ongoing research conducted under this program include: pulmonary pathophysiology, including fibrogenesis and tumorigenesis; isolation and characterization of lung cells; monoclonal antibody development against specific lung cell populations; pulmonary toxicology; lung defense mechanisms; flow cytometric analyses of lung cells; lung fluid constituent analyses; aerosol deposition, retention, and clearance pathways; and pulmonary immunology; pulmonary physiology; pulmonary pharmacology. Individuals with a strong background and interest in cellular-molecular mechanisms involved in environmentally induced pulmonary tumorigenesis are especially encouraged to apply.

Applicants should have received their doctoral degree within the past three years. The appointments are for one year, renewable for a second year. The annual stipend range is \$29,520 - \$31,080 per year; employee benefits and moving expenses are provided.

Postdoctoral appointments are awarded in a Laboratory-wide competition. The Selection Committee meets four times a year in February, May, August, and December. Applications are accepted any time during the year.

To formally apply, send resume, three letters of reference, a statement of research interests and goals, and graduate and undergraduate transcripts to:

Carol M. Rich
Personnel Administration Division
POSTDOC-FY
Los Alamos National Laboratory
Los Alamos, NM 87545
United States citizenship is required. Los Alamos is an Affirmative Action/Equal Opportunity Employer.



ASSISTANT PROFESSOR OF BIOCHEMISTRY

A major commitment to improvement of teaching and research in the basic medical sciences will include new faculty appointments and investment in research resources. For the initial appointment in Biochemistry, we seek an individual who can develop an independent research program in some aspect of molecular biology (e.g., regulation of gene expression or the application of DNA/protein sequencing or recombinant DNA technology to significant problems in areas such as endocrinology, neurobiology or membranes). This is a tenure-track, state-funded position with a competitive salary. Start-up funds and funds for major investment in new technologies are available. Minimum requirements are a Ph.D. with post-doctoral experience and the ability to develop a grant-supported research program; competence and interest in teaching medical and graduate students is important. Send a copy of c.v., names of three references and a one or two page research proposal to: **Dr. Thomas Detwiler, Biochemistry Faculty Search Committee, 450 Clarkson Ave., Box 8, SUNY-Downstate Medical Center, Brooklyn, NY 11203, (718) 270-1270, DMC#797, EO/AA Employer.**



**DOWNSTATE
MEDICAL CENTER**
STATE UNIVERSITY OF NEW YORK

LOUISIANA STATE UNIVERSITY MEDICAL CENTER DEAN OF THE SCHOOL OF MEDICINE IN SHREVEPORT

The Louisiana State University (LSU) Medical Center is seeking applications and nominations for the position of dean of the School of Medicine in Shreveport. The former dean, Dr. Perry G. Rigby, became chancellor of LSU Medical Center effective 1 September 1985. The dean is the chief administrative officer of the School of Medicine and is responsible to the chancellor of the LSU Medical Center for the administration of all educational, research, and clinical programs conducted by the School of Medicine in Shreveport.

The school enrolls approximately 400 medical students, 290 house officers, 30 graduate students, and conducts continuing medical education programs. Clinical service programs are conducted at Louisiana State University Hospital, Shreveport Veterans Administration Medical Center, E. A. Conway Memorial Hospital in Monroe, Louisiana, and several affiliated institutions.

Louisiana State University is the major state institution of higher learning with seven campuses and 55,000 students. The School of Medicine in Shreveport is one of six professional schools in the LSU Medical Center which includes the schools of: Medicine in New Orleans, Dentistry, Nursing, Allied Health Professions, and Graduate Studies.

Applicants should have a M.D. or Ph.D. degree and considerable academic administrative experience. Applications and nominations should include curriculum vitae, the names of three references, and should be submitted by 1 February 1986 to:

**Horace E. Thompson, M.D., Chairman
Dean Search Committee (Box 600)
LSU School of Medicine in Shreveport
P.O. Box 33932
Shreveport, La. 71130**

Louisiana State University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ENVIRONMENTAL CHEMIST/ MICROBIOLOGIST

The Division of Occupational and Environmental Health in the Graduate School of Public Health is seeking an environmental chemist/microbiologist for a full-time, tenure-track position at the assistant or associate professor level for the 1986 to 1987 academic year. Applicants must hold a doctoral degree in an appropriate area and will be expected to develop and teach graduate courses in several areas of environmental health such as, air pollution, environmental chemistry, food quality control, and hazardous materials, and solid waste management. The successful candidate must have strong commitments to (i) developing or continuing an active research program, preferably in the area of hazardous and solid waste recycling and disposal and (ii) assisting with program development and student recruitment. To assure consideration for the position, curriculum vitae and three letters of reference should be mailed not later than 1 February 1986 to:

**John B. Conway, Ph.D., Head
Division of Occupational and Environmental Health
Graduate School of Public Health
San Diego State University
San Diego, California 92182**

San Diego State University is an Affirmative Action/Equal Opportunity/Title IX Employer and does not discriminate against the handicapped.

FACULTY POSITION AVAILABLE PROFESSOR OF MATERIALS SCIENCE AND ENGINEERING

The Materials Science and Engineering Department of The Johns Hopkins University invites applications for a tenured faculty position at the rank of professor. Candidates should have demonstrated expertise in the field of nondestructive evaluation of materials and structures. Special consideration will be given to those applicants who are experienced in signal and image processing, applied numerical methods, including finite element analysis, systems analysis techniques for computer-based systems, and principles and practice of electromagnetic evaluation of materials and structures. The applicant selected will be expected to assist in expanding the undergraduate program as well as to conduct and supervise graduate student research. A genuine commitment to excellence in teaching as well as research is required. The Materials Science and Engineering Department at Johns Hopkins is in a growth phase and the successful applicant will be encouraged to develop her or his particular area of expertise. *The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.*

Candidates should send professional résumé containing teaching and research accomplishments and names of three referees no later than 1 February 1986 to:

**Professor Robert E. Green, Jr.
Materials Science and Engineering Department
The Johns Hopkins University
Baltimore, Md. 21218**

FISHERY SCIENTIST: University of Maryland, Center for Environmental and Estuarine Studies, Chesapeake Biological Laboratory (CBL). CBL seeks a tenure-track or tenured faculty member in fishery science to undertake research and participate in graduate education. Scientists with expertise in stock assessment, population/community dynamics, larval/juvenile ecology, or recruitment processes are especially urged to apply. The successful candidate will join a faculty at CBL that includes five fishery scientists/ecologists. Faculty rank and salary level will be commensurate with experience. Applicants should send curriculum vitae, a letter expressing research interests, and a list of five potential referees to: **Dr. Edward D. Houde, Chairman of Search Committee, Chesapeake Biological Laboratory, University of Maryland, P.O. Box 38, Solomons, Md. 20688.** All applications received by 31 January 1986 will be assured of full consideration. *The University of Maryland is an Affirmative Action/Equal Opportunity Employer.*

IMMUNOLOGY RESEARCH MANAGER

We are seeking an individual for our Kansas City location to head a group in the development of in vitro diagnostic products in the area of allergy and immunology. A Ph.D. in biochemistry or immunology and postdoctoral training is required. Experience with immunoassay development and protein purification is desirable. Industry experience is a plus.

Send résumé/curriculum vitae to: **Margaret Speich, Personnel Administrator, Immuno Biotech (a subsidiary of Immuno Nuclear Corporation), Suite 203, 6811 West 63 Street, Overland Park, Kansas 66202.**

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION IN BIOCHEMISTRY DEPARTMENT OF BIOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Candidates are sought for a tenure-track position at the level of assistant professor in the field of biochemistry.

Candidates should have significant research accomplishments in the area of biochemistry of proteins, enzymes, nucleic acids, or membranes. While there is broad latitude in the research interests of the candidates, we are particularly interested in those engaged in studies on structure and mechanism of action of biological molecules.

The successful applicant will be expected to conduct an active research program and to participate in the teaching program of the department.

Applicants should send curriculum vitae, a summary of their proposed research program, and the names of at least three scientists who can provide an evaluation of the candidate's past accomplishments and future potential.

Send applications to:

**Professor Uttam L. RajBhandary
Chairman, Biochemistry Search Committee
c/o Room 56-509, Department of Biology
Massachusetts Institute of Technology
Cambridge, Massachusetts 02139**

An Equal Opportunity/Affirmative Action Employer

GENETICIST—The University of Richmond invites applications for a tenure-track position in biology. The primary responsibilities will involve teaching principles of genetics to undergraduates and developing a research program in molecular genetics which involves both undergraduate and graduate (M.S. level) students. It is likely that the appointee will also be involved in the introductory biology sequence and a second upper-level course in an area such as immunology, virology, or toxicology. Candidates must have the Ph.D. degree and postdoctoral experience is desirable. While it is expected that the appointment will be at the assistant professor level, outstanding candidates at a more senior level are invited to apply. Submit résumé, undergraduate and graduate transcripts, a statement of research plans, and three letters of reference to: **Dr. F. B. Leftwich, Department of Biology, University of Richmond, Richmond, Va. 23173.** Deadline—15 January 1986. *The University of Richmond is an Equal Opportunity Employer and actively seeks applications from female and minority candidates.*

INSTRUCTORSHIP is available in the Department of Anatomy, University of Tennessee, Memphis. The candidate should have a Ph.D. and/or M.D. with at least 2 years of postdoctoral training, competency in teaching all anatomy courses for medical students with at least 5 years of teaching experience, knowledge of two languages besides English, publications in referred journals in neurobiology, and ability to perform immunocytochemistry, histochemistry, autoradiography, and other standard neuroanatomical techniques, using both light and electron microscopy. Salary range: \$21,996 to \$24,000. Send curriculum vitae and names of three references to: **Tennessee Job Service, Jack Hilzheim, 1295 Poplar, Memphis, Tenn. 38104.**

MOLECULAR GENETICIST required to investigate the effect of x-rays and neutrons on oncogenic transformation assay systems with cells in vitro. Appointment can be postdoctoral, or at junior faculty level, depending on the experience of the investigator. Competitive salary available. Send résumé, reprints, and references to:

**Professor E. J. Hall
Radiological Research Laboratory
College of Physicians and Surgeons
Columbia University
630 West 168 Street
New York, N.Y. 10032**

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION UNIVERSITY OF LOUISVILLE DEPARTMENT OF BIOLOGY

POSTDOCTORAL POSITION available immediately to study enhanced oil recovery. Experience in microbial ecology, anaerobic processes, and gas chromatography. Salary \$20,000. Send curriculum vitae and list of two references to: **Dr. Ronald Atlas, Department of Biology, University of Louisville, Louisville, Ky. 40292.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

LABORATORY DIRECTOR

Intellectually challenging stable academic research position with both long-term career and leadership capacity potential. A typically qualified candidate should hold the Ph.D. degree (American or United Kingdom school), having had at least one (preferably more) postdoctoral experience. Background in cell biology and/or biochemistry needed with experience in applied immunochemistry and related protein characterization techniques. Work at present entails the above, plus protein-lipid interactions. Salary and fringe benefits competitive. *Equal Opportunity Employer.* Send curriculum vitae and references to:

G. I. Research Unit
Cleveland Clinic Foundation
9500 Euclid Avenue
Cleveland, Ohio 44106

MECHANICS OF SEDIMENT TRANSPORT—The Marine Sciences Research Center of the State University of New York (SUNY) at Stony Brook seeks faculty member in the area of the physics of sediment transport. Applicants should have expertise in the mechanics of sediment transport in estuarine and coastal marine environments. Individuals with backgrounds in physics, engineering, or geology are encouraged to apply. The successful candidate will have an opportunity to interact with other faculty conducting research on estuarine, beach, nearshore, and shelf processes and benthic boundary layer interactions. Successful candidate will be expected to develop an active research program and to teach. This is a tenure-track position at the assistant professor level. Salary range \$23,000 to \$25,000. Closing date is 1 January 1986. Interested applicants should send a letter describing their research interests, curriculum vitae, and the names of referees to: Gary A. Zarillo, Marine Sciences Research Center, SUNY Stony Brook, Stony Brook, N.Y. 11794-5000. *SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.* AK Number 307B-85.

MICROBIOLOGIST—RESEARCH ASSOCIATE at GS-11 (\$26,381) or GS-12 (\$31,619), grade based on qualifications. This position is not to exceed 2 years. One Federal excepted service position with the United States Department of Agriculture, Agricultural Research Service in Brownsville, Texas, to conduct research on microbial pathogens, with emphasis on the identification, classification, and fermentation of bacterial pathogens. Specifically, incumbent will study the insecticidal toxins produced by various isolates of *Bacillus thuringiensis* and other *Bacilli*. Ph.D. or equivalent education/experience is required with strong knowledge of *Bacilli* and aerobic bacteria and serological and biochemical methods. Candidates must be U.S. citizens. *Equal Opportunity Employer.* For application procedures contact: S. L. Conner at telephone 301-344-1925. Applications in response to this advertisement must be marked S-09.

Mailing Address:

W. G. Hart
Subtropical Agricultural Research Laboratory
509 West 4 Street
Weslaco, Texas 78596

MOLECULAR BIOLOGY POSTDOCTORAL POSITION

Postdoctoral fellow in 2nd or 3rd year of training. Applicants should have experience in oncogene studies to apply toward the elucidation of the structure and function of *c-ets* and its relation to rearrangements involving human chromosome 11. Salary \$25,000 to \$30,000 per annum, commensurate with experience. Please submit curriculum vitae, three references, and a brief description of present and future research interests to:

Jorge J. Yunis, M.D.
Department of Laboratory Medicine and Pathology
Box 198, Mayo Memorial Building
420 Delaware Street, S.E.
Minneapolis, Minn. 55455

POSTDOCTORAL POSITION

Available immediately. The project involves the study of glucocorticoid receptors and glucocorticoid action in coronary and cerebral microvascular endothelial cells. Candidates experienced in receptor assays and cell culture desired. Submit curriculum vitae and names of two references to: Dr. M. E. Gerritsen, Department of Physiology, New York Medical College, Valhalla, N.Y. 10595. Telephone: 914-993-4095.

POSITIONS OPEN

Ph.D. IN MOLECULAR BIOLOGY DESIRED FOR POSITION IN AN ONCOLOGY RESEARCH LABORATORY

To initiate research program involving: Growth factors, oncogenes, and gene rearrangements in both solid and hematologic malignancies.

Individual with several years of postdoctoral experience as well as record of independent, original research preferred.

Send curriculum vitae and reference letters to:

Larry Nathanson, M.D.
222 Station Plaza North
Room 300
Mineola, New York 11501

PHARMACOLOGIST

The University of New England—College of Osteopathic Medicine (UNECOM) has an opening for a pharmacologist. The ideal applicant should have significant teaching experience in pharmacology and must have demonstrated ability to carry out an independent research program. Rank and salary will be commensurate with qualifications and experience. The position is available immediately. UNECOM is a small, private medical school on the coast of southern Maine. Inquiries, including curriculum vitae and names of three references should be sent to: J. T. Earnhardt, Ph.D., Department of Pharmacology, University of New England-COM, Hills Beach Road, Biddeford, Maine 04005.

An Affirmative Action/Equal Opportunity Employer.

PLANT PHYSIOLOGY. The Department of Biology, University of Missouri-St. Louis, has an opening for a Ph.D. in plant physiology. A tenure-track appointment at the assistant professor level is anticipated, but more senior candidates will be considered. Teaching responsibilities include introductory botany, plant physiology, and development, and an upper level course in the area of specialization. The appointee will be expected to develop a productive research program, have a strong interest in directing graduate students, and secure extramural funding. Interest in Ecophysiology and/or tropical systems is desirable. The position offers an opportunity for extensive interaction with the Missouri Botanical Garden.

Applications including curriculum vitae, statement of research interests and goals, reprints of selected research papers, and names and addresses of three professional references should be sent by 1 January 1986 to: Chairperson, Plant Physiology Search Committee, Department of Biology, University of Missouri-St. Louis, 8001 Natural Bridge Road, St. Louis, Mo. 63121. *Equal Opportunity/Affirmative Action Employer.*

PLANT SYSTEMATIST

An outstanding vascular plant systematist is sought for a tenure-track assistant professorship to begin September 1986. The successful candidate will establish and maintain an active research program in plant systematics/evolution and participate in undergraduate and graduate teaching. Ph.D. required. Interest in the flora of the Northern Rocky Mountain region is desirable. Application review begins 15 January 1986. Send letter, including background and research goals, curriculum vitae, and the names, addresses, and telephone numbers of three references to: Dr. Sharon Eversman, Chair, Search Committee, Department of Biology, Montana State University (MSU), Bozeman, Mont. 59717. Detailed description of position is available. *MSU is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOW/OR JUNIOR FACULTY POSITION available immediately to participate in studies on transmitter neuropeptides in relation to smooth muscle function. Experience in immunocytochemistry, cell culture, and isolated cell techniques useful. Salary \$20,000 to \$25,000, depending on experience. Send curriculum vitae to: Dr. G. M. Makhoul, Box 711, MCV Station, Medical College of Virginia, Richmond, Va. 23298.

POSTDOCTORAL POSITION available March/April 1986 to study cellular/molecular/genetic basis of compatibility/resistance of host-parasite system (molluscan schistosomiasis). Background in cellular immunology, molecular genetics, and/or hybridomas. Send letter, résumé and names of three references to: Dr. Christopher J. Bayne, Department of Zoology, Oregon State University (OSU), Corvallis, Oregon 97331. *OSU is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.*

Course Announcement

FUNDAMENTAL NEUROBIOLOGICAL APPROACHES TO DISEASE: Epilepsy

February 2-7, 1986

The Neurosciences Institute will sponsor a course on epilepsy emphasizing the disease process as an object for biological research. The purpose is to introduce scientists to the basic physiology and pathology of a human neurological disorder and to the opportunities it provides for solving fundamental biological problems.

This intensive course will review clinical phenomena of the epilepsies and pertinent areas in basic neuroscience. The format includes lectures, clinical case presentations, and small group discussions. Instructors include Paul Adams, Per Andersen, Floyd Bloom, Robert Collins, Barry Connors, Maxwell Cowan, Sir John Eccles, Robert Moore, Vernon Mountcastle, George Newman, Fred Plum, David Prince, Philip Schwartzkroin, and Arthur Ward.

Applications are invited from scientists with advanced training and experience in neuroscience and related biological sciences. Participants' expenses will be reimbursed by the Institute.

For application forms or further information, please write to Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 1230 York Avenue, New York, New York 10021, or telephone (212) 570-8975.



The Neurosciences Institute
of the Neurosciences Research Program

POSITIONS OPEN

POPULATION GENETICIST

The Department of Ecology and Evolutionary Biology at The University of Connecticut seeks a population geneticist at the assistant professor level beginning September 1986. The successful candidate will be expected to teach an advanced course in population genetics and participate in an introductory biology or an evolution course. Applicants should demonstrate a strong research and teaching commitment and preference will be given to individuals whose interests complement those of the faculty. There are ample opportunities for interaction with faculty in molecular genetics programs of the Department of Molecular and Cell Biology. Applicants should submit curriculum vitae, a statement of research interest, reprints, and three letters of recommendation by 15 January 1986 to: John Silander, Chairman of the Population Genetics Search Committee, Department of Ecology and Evolutionary Biology, Box U-42, 75 North Eagleville Road, The University of Connecticut, Storrs, Conn. 06268. *The University of Connecticut is an Equal Opportunity/Affirmative Action Employer.* (Search Number 5A224)

UNIVERSITY OF CONNECTICUT

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE (with potential for further advancement) to perform research on the regulation of hematopoiesis, developmentally regulated surface markers on normal and neoplastic hematopoietic cells, autologous bone marrow transplantation, and dye-mediated photosensitization. Ph.D. or equivalent degree required; background in cell biology, membrane biochemistry, and/or immunology desirable. Available immediately. Salary commensurate with qualifications and experience. Send résumé with the names and addresses of three references to: Dr. Fritz Sieber, Midwest Children's Cancer Center, Department of Pediatrics, Medical College of Wisconsin, P.O. Box 1997, Milwaukee, Wis. 53201.

Equal Opportunity/Affirmative Action Employer, M/F/H

POSTDOCTORAL FELLOW. Position available immediately to study leukocyte-endothelial interactions with emphasis on the role of the endothelial cell. Biochemically oriented multidisciplinary project. Experience with cell culture helpful. Send curriculum vitae and three letters of reference to: Dr. Richard L. Hoover, Department of Pathology, Vanderbilt University, Nashville, Tenn. 37232. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

Available immediately to study the molecular biology of T cell receptors. Experience in recombinant DNA methodologies essential. Possibility of instructor level position dependent upon credentials. Send curriculum vitae and three letters of reference to:

Dr. John J. Marchalonis
Department of Biochemistry
Medical University of South Carolina
171 Ashley Avenue
Charleston, South Carolina 29425
An Equal Opportunity Employer

TWO POSTDOCTORAL POSITIONS in molecular biology. First position involves electrophysiological analysis of mutant photoreceptors. Experience with recording from small cells and with cell culture techniques desirable. Direct inquiries about this position to: Dr. Robert Stephenson, telephone: 313-577-2861. Second position involves studies on regulation and evolution of contractile protein genes in *Drosophila*. Experience in molecular biology and recombinant DNA technology preferred. Direct inquiries about this position to: Dr. Ann Sodja, telephone: 313-577-2908. Salary is \$17,000, plus fringe benefits. Positions are for 1 year, with possibility of extension. Send letter of application, curriculum vitae, and three letters of reference by 31 December to one of the individuals above, Department of Biological Sciences, Wayne State University, Detroit, Mich. 48202. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

Available immediately for research on the developmental immunobiology of macrophages. Stipend starts at \$20,000 per year, plus fringe benefits. Send curriculum vitae and name of three references to: Dr. William S. Walker, Department of Immunology, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, Tennessee 38101.

An Equal Opportunity, Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE MEMBRANE BIOCHEMIST

To join laboratory with expertise in the regulation of ion transport in cultured vascular smooth muscle and endothelial cells. To collaborate in studies of the mechanism of calcium release by inositol trisphosphate and characterization of a new class of compounds that are potent activators of protein kinase C. Send curriculum vitae, description of research interests, and names of three references to: Dr. Jeffrey B. Smith, Department of Pharmacology, University of Alabama at Birmingham, Birmingham, Ala. 35294 Telephone: 205-934-7434.

An Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF ALABAMA AT BIRMINGHAM ATHEROSCLEROSIS RESEARCH UNIT Postdoctoral Position

Is available from 2 January 1986 for a recent Ph.D. in biochemistry, molecular biology, immunology, or microbiology. High density lipoprotein subspecies is the major focus of the project. Applicants should have experience in electrophoresis, monoclonal antibodies, and affinity chromatography. Salary will be in accord with NIH guidelines.

Further details can be obtained from: Dr. Jere P. Segrest, Director, Atherosclerosis Research Unit, G035 Volker Hall, University of Alabama at Birmingham, University Station, Birmingham, Alabama 35294. Application should include curriculum vitae and three letters of recommendation.

An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Two positions available to study (i) the immunochromatography of nucleic acids and the role of double-stranded RNA in interferon action, (ii) resonance Raman spectroscopy of nucleic acids. Experience in immunochromatography or Raman spectroscopy preferred. Send curriculum vitae and names of three references to:

Dr. Margaret Johnston
c/o Civilian Personnel
Uniformed Services University of the Health Sciences
Bethesda, Md. 20814-4799

POSTDOCTORAL

Two postdoctoral positions available immediately. One opening is in a project involved with marine, biofouling *Caulobacters*. Studies include biochemical analysis of the adhesion organelle and efforts to engineer toxic substances degradation capability in this bacterium. The other position will be in support of a study of the excretion and assembly of the proteins of the paracrystalline surface layer of *Caulobacter*, including excretion of the cloned gene products in *Escherichia coli*. For both positions, background in biochemistry is required, and experience in recombinant DNA methods or electron microscopy techniques is desirable.

Send résumé and names of references by 31 December 1985 to: Dr. John Smit, Naval Biosciences Laboratory, School of Public Health, 140 Warren Hall, University of California, Berkeley, California, 94720.

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

POSTDOCTORAL POSITIONS NEUROPHYSIOLOGY/NEUROCHEMISTRY ELECTRON MICROSCOPY

Two postdoctoral/research associate positions to study cellular mechanisms of axonal regeneration, glial-neuronal trophic interactions, or synaptic plasticity (facilitation, pre-synaptic inhibition, lay-term potentiation, etc). Send curriculum vitae and names of three references to: Dr. George D. Bittner, Department of Zoology, University of Texas at Austin, Austin, Tex. 78712.

CORNELL UNIVERSITY MEDICAL COLLEGE DEPARTMENT OF PEDIATRICS DIVISION OF HUMAN GENETICS

A **POSTDOCTORAL RESEARCH POSITION** is available immediately for studies on the human X-chromosome recombination, with special reference to the fragile (X) syndrome and other types of X-linked mental retardation. Applicants should have a strong background in molecular biology. Applications, including curriculum vitae and the names of two referees, should be sent to: Dr. Patricia A. Jacobs, Cornell University Medical College, Department of Pediatrics, Division of Human Genetics, 515 East 71 Street, New York, N.Y. 10021.

POSITIONS OPEN

POSTDOCTORAL POSITION to study environmental etiologies of Diabetes. Specific emphasis is on the interaction of toxins with beta cell DNA to produce altered function or cell death. Send curriculum vitae and names of three references to: Dr. Glenn L. Wilson, Department of Anatomy, University of South Alabama, Mobile, Alabama 36688.

A **POSTDOCTORAL POSITION** is available for a suitable, qualified applicant interested in studying the role of viral oncogene expression in leukemogenesis. Applicants should have experience in molecular biology and an interest in immunobiology. The research program of the Trudeau Institute emphasizes the use of animal models of cancer and infectious disease to analyze mechanisms of protective immunity. The salary range is \$16,000 to \$20,000, depending upon experience, plus employer paid fringe benefits. Subsidized housing may be available.

The Trudeau Institute is a not-for-profit, pure research institute located on the shore of Saranac Lake, 10 miles from Lake Placid, N.Y. Send résumé and names of three references to:

David Hines, Ph.D.
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, N.Y. 12983
An Equal Opportunity Employer

POSTDOCTORAL RESEARCH ASSOCIATE position available in Medical Genetics, University of Washington. Study of the control of hemoglobin switching using molecular approaches. Experience in molecular biology required.

Send a letter of application, descriptive of research interests, curriculum vitae and two letters of reference to: Dr. George Stamatoyannopoulos, Division of Medical Genetics, RG-25, University of Washington, Seattle, Wash. 98195.

POSTDOCTORAL RESEARCH POSITION: State University of New York (SUNY), Stony Brook—A postdoctoral position is available to study the expression of exogenous genes in cultured human epidermal keratinocytes. The goal of this study is to develop these cells for possible use in the gene therapy. A research background in recombinant DNA techniques is desired. Applicants should send curriculum vitae and names and telephone numbers of three references to either: Dr. Lorne Taichman (Department of Oral Biology and Pathology) or Dr. David Williams (Department of Pharmacology), Health Sciences Center, SUNY, Stony Brook, Stony Brook, N.Y. 11794. *SUNY, Stony Brook, is an Affirmative Action/Equal Opportunity Educator and Employer.* AK Number 180C-85.

POSTDOCTORAL SCHOLAR POSITION available immediately to study the mechanisms by which growth hormone increases growth performance of pigs. Research efforts will be directed at the metabolic and growth promoting effects of GH in adipose tissue and liver. Experience in protein chemistry or endocrinology is desired. Send résumé to: T. D. Etherton, Department of Dairy and Animal Science, 301 W. L. Henning Building, The Pennsylvania State University, University Park, Pa. 16802. *An Equal Opportunity/Affirmative Action Employer.*

RADIOLOGIC SCIENCES (M.S. or Ph.D.) at the level of research associate to assist in the running of an animal/patient cardiac research facility. There will be an academic appointment at the University of Oklahoma. The laboratory is funded by a privately endowed research foundation. The goals of the laboratory are to develop and apply noninvasive cardiac imaging modalities to the study of cardiac disease and physiology. Modalities currently include isotopes, echocardiography, and nuclear magnetic resonance. The associate would assist in study design and execution, data analysis, and manuscript preparation. The associate's training would ideally include radiologic sciences, statistics, computer programming, and physiology. Please forward curriculum vitae and names of three references to:

Robert D. Okada, M.D.
Saint Francis of Tulsa Medical Research Institute
6465 South Yale
Suite 1010
Tulsa, Oklahoma 74136

POSITIONS OPEN

POSTDOCTORAL POSITION

This position available for 2 years (\$16,000 per year) to study the physiology and diversity of microbial communities in a novel lake recovery system. Background in microbial ecology and physiology. Send curriculum vitae and names of three references to: **Dr. David R. Bensen, Department of Molecular and Cell Biology, U-44, The University of Connecticut, Storrs, Conn. 06269.** (Search 5A233) *Affirmative Action/Equal Opportunity Employer.*

UNIVERSITY OF CONNECTICUT

POSTDOCTORAL POSITION available to study evolution and diversification of the immunoglobulin mutigenic family using recombinant DNA approaches. Experience in gene cloning, sequencing, and other molecular biological technology is highly desirable. Send curriculum vitae and three letters of recommendation to: **Dr. G. W. Litman, Chairman, Department of Molecular Genetics, Showa University Research Institute, 10900 Roosevelt Boulevard North, St. Petersburg, Fla. 33702.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH, BIOCHEMISTRY/NEUROBIOLOGY, available March 1986 to study the function of protein carboxyl methylation in neurons and related cell types. Experience in protein purification, HPLC, gel electrophoresis, and immunoblotting is desirable. Send curriculum vitae and three reference letters to: **Dr. Dana Aswad, 231 Steinhaus Hall, School of Biological Sciences, University of California, Irvine, Calif. 92717.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL TRAINING (M.D. or Ph.D.) for 1 to 3 years in basic vision research. Preceptors: Bernard Becker, Joel Brown, Ronald Burde, Adolph Cohen, Nigel Daw, Robert Miller, and Alan Pearlman. NIH-supported stipends. U.S. citizens or permanent resident status. July 1986. Details: **A. I. Cohen, Ophthalmology—Box 8096, Washington University Medical School, 660 South Euclid Avenue, St. Louis, Mo. 73110.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION IN CALIFORNIA

There is an immediate opening for a postdoctoral fellow interested in cell surfaces and in the structure and function of the major histocompatibility complex. This is a 2-year position in a NIH-funded study of Class I and IV antigens of the avian MHC. It would be helpful, but not absolutely necessary to have experience in protein purification and/or cloning with expression vectors. This is an ongoing project in an environment with expertise in MHC molecular genetics, protein chemistry and avian immunogenetics. Contact: **Dr. M. M. Miller, Division of Cytogenetics, City of Hope Medical Center, Duarte, Calif. 91010; Telephone: 818-359-8111, extension 2832.**

POSTDOCTORAL RESEARCH ASSOCIATE.

Bioorganic chemistry on bilirubin neurotoxicity and enzymic oxidation. Involves extensive use of HPLC, some organic synthesis and spectroscopy of pyrrole pigment derivatives. Position requires a Ph.D. in chemistry or biochemistry with experience in HPLC and spectroscopy. Available early 1986. Send résumé and three reference letters within 30 days of this notice to: **Professor D. A. Lightner, Cellular and Molecular Biology Program, Chemistry Department, University of Nevada, Reno (UNR), Nev. 89557.** *UNR is an Affirmative Action/Equal Opportunity Employer.*

EMORY UNIVERSITY DEPARTMENT OF PHYSICS

Research Associate position in biophysics is available on or after 1 January 1986. One year with renewal possible. The research involves Mössbauer and EPR studies on metalloproteins; will have opportunity to interact with chemistry and biochemistry research groups. Recent doctorates in physics, biophysics, or physical biochemistry are invited to apply. Experience in Mössbauer spectroscopy and in electronics are desirable.

Send curriculum vitae and names of three references to: **Dr. B. H. Huynh, Physics Department, Emory University, Atlanta, Ga. 30322.** *Emory University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

RESEARCH ASSOCIATE, BIOCHEMICAL TOXICOLOGY. Recent Ph.D. in analytical chemistry, organic chemistry, biochemistry, toxicology, or pharmacology required to investigate the metabolism and pharmacokinetics of selected drugs in marine invertebrates (lobster and blue crab). Studies will be conducted at the well-equipped Whitney Laboratory for Experimental Marine Biology of the University of Florida, located on the coast near St. Augustine, Florida. Send curriculum vitae and names of three references to: **Dr. M. O. James, Department of Medicinal Chemistry, Box J4, College of Pharmacy, University of Florida, Gainesville, Fla. 32610.**

SCIENCE AND TECHNOLOGY INFORMATION SPECIALIST

The Soviet and East European Affairs Program (SEEA) of the National Research Council (NRC) is seeking a **PROGRAM OFFICER** to direct the development and implementation of a program to acquire, assess, and disseminate current information about science and technology developments in the U.S.S.R. and Eastern Europe. The incumbent will coordinate NRC activities with information activities of other institutions, supervise preparation of a newsletter, and represent the program at national meetings directed to assessing publications from the U.S.S.R. and Eastern Europe. A degree in science or engineering or equivalent is required; an M.S. is preferred. Demonstrated oral and written communications skills, including technical writing and editing, are required. One year of experience in assessing scientific or technical developments at the national or regional level and the ability to read Russian fluently are also requirements. Also desirable are the ability to read other East European languages and experience in information acquisition and dissemination activities.

Applicants should submit a résumé, including names of two references, to: **Program Officer/SEEA, P.O. Box 57140, Washington, D.C. 20418.** U.S. citizenship required. *Equal Opportunity Employer.*

NATIONAL RESEARCH COUNCIL

VICE PRESIDENT

for Research and Dean of Graduate Studies The Wichita State University

The Wichita State University invites nominations and applications for the newly created position of Vice President for Research and Dean of Graduate Studies. This individual will be expected to assume a leadership role in increasing the level of research and public service on campus, expanding the capacity of research support facilities (e.g., the library) and introducing new graduate programs. The Vice President for Research will be responsible for oversight of the Graduate School, the Office of Research and Sponsored Programs, the Library and Media Resources Center, the Digital Computing Center, the Office of Planning and Institutional Research, the Hugo Wall Center for Urban Studies and the Gerontology Center.

The successful candidate must possess the following qualifications: Demonstrated leadership qualities (particularly desirable is the ability to stimulate faculty research efforts), research record in an academic discipline and the ability to identify and secure research funding; experience in the management of personnel and fiscal resources; graduate level teaching experience; a terminal degree or extensive experience securing and managing research resources.

The starting date for this position is no later than July 1, 1986. Salary is competitive. Applications, including a letter, resume and names and addresses of five references, must be received no later than December 15. Send to:

Dr. Nancy McCarthy Snyder
Chair, Vice Presidential Search Committee
The Wichita State University
Wichita, Kansas 67208-1595

The Wichita State University is an equal employment opportunity/affirmative action employer

CHAIR—DEPARTMENT OF LARGE ANIMAL CLINICAL SCIENCES

College of Veterinary Medicine
University of Minnesota

Applications and nominations are invited for the position of chair of the Department of Large Animal Clinical Sciences, which encompasses Epidemiology; Food Hygiene and Public Health; Large Animal Medicine; Large Animal Surgery; Theriogenology; and Veterinary Medical Continuing Education and Extension.

Candidates must have a D.V.M./V.M.D., or equivalent degree from a foreign institution, plus an M.S. A Ph.D. and Board-certification is recommended, but not required. A minimum of 5 years of professional and graduate teaching experience, including clinical experience in one of the large animal clinical areas is also required. The appointee must have demonstrated evidence of his ability as an independent researcher, scholarly achievement, and be nationally recognized as a capable scientist in veterinary medicine. The person should be qualified for tenure, and full membership on the faculty of the graduate school; have administrative experience and demonstrated ability to relate to students, staff, and faculty. Candidates should have demonstrated their ability as active members and leaders in professional and specialty organizations to which they belong and have the ability and willingness to establish and maintain rapport with producers and commodity groups.

The appointee will be expected to provide academic and professional leadership in a multidisciplinary department which has a broad spectrum of expertise and talents; provide leadership and coordination in developing the clinical, professional, and graduate teaching programs in order to provide a creative learning environment for students and staff alike. To do this, the chair will become familiar with the clinical rotations and faculty within the department; participate in limited professional and graduate teaching in his/her area of expertise; participate as an advisor to graduate students and as a member of graduate school examining committees. The chair should be an active promoter of faculty research, and undertake a leadership and/or consultant role in various research projects. More specifically, this includes procurement of both intramural and extramural funds for fostering departmental teaching and research.

An important aspect of the duties of the chair is to actively represent the department publicly and participate in the affairs of local, state, and national professional organizations, livestock production groups and specialty organizations.

SALARY: Commensurate with experience and qualifications of the individual.

BEGIN DATE: 1 July 1986

**APPLICATION
DEADLINE:**

Letters of application should include a current curriculum vitae, a brief statement of views on future needs in research and education, plus names and addresses of three persons who will provide letters of reference by 31 January 1986 to:

Dr. Michael M. Pullen
Chairman, Search Committee (G)
University of Minnesota
Department of Large Animal Clinical Sciences
225 Veterinary Teaching Hospital
1365 Gortner Avenue
St. Paul, Minnesota 55108

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

DEAN FOR COLLEGE OF BIOLOGICAL SCIENCES

Applications and nominations are invited for the position of the dean of the College of Biological Sciences (CBS) at the University of Minnesota, available September 1986. The college includes the departments of Biochemistry, Botany, Ecology and Behavioral Biology, Genetics and Cell Biology, the Gray Freshwater Biological Institute, the Institute for Advanced Studies in Bioprocess Technology, the Bell Museum of Natural History, the Plant Molecular Genetics Institute, and a number of affiliated departments in other colleges. CBS has the major responsibility for undergraduate education in biology and is a focal point for research in basic biology at the University of Minnesota among a large number of biologists located in Health Sciences, Agriculture, Veterinary Medicine, and Bioengineering.

The University of Minnesota considers that biology will be the major scientific activity of the coming century. We are seeking a person of demonstrated scientific and intellectual excellence who will lead the college to a position of preeminence in research, scholarship, and teaching. The candidate is expected to possess a Ph.D. or other appropriate doctoral degree and shall be appointed to a tenured professorship in one of the collegiate departments.

The deadline for receipt of completed applications is 1 February 1986.

Send nominations and applications to:
Dr. Martin Dworkin
Department of Microbiology
University of Minnesota
Minneapolis, Minnesota 55455
Telephone 612-373-8048

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

PROGRAM COORDINATOR The University of Illinois at Chicago

Applications are invited for three program coordinator positions in the Office of Sponsored Research. These coordinators will be responsible for providing research development and administrative support services to faculty in three intellectual areas: (i) basic life sciences, (ii) clinical sciences, and (iii) physical sciences, engineering, and mathematics. In addition to identifying funding sources, assisting in the design of effective proposals, maintaining relations with granting agencies, and facilitating administrative review, coordinators will initiate development activities that encourage individual, multi-investigator, and large-scale interdisciplinary projects.

Qualifications: doctorate in an appropriate field is preferred, but suitable master's degree will be considered; record of research or development experience; ability to encourage and organize new ventures; commitment to service; strong communication skills and ability to work closely with faculty, department heads, and others in a university environment that includes Colleges of Medicine, Nursing, Pharmacy, Engineering, and Liberal Arts and Sciences.

The University of Illinois at Chicago is a comprehensive, public, urban university with 25,000 students, 2,000 faculty, and more than \$43 million in sponsored programs.

Starting date: 1 January 1986. Salary negotiable. For full consideration, apply by 15 December 1985. Send letter of application, résumé, and three references to:

Dr. Richard Buchanan
Office of Sponsored Research, M/C 672
University of Illinois at Chicago
P.O. Box 6998
Chicago, Illinois 60612
Telephone: 312-996-4995

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

POSITIONS OPEN

University of South Florida, College of Medicine, will have openings for a **PROFESSOR, ASSOCIATE PROFESSOR, ASSISTANT PROFESSORS, INSTRUCTORS, AND AN ASSOCIATE IN RESEARCH**. Experience in the field of adjuvants, construction of synthetic vaccines, analysis of microbiologic toxins, and the pharmacology, cellular immunology, and immunochemistry of biologic response modifiers and synthetic immunomodulators. Send curriculum vitae and recent publications to: **Jack W. Hickman, M.D., 12901 North 30th Street, Box 53, Tampa, Fla. 33612.**

VAN VLEET PROFESSOR OF PHARMACOLOGY

Applications are invited by the Department of Pharmacology, University of Tennessee—Memphis, from individuals interested in this endowed professorship, available immediately. The applicant for this chair should be an internationally recognized scientist. This chair is one of several being established to attract outstanding scientists to our campus. The incumbent will also be expected to participate in the graduate and professional education programs of the Department of Pharmacology. Although the field of research of the candidate is open, it should relate broadly to cancer biology. Preference will be given to individuals whose research brings the experience of biochemistry, molecular biology, or immunology to bear on these problems. Please send complete curriculum vitae, and reprints of two or three of your most significant papers to: **Dr. Murray Heimberg, Chairman, Department of Pharmacology, University of Tennessee—Memphis, The Health Science Center, Memphis, Tenn. 38163.** Closing date for receipt of applications is 15 January 1986. *The University of Tennessee is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE—Position available immediately for a biochemist/organic chemist to lead a research team in chemical carcinogenesis. The project involves the investigation of the interaction of nitrosamines with DNA in hybrid mice. Ph.D. graduate with experience in HPLC and immunoassays required. Salary negotiable: Send curriculum vitae and names of three references to: **Dr. G. D. Stoner, Department of Pathology, Medical College of Ohio, C.S. 10008, Toledo, Ohio 43699.** *An Equal Opportunity Employer.*

Positions for **RESEARCH UNIVERSITY GRADUATES** with a bachelor's degree in the biological sciences to do research in the areas of cellular and molecular biology with the W. Alton Jones Cell Science Center, for a period of 3 years. Salary ranges from \$8,000 to \$10,000, depending on experience. Send curriculum vitae to: **The Personnel Office, W. Alton Jones Cell Science Center, 10 Old Barn Road, Lake Placid, New York 12946.** Please refer to: **Job Order SA-509.**

An Affirmative Action/Equal Opportunity Employer

SCIENCE AND TECHNOLOGY POLICY SPECIALIST

The Soviet and East European Affairs Program (SEEA) of the National Research Council (NRC) is seeking a **SENIOR PROGRAM OFFICER** to direct the development and implementation of science and technology policy programs for the U.S.S.R. and Eastern Europe. Special areas of interest include productivity of R&D organizations, impact of economic policies and technological performance, and environmental policies. The program includes exchanges of science policy specialists, bilateral science and technology policy workshops, and support information services. The incumbent will develop the conceptual framework, supervise preparation of reports, and prepare articles for publication. An advanced degree in science, engineering, economics, or business administration or equivalent is required; a Ph.D. is preferred. Demonstrated oral and written communication skills and 2 years of experience in the field of science and technology policy or economic analysis are required. Experience in assessing interactions of economic policies and technological performance in the industrial sector, and experience in East European affairs and fluency in one or more of the languages of the area are desired.

Applicants should submit a résumé, including names of two references, to: **Senior Program Officer/SEEA, P.O. Box 57140, Washington, D.C. 20418.** U.S. citizenship required. *Equal Opportunity Employer.*

NATIONAL RESEARCH COUNCIL

POSITIONS OPEN

PROFESSOR-IN-CHARGE, BIOMEDICAL ENGINEERING PROGRAM (BME), Iowa State University. Applicants must have a Ph.D. in a discipline related to biomedical engineering and molecular biology. Experience in medicine or veterinary medicine is desirable. The applicant must have the qualifications for appointment as a tenure-track professor within the College of Engineering or Veterinary Medicine. Applicants should have experience adequate to insure leadership for the traditional areas of biomedical engineering as well as to expand the current program into active participation in the university-wide biotechnology program. In addition to having administrative responsibilities, the individual will be expected to develop an active research program, supervise graduate students, and participate in graduate teaching within the BME Program. The term of this appointment is 5 years, subject to reappointment. Send complete résumé with names, addresses, and telephone numbers of at least three references to: **Curran S. Swift, BME Program, 1171 Veterinary Medicine, Iowa State University, Ames, Iowa 50011.** Closing date for receipt of application is 31 January 1986 or until position is filled. *An Equal Opportunity/Affirmative Action Employer.*

RADIATION CHEMIST—The Medical Research Council of Canada Group in the Radiation Sciences has an opening for a chemist at the **ASSISTANT PROFESSOR** level. The successful applicant will be expected to develop an independent research program in the general field of radiation chemistry.

Send résumé, research plans, and letters of reference to: **Etienne LeBel, M.D., Associate Dean of Research, Faculty of Medicine, University of Sherbrooke, Sherbrooke, Québec, Canada J1H 5N4.**

RESEARCH ASSISTANTS. The Jackson Laboratory has current openings for full-time research assistants. The Jackson Laboratory is a world leader in genetics of growth and development. Located in Bar Harbor, Maine, and near Acadia National Park, the laboratory offers an opportunity to work at the forefront of biomedical research in a rural, coastal setting. B.S./M.S. in life sciences required. Biochemical and/or molecular biology laboratory experience essential for all openings. **MOLECULAR BIOLOGY POSITIONS:** (i) Studies concerning regulation of gene expression in differentiation: chromatin analysis, electrophoresis, [³²P], DNA, RNA analytical methods, protein purification, cell culture. (ii) Studies concerning gene expression in the mammalian brain: nucleic acid isolation, cloning, and analysis. **BIOCHEMISTRY POSITION:** Position involves study of gene expression in genetically diabetic mice: cell culture, electrophoresis, animal surgery, subcellular fractionation, biochemical assays, and isolation of pancreatic islets. Send résumé and transcripts to: **Harold R. Wheeler, Employment Manager, The Jackson Laboratory, Bar Harbor, Maine 04609.** *The Jackson Laboratory is an Equal Opportunity/Affirmative Action Employer.*

SUPERCOMPUTING

The Department of Animal Sciences of the University of Illinois seeks to fill an academic year, tenure track or tenured position (rank open) in applications of supercomputers to animal agriculture. Salary will be commensurate with experience and qualifications. The faculty member will have an affiliation with the National Center for Supercomputing Applications, with access to a CRAY-XMP. A courtesy appointment with another department, for example, statistics, is possible. The appointment is 80 percent research and 20 percent teaching. Research may include: (i) development of decision models using data from electronically identified farm animals; (ii) simulation of complex biological systems at the molecular, cellular or organismic levels; or (iii) development of stochastic models for prediction of animal performance using regional or national data banks. Teaching would include a course in applications of supercomputers to animal agriculture, and supervision of graduate students. A Ph.D. is required with expertise in agriculture or biology, and experience in computer science, applied mathematics, statistics, or numerical analysis of large systems. A résumé, transcripts, and three letters of reference should be sent to: **W. R. Gomes, Head, Department of Animal Sciences, University of Illinois, 1301 West Gregory Drive, Urbana, Illinois 61801; telephone: 217-333-1045.** To insure full consideration, applications should be received no later than 1 February 1986. The position is available immediately. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*



Molecular Biologists

Applications are now being accepted for molecular biologists with recent broad experience in molecular biology with emphasis on both procaryotic and eucaryotic molecular cloning, microbial genetics, and the development of high protein expression systems. Recent experience in nucleotide sequencing, the use of oligonucleotides in molecular biology, and protein biochemistry would also be helpful.

INCELL, a research oriented molecular biology and fermentation technology organization, is located in the brewing and fermentation center of Milwaukee, Wisconsin, adjacent to the University of Wisconsin-Milwaukee and Marquette University. In addition the organization has strong ties to the University of Wisconsin at Madison which is just 90 minutes away.

Responsibilities will include the recruitment and training of assistant scientists, consultation with colleagues in protein biochemistry, biochemical engineering, and fermentation operations, and budgetary responsibility for research projects undertaken.

Minimum requirements for this position include a Ph.D. plus post-doctoral experience in techniques of RNA and DNA manipulations. A broad overview of molecular genetics with strong emphasis on microbial expression systems and an interdisciplinary approach to problem solving are key qualifications for this position, along with the capability of working in a relatively unstructured, fast moving entrepreneurial environment.

Qualified applicants for these positions are invited to submit, in confidence, their resumes together with publications, salary history, and three references to:

Ms. Jane Kiefert
Manager of Human Resources
INCELL CORPORATION
1600 W. Cornell Street
Milwaukee, Wisconsin 53209

TWO OUTSTANDING OPPORTUNITIES OFFERED BY MAJOR UPSTATE NEW YORK PHARMACEUTICAL COMPANY

Due to the success of our current research programs, Norwich Eaton Pharmaceuticals, Inc., a wholly-owned subsidiary of The Procter & Gamble Company, has two newly created Senior Staff Scientist positions available in its Research and Development Department for highly-motivated professionals in the area of cardiac disease pathophysiology and drug discovery.

Cardiac Physiologist/Pharmacologist. This position will involve the design, preparation and execution of studies to determine the pathophysiology of congestive heart failure and the mechanism of action of novel cardioactive drugs. The preferred candidate will have a Ph.D. and/or M.D. degree in cardiovascular physiology/pharmacology, with 0-5 years of postdoctoral experience. Experience in whole animal hemodynamic studies, especially conscious models, would be particularly relevant.

Cardiac Physiologist/Pharmacologist. This position will involve the design, preparation and execution of studies to determine the pathophysiology of cardiac arrhythmias, and the mechanism of action of novel antiarrhythmic drugs. The preferred candidate will have a Ph.D. and/or M.D. degree in cardiovascular physiology/pharmacology with 0-5 years of postdoctoral experience. Experience in conscious animal models of arrhythmia would be particularly relevant.

Norwich Eaton is a beautiful rural location in Central New York State in the Syracuse-Binghamton-Utica triangle, 250 miles northwest of New York City. Besides offering a stimulating environment for professional growth, the Company provides a competitive employment package including paid relocation, and company-paid health, dental, and retirement benefits. Some of Norwich Eaton Rx products include Macrodantin, Dantrium, Sarenin, Vivonex, Entex LA and Buprenex. Resumes and inquiries should be addressed to:

Susan M. Finch
 Personnel Representative
Norwich Eaton Pharmaceuticals, Inc.
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BIOCHEMISTRY

Microgenics is a biotechnology company which has developed an advanced and proprietary diagnostic test system based on protein engineering by recombinant DNA techniques. New positions are available for exceptional research scientists.

IMMUNOCHEMISTS, PhD. Candidates will supervise product development of CEDIA homogeneous enzyme immunoassays. A PhD in immunology or chemistry and prior industrial product development experience required. Candidates will be familiar with validation of diagnostic assays, generation of GLP/GMP protocols, and submission of FDA documentation.

CHEMISTS/BIOLOGISTS, BA/BS/MS. Candidates will be familiar with the performance and documentation of an EIA/ELISA 510(k) validation. Responsibilities will include development of commercial immunoassays and applicable FDA documentation. Supervisory experience preferred.

MOLECULAR BIOLOGISTS, PhD. Candidates will protein engineer hybrid and tribrid polypeptides at the recombinant DNA level for commercial immunoassays within eukaryotic and prokaryotic expression vectors.

CHEMISTS/BIOLOGISTS, BS/MS/PhD. Candidates will function in protein chemistry with a practical knowledge of liquid chromatography, SDS-PAGE, Western-Blots and enzyme-immunoassays.

Microgenics offers a scientific challenge and equity participation with competitive salaries and fringe benefits. For immediate consideration, forward your resume in strict confidence to:

MICROGENICS CORPORATION
 2341 Stanwell Dr. • Concord, CA 94520



MICROGENICS

POSITIONS OPEN

RESEARCH ASSOCIATE. Individual to work on NIH-sponsored project to isolate and characterize the tyrosine aminotransferase gene from *Drosophila*. Cloned rat probe will be employed to isolate *Drosophila* gene from a genomic library. Some DNA recombinant experience desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Tom Brady, Chairman, Biology Department, Hamilton College, Clinton, N.Y. 13323.** *Equal Opportunity Employer.*

RESEARCH ASSOCIATE/ RESEARCH SPECIALIST

Physical oceanography—To develop technical group devoted to design of oceanographic and meteorological instrumentation to be applied in upper ocean and near air-sea interface. Sea duty required. Experience with seagoing instrumentation desirable. Degree in mechanical, electrical, or ocean engineering, or physical oceanography required.

Please include references when responding to: **Personnel Manager, Box 54P, Woods Hole Oceanographic Institution, Woods Hole, Mass. 02543.** *An Equal Opportunity Employer, M/F/H.*

RESEARCH SUPERVISOR, University of North Dakota Energy Research Center (UND/ERC). Position functions as research supervisor for physical properties and is located in the Coal Science Division of UND/ERC. Requires a Ph.D. in physical chemistry; at least 5 years of research experience in polymer science with specific experience in dipolar relaxation, viscoelasticity, and statistical mechanics; and 1 year of experience in coal science. Demonstrated record of publications in the professional literature in the following areas: physical chemistry of coal and mechanical or electrical properties of coal. Fluency in a foreign language, preferably German. \$36,000 to \$42,000. **Deadline:** 13 December 1985. To apply, refer to vacancy Number 5-363 and send résumé to: **Personnel Services, P.O. Box 8010, University of North Dakota, Grand Forks, N.D. 58202.**

Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

RESEARCH ASSOCIATE; job order number 581582; 40 hours per week; \$25,000 per year.

Synthesize organic nitrogen compounds having near zero hydrogen content. Prepare high energy compounds as synthetic fuels. Study the nitrolysis and nitrosolysis of tertiary amines. Investigate the generation and reactions of nitrocarbenes. Study the synthesis and decomposition of stable nitrolydes. Use appropriate tools such as infrared (IR), nuclear magnetic resonance (NMR) spectrometers, and chromatographic techniques. Requires Ph.D. degree in chemistry. Must have sufficient knowledge and background to perform job described.

Contact: **Louisiana Office of Employment Security, 617 St. Charles Avenue, New Orleans, La. 70130.**

RESEARCH POSITION IN TOXICOLOGY

An immediate position is available for research in biochemical toxicology to study heme and hemoprotein metabolism. The work involves purification and characterization of enzymes of heme degradation. A Ph.D. in biochemistry or related area, a minimum of 4 years of research experience in hemoprotein and heme metabolism, expertise in enzyme purification and characterization, and publications are required. Annual salary: \$30,000. Send résumé to: **Mahin D. Maines, Ph.D., Department of Radiation Biology and Biophysics, University of Rochester School of Medicine, Rochester, N.Y. 14642.**

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

SENIOR RESEARCH POSITION

As section head, at major Northwestern University hospital, to define specific components involved in cellular and humoral immunity related to human carcinoma. Doctorate, at least 3 years of experience in immunological, immunochemical, and cell culture techniques required. Outstanding salary and benefits. Send résumé and bibliography to: **Georg F. Springer, M.D., Immunochimistry Research, Evanston Hospital, 2650 Ridge Avenue, Evanston, Ill. 60201.**

Equal Opportunity Employer, M/F

POSITIONS OPEN

RESEARCH ASSOCIATE

A 2- to 3-year position at the rank of postdoctoral research associate is available at the University of Tennessee, Memphis, to work with Dr. William R. Crowley (Department of Pharmacology) and Dr. C. E. Grosvenor (Department of Physiology) on research dealing with neurochemical and cellular mechanisms regulating LH, PRL, and oxytocin secretion. Candidates should have a Ph.D. or M.D. degree. Send curriculum vitae, brief statement of research interests, and the names of three references to either: **Dr. Clark Grosvenor, Professor, Department of Physiology and Biophysics, or Dr. William R. Crowley, Associate Professor of Pharmacology, University of Tennessee, Memphis, Tennessee 38163.** *An Equal Opportunity/Affirmative Action Employer.*

SENIOR SCIENTIST

U.S. Pharmacopeia, located in convenient Rockville, Maryland, seeks a senior scientist with an advanced degree in biochemistry, immunology, or microbiology. Position requires a pharmaceutical or diagnostics background to include a minimum of 7 years of laboratory and administrative experience. Prior work with monoclonal antibodies preferred. This is a highly visible liaison position requiring excellent interpersonal and oral and written communication skills in order to communicate effectively with the elected Committee of Revision and representatives of industry and government. We offer excellent company-paid benefits and salary commensurate with experience. Please send résumé and salary requirement in confidence to:

**Dr. L. T. Grady
U.S. Pharmacopeia
12601 Twinbrook Parkway
Rockville, Md. 20852
*An Affirmative Action/Equal Opportunity Employer***

SCHOOL OF OCEANOGRAPHY UNIVERSITY OF WASHINGTON TENURE-TRACK POSITIONS MICROBIAL OCEANOGRAPHY MARINE GEOLOGY AND GEOPHYSICS EXPERIMENTAL PHYSICAL OCEANOGRAPHY

We invite applicants at the assistant, associate, or full professor level. In each one of the following specialties the university will provide 6-month, tenure-track salary support per year. A commitment to education is expected.

MICROBIAL OCEANOGRAPHY. We are seeking to fill teaching needs in one or more specialties, namely ecology or phytoplankton, microzooplankton, and sedimentary bacteria. Individuals whose research complements schoolwide efforts in mixed-layer dynamics, benthic processes, mesoscale variability, or large-scale ocean circulation and its consequences are especially encouraged to apply.

MARINE GEOLOGY AND GEOPHYSICS. We are seeking to expand our program in Ridge Crest Processes in the areas of geology and geophysics. This program is broadly based with ongoing research in microbiology, chemistry, geochemistry, geology, and geophysics. Emphasis will be on candidates who apply geology/geophysics to the identification and elucidation of the major processes involved in the formation and evolution of oceanic lithosphere.

EXPERIMENTAL PHYSICAL OCEANOGRAPHY. Applicants should have a strong background in dynamical and descriptive oceanography, experimental techniques, and data analysis. Candidates are sought who will develop research programs founded on the use and expansion of seagoing facilities and the application of dynamical concepts to the interpretation of oceanic observations. Teaching in areas such as experimental design and execution, instrumentation, descriptive oceanography, and dynamical interpretation of data will be expected. The physical oceanography group presently has research programs in large-scale ocean-atmosphere interaction, general circulation, internal waves and turbulence, arctic, coastal, and equatorial oceanography, and ocean acoustics.

A letter of application, curriculum vitae, appropriate reprints, and names of four references should be sent to: **Dr. Brian T. R. Lewis, Director, School of Oceanography, WB-10, University of Washington, Seattle, Wash. 98195. Telephone: 206-543-6487,** by 31 January 1986. Ad Number 854. *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

WANTED

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DEBIOPHARM, a Swiss-based independent financial group will consider the development of novel biological or chemical compounds with a promising pharmacologic profile. If you are an independent investigator with such compounds, please write to us.

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THE VERIFICATION CHALLENGE: Problems and Promise of Strategic Nuclear Arms Control Verification, by Richard A. Scribner, Theodore J. Ralston, and William D. Metz. Available November 1985, ca. 200pp., \$15*.

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STRATEGIC NUCLEAR ARMS CONTROL VERIFICATION: An Annotated Bibliography, 1977-1984, by Richard A. Scribner and Robert Travis Scott. AAAS (1985) ca. 108pp., \$7.50*.

THE STRATEGIC DEFENSE INITIATIVE: Some Arms Control Implications, by Jeffrey Boutwell and Richard A. Scribner. AAAS (1985) 48pp., \$2.50*.

To order, write to: Committee on Science, Arms Control, and National Security, AAAS, 1333 H Street, NW, Washington, DC 20005.

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research biochemist

FMC CORPORATION, a Fortune 200 company located in Princeton, NJ, has an excellent opportunity available for a Research Biochemist.

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FMC offers an excellent salary and benefits package. For consideration, please forward your resume with salary requirements to: **Employment Manager, FMC CORPORATION, Chemical R&D Center, P.O. Box 8, Princeton, NJ 08540.** An Equal Opportunity Employer, M/F.

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GRADUATE PROGRAM

THE UNIVERSITY OF NEW MEXICO (UNM) SCHOOL OF MEDICINE, AND LOS ALAMOS NATIONAL LABORATORY (LANL) have combined resources to create a multidisciplinary **Ph.D. program**. Students have access to faculty and facilities of the Departments of Anatomy and Pathology at the UNM School of Medicine and the Life Sciences Division at LANL. All three departments are engaged in active research in the areas of cell biology, immunology, neurobiology, biophysics, and biochemistry. Graduate stipends begin at \$7200 per annum. For further information and application forms, contact: **Dr. D. E. Van Epps, Department of Pathology, University of New Mexico Medical School, Albuquerque, New Mexico 87131.**

GRADUATE TRAINING

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS in endocrinology, metabolism, and diabetes for M.D. or Ph.D. graduates are available at Emory University School of Medicine utilizing ten training faculty in six basic and clinical departments. *Must be U.S. national or permanent resident.* M.D. applicants must have U.S. residency experience. Send curriculum vitae, statement of research and career objectives, and two letters of reference by 15 February 1986 to: **Lawrence S. Phillips, M.D., Program Director, Emory University School of Medicine, 69 Butler Street, Atlanta, Ga. 30303. An Equal Opportunity Employer.**

GRADUATE STUDY

GRADUATE STUDIES IN CELL BIOLOGY, NEUROENDOCRINOLOGY, NEUROANATOMY OR NEUROPHYSIOLOGY leading to the Ph.D. in anatomy, University of California, Los Angeles (UCLA). Predoctoral experience in these rapidly advancing areas of investigation is offered by a faculty of more than 30 research active members. The program provides training in research and teaching as preparation for academic careers in the biomedical sciences. Fellowships up to \$10,000 plus fees are available. Inquire: **Dr. E. Eldred, Department of Anatomy, UCLA, School of Medicine, Los Angeles, Calif. 90024.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS AND GRANTS FOR BASIC RESEARCH RELEVANT TO HUNTINGTON'S DISEASE

Application forms can be obtained from:

HEREDITARY DISEASE FOUNDATION
606 Wilshire Boulevard, Suite 504
Santa Monica, Calif. 90401

POSTDOCTORAL FELLOWSHIPS IN IMMUNOLOGY AND TUMOR IMMUNOLOGY VIRGINIA COMMONWEALTH UNIVERSITY

Several fellowships are available in a multidisciplinary research training program focusing on the molecular, cellular, and genetic basis of immune responses. The faculty include: S. G. Bradley (host-parasite), C. O. Elson (IgA regulation), R. E. Hall (monocyte and NK cytotoxicity), B. H. Littmann (lymphokines), F. Marciano-Cabral (immunoparasitology), T. Mohanakumar (transplantation, tumor immunology, Fc receptors), A. E. Munson (immunotoxicology), R. R. Ranney (periodontal disease), S. Ruddy (complement, Fc receptors), B. M. Susskind (cellular immunology), H. S. Schenkein (complement), L. B. Schook (immunogenetics), J. G. Tew (follicular dendritic cell), L. Schwartz (mast cell biology), T. Huff (IgE, cellular immunology), H. Bear (suppressor cell regulation of tumors), J. Haar (immunology of aging), and J. Monaco (molecular immunogenetics).

Stipends are funded through a training program sponsored by the National Cancer Institute. Positions are available beginning 1 July 1986. The requirements are U.S. citizenship and a Ph.D., M.D., D.D.S., D.V.M., or equivalent. Send résumé, statement of research interests, and a minimum of three references to: **T. Mohanakumar, Ph.D., Professor of Surgery and Microbiology and Program Director, Box 5, MCV Station, Virginia Commonwealth University, Richmond, Va. 23298.**

Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer.

FELLOWSHIPS

PERINATAL PHYSIOLOGY FELLOWSHIP—Postdoctoral fellowships are available starting January 1986 and July 1986 to study maternal and fetal responses to renal hypertension, vascular disease, and intrauterine growth retardation. Experience in cardiovascular physiology/pharmacology or endocrinology preferred. Funded by NIH training grant in perinatal physiology. Submit curriculum vitae and the names of three references to: **Kenneth E. Clark, Ph.D., A. E. Seeds Perinatal Research Center, Department of Obstetrics and Gynecology, University of Cincinnati, Cincinnati, Ohio 45267-0526. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIPS. Research training in lipid metabolism related to atherosclerosis. Traineeships supported by an NHLBI grant are currently available at the Hormel Institute, a unit of the Graduate School, University of Minnesota. Basic, multidisciplinary research related to atherosclerosis with emphasis on membrane structure and function includes: polyunsaturated fatty acids in nutrition, metabolism and disease; control of mitochondrial function; ionophore-catalyzed cation transport; analysis and biosynthesis of prostaglandins and related compounds; inhibition of platelet aggregation; metabolism of furan fatty acids; phospholipid deacylation/reacylation and LDL uptake by endothelial cells; NMR of lysophospholipid and cholesterol interactions; carbohydrate and lipid metabolism in isolated cell systems related to development/prevention of obesity; regulation of lipases and phospholipases; the role of membrane phospholipids in signal transduction and cell injury. Faculty members include Drs. W. J. Bauman, H. L. Brockman, M. P. Cleary, R. T. Holman, D. R. Pfeiffer, O. S. Privett, H. Schlenk, and H. H. O. Schmid. Beginning salaries are substantially above NIH scale with complete fringe benefit package. Appointments are annually renewable. Applicants must be U.S. citizens, noncitizen nationals, or permanent U.S. residents with a Ph.D., M.D., or equivalent degree. Applications should include curriculum vitae, list of publications, and the names of three references. Send curriculum vitae to: **Dr. Margot P. Cleary, The Hormel Institute, University of Minnesota, 801 16th Avenue, NE, Austin, Minn. 55912. Telephone: 507-433-8804. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages women and minority applicants.**

POSTDOCTORAL FELLOWSHIP for research in protein chemistry. Background in purification, isolation, and characterization of structural proteins, RIA, ELISA, HPLC, amino acid and sequence analyses, monoclonal antibody production and assay, and electron microscopic experience (optional). Position for 2 to 3 years in established research laboratory. Address résumé to: **Carole Rainaldi, Administrative Assistant, Department of Pathology (M-012), University of California, San Diego, La Jolla, Calif. 92093.** All applications received by 20 December 1985 will receive thorough consideration. Salary range is based on University of California pay-scale. *Equal Opportunity/Affirmative Action Employer.*

PREDOCTORAL FELLOWSHIPS. Competitive fellowships are available in the areas of behavior, cell and developmental biology, ecology, genetics, physiology, and systematics/morphology. Included are 12-month stipends and waivers of out-of-state tuition. Research and teaching assistantships also are available. The faculty consists of 35 members with a wide range of research programs. Two faculty are NIH RCDA recipients; another is recipient of a Presidential Young Investigator Award. Further information, contact: **The Department of Zoology, Attention: Graduate Secretary, Arizona State University, Tempe, Arizona 85287. Arizona State University vigorously pursues Affirmative Action and Equal Opportunity in its employment, activities, and programs.**

POSTDOCTORAL FELLOWSHIP (2 to 3 years), available 1 January 1986 to join a group at the University of Maryland working on the expression of apical proteins in mammary epithelial cells. Molecular biologist required with training in recombinant DNA and transfection techniques. Funds available for travel to the Middlesex Hospital Medical School, London, United Kingdom, to collaborate with Professor R. K. Craig and colleagues. Starting salary: approximately \$18,000. Applications, including three references to: **Dr. Ian H. Mather, Department of Animal Sciences, University of Maryland, College Park, Md. 20742. An Equal Opportunity/Affirmative Action Employer.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP—An innovative project area with a research group dealing with isolation and characterization of unique human secretory proteins having a variety of important biological functions, among which are included protein-lipid interactions. Candidates should have appropriate biochemistry, cell biology, and applied immunology experience at the Ph.D. level. Submit résumé and names of three references to: **G. I. Research Unit, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio 44106. An Equal Opportunity Employer.**

COURSE

1986 KINSEY SUMMER INSTITUTES

Human Sexuality: Emerging Perspectives—26 to 31 July.

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Human Male: Sex, Gender, and Reproduction—3 to 8 August.

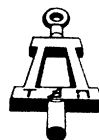
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AWARDS

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The Lilly Research Laboratories, a Division of Eli Lilly and Company, is offering postdoctoral research opportunities in the areas of central nervous system research, cardiovascular diseases, leukotriene research, and recombinant DNA/molecular genetics. Postdoctoral Scientists will work in close association with Lilly scientists who are involved in the basic research process of drug discovery. Publication and presentation of results will be an integral part of the program. This postdoctoral experience is designed to give individuals in-depth research training in a focused area of biology. The program will also provide an opportunity to become acquainted with the drug development process within the pharmaceutical industry. Postdoctoral Scientists will be expected to participate fully in the conceptual and design phases of projects, within the following areas:

Central Nervous System Research: Scientists with training in pharmacology or neuroendocrinology will study the role of neurotransmitters in the control of neuroendocrine function, as relating to affective and neurological disorders. There will be considerable interaction with scientists studying the pharmacology and mechanism of action of antidepressant and antipsychotic drugs. Experience with hormone assays and knowledge of neuroanatomy and serotonin and dopamine pharmacology is desirable.

Cardiovascular Research: Individuals will be involved in areas of research including the molecular basis of inotropic drug action, models of congestive heart failure including associated biochemical alterations, and myocardial adaptations of the adrenergic nervous system in various models of heart disease. Biochemical and physiological approaches will be used.

Leukotriene Research: Postdoctoral scientists will work in a laboratory currently examining the pharmacology of leukotrienes and other mediators of anaphylaxis. The successful candidate should have demonstrated prior biochemical or pharmacologic expertise in this area. The project will relate to the interaction of mediators released during immediate type hypersensitivity reactions.

Molecular Genetics Research: Scientists will employ rDNA technology to isolate and study genes coding for antibiotic biosynthesis in *Streptomyces* and fungi. The structure and regulation of these genes will be examined and they will be the basis of collaborative projects designed to lead to novel antibiotics. Candidates should have a strong background in microbiology, rDNA methodology and biochemistry.

Postdoctoral appointments are of one-year duration and are renewable for a second year with mutual agreement. Candidates with no more than one previous postdoctoral experience are encouraged to apply.

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