

Then they demonstrate that archeologically the workshops are much closer to domestic environments than to any other form known archeologically, including anything military or from a deprived environment. They discover this by comparing the artifact assemblage, whose limitations are fully described, with Stanley South's artifact patterns. The ratio of plates, glass, bottles, bricks, bones, nails, and kitchenware is virtually identical to that expected from a house site. Inferred from this pattern is a routine of domestic living analogous to that found not in a military fort with its strict discipline or on a frontier with its deprivation but in a setting with rules analogous to, though not identical with, those of the home. The careful comparison of artifact patterns thus shows that at the level of reality as lived—not

philosophized—the workshop was the environment for resocialization that many new American institutions were intended to be.

The post-Revolutionary era was one of much confusion and instability in the institutions of the new United States, as is apparent in "After the Revolution, 1790–1830," a well-researched and now much-celebrated exhibit at the National Museum of American History. We can see, however, from the Prison Workshop that some social experiments worked, and why. We can see that this is dramatically different from what we believe to be the effect of our prisons now.

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Books Reviewed in Science

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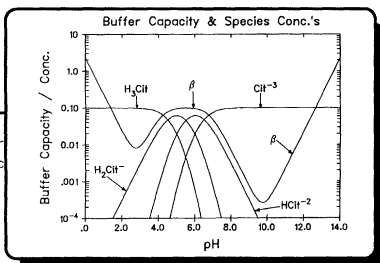
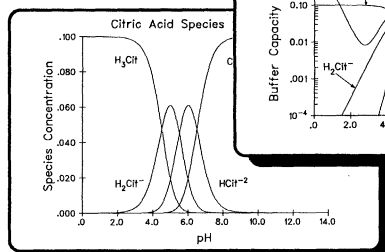
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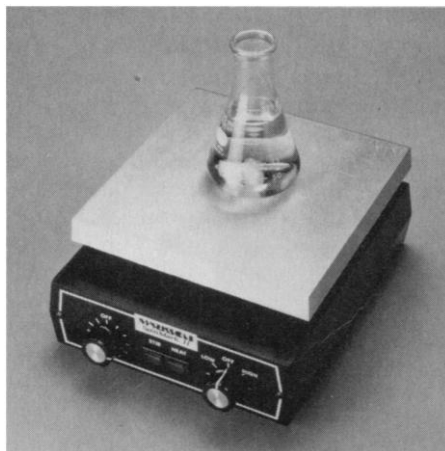
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Literature

The *Data Acquisition Catalog* features data acquisition hardware and data analysis and graphics software for IBM PC, XT, AT, PS/2 model 30, and compatible computers. Interactive Microwave. Circle 445.

Evaporation Rates and Drying Times of Typical Laboratory Solvents in the SpeedVac Centrifugal Vacuum Evaporator/Concentrator/Dryer is a technical brochure that describes the variables that affect evaporation speeds. Savant Instruments. Circle 446.

Technical Brochure #117 describes a technique that detects plasmids in *Bacillus cereus* and *Escherichia coli* when they cannot be detected by plasmid isolation procedures or horizontal electrophoresis. Hoefer Scientific Instruments. Circle 447.

Ultra Cold Chests is a catalog sheet about storage cabinets with adjustable temperatures of -20° to -80°C. Kelvinator Scientific. Circle 448.

Catalogue 2 is a 140-page catalog of 800 products for immunology, cell biology, biochemistry, and molecular biology. Janssen Biochimica (Belgium). Circle 449.

Books Received

Autowave Processes in Kinetic Systems. Spatial and Temporal Self-Organization in Physics, Chemistry, Biology, and Medicine. V. A. Vasiliev *et al.* Reidel, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). 262 pp., illus. \$69. Mathematics and Its Applications, Soviet Series. Translated from the Russian.

Bacteria-Host Cell Interaction. Marcus A. Horwitz, Ed. Liss, New York, 1987. xvi, 393 pp., illus. \$74. UCLA Symposia on Molecular and Cellular Biology, vol. 64. From a symposium, Park City, UT, Feb. 1987.

Cytomechanics. The Mechanical Basis of Cell Form and Structure. J. Bereiter-Hahn, O. R. Anderson, and W.-E. Reif, Eds. Springer-Verlag, New York, 1987. xx, 294 pp., illus. \$95.

Early Science in Newfoundland and Labrador. D. H. Steele, Ed. Avalon Chapter of Sigma Xi, St. Johns, Newfoundland, 1987. vi, 199 pp., illus. Paper, \$12. From a symposium, St. John's, March 1986.

Growth Factors and Oncogenes in Breast Cancer. M. Sluysen, Ed. Horwood, Chichester, U.K., and VCH, New York, 1987. 208 pp., illus. \$57. Ellis Horwood Series in Biomedicine.

Guide to Molecular Cloning Techniques. Shelby L. Berger and Alan R. Kimmel, Eds. Academic Press, Orlando, FL, 1987. xxvi, 812 pp., illus. Spiral bound, \$45. Methods in Enzymology, vol. 152.

Handbook on the Physics and Chemistry of Rare Earths. Vol. 9. Karl A. Gschneidner, Jr., and LeRoy Eyring, Eds. North-Holland (Elsevier), Amsterdam, 1987 (U.S. distributor, Elsevier, New York). xii, 434 pp., illus. Dfl. 250.

The Isolated Hepatocyte. Use in Toxicology and Xenobiotic Biotransformations. E. J. Rauckman and George M. Padilla, Eds. Academic Press, Orlando, FL, 1987. xii, 292 pp., illus. \$75. Cell Biology.

Laboratory Hamsters. G. L. Van Hooser, Jr., and Charles W. McPherson, Eds. Academic Press, Orlando, FL, 1987. xvi, 400 pp., illus. \$79.50. American College of Laboratory Animal Medicine Series.

Molecular Plant Development. Terence M. Murphy and William F. Thompson. Prentice-Hall, Englewood Cliffs, NJ, 1988. xii, 222 pp., illus. \$30.

Multiple Comparison Procedures. Yosef Hochberg and Ajit C. Tamhane. Wiley, New York, 1987. xxiv, 450 pp. \$44.95. Wiley Series in Probability and Mathematical Statistics.

Neural Plasticity. A Lifespan Approach. Ted L. Petit and Gwen O. Ivy, Eds. Liss, New York, 1987. xii, 383 pp., illus. \$59.50. Neurology and Neurobiology, vol. 36. From a symposium, Scarborough, Ontario, April 1987.

Optical Mineralogy. Vol. 2, Mineral Descriptions. Ernest G. Ehlers. Blackwell Scientific, Palo Alto, CA, 1987. x, 286 pp., illus., + plates. \$49.95.

Paleomagnetology. Aleksey N. Khramov. Springer-Verlag, New York, 1987. xx, 308 pp., illus. \$107.50. Translated from the Russian edition (Leningrad, 1982).

Robust Regression and Outlier Detection. Peter J. Rousseeuw and Annick M. Leroy. Wiley, New York, 1987. xvi, 329 pp., illus. \$36.95. Wiley Series in Probability and Mathematical Statistics.

Saline Water and Gases in Crystalline Rocks. P. Fritz and S. K. Frape, Eds. Geological Association of Canada, St. John's, Newfoundland, 1987. vi, 259 pp., illus. \$47; \$39 to GAC members. Geological Association of Canada Special Paper no. 33. Based on a symposium, Fredericton, New Brunswick, 1985.

Science and Earth History. The Evolution/Creation Controversy. Arthur N. Strahler. Prometheus, Buffalo, NY, 1987. xiv, 552 pp., illus. \$39.95.

Viral Carcinogenesis. Functional Aspects. Niels Ole Kjeldgaard and Jes Forchhammer, Eds. Munksgaard, Copenhagen, 1987 (U.S. distributor, Raven, New York). 467 pp., illus. \$90. Alfred Benzon Symposium Series, vol. 24. From a symposium, Copenhagen, Denmark, June 1986.

Visions of Addiction. Major Contemporary Perspectives on Addiction and Alcoholism. Stanton Peele, Ed. Lexington (Heath), Lexington, MA, 1988. xviii, 244 pp., illus. \$30.

VLSI Specification, Verification and Synthesis. Graham Birdwistle and P. A. Subrahmanyam, Eds. Kluwer, Norwell, MA, 1987. xii, 404 pp., illus. \$65. Kluwer International Series in Engineering and Computer Science, vol. 35. From a workshop, Calgary, Alberta, Jan. 1987.

Waveforms. A History of Early Oscillography. V. J. Phillips. Hilger, Bristol, U.K., 1987 (U.S. distributor, Taylor and Francis, Philadelphia). xii, 259 pp., illus. \$77.

Personnel Placement

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BIOLOGICAL ANTHROPOLOGIST

The U.S. Army Natick Research, Development and Engineering (RD&E) Center invites applications for research anthropologist position (GS-11), beginning 1 October 1988. Responsibilities include creating and implementing innovative research designs for basic morphometric research and applied problems in human engineering of the protective clothing and equipment. Ph.D. preferred. Strong candidates will have backgrounds in anatomy/osteology or growth/development with biostatistics and computer science. Applicants must be U.S. citizens. Send letter, curriculum vitae, names of three references, transcripts, and applications for Federal Employment (SF-171) by 17 June 1988, to: **Dr. Kenneth R. Parham, U.S. Army Natick RD&E Center, Attention: STRNC-YBF (Box 20), Natick, MA 01760-5020.**

CHAIRPERSON—Department of Environmental Health—Search Extended—Associate/Professor. Begins 15 August 1988. Minimum qualifications are Ph.D., Dr. P.H. or equivalent in environmental health or related field with administrative experience in higher education and eligibility for certification by professional board. Send application materials to: **Dr. Algeania Freeman, Box 21, 190A, East Tennessee State University (ETSU), Johnson City, TN 37614.** *ETSU is an Equal Opportunity/Affirmative Action Employer and employs only U.S. citizens and aliens authorized to work in the U.S.*

POSITIONS OPEN

BIOLOGIST. An entry-level, 9-month, tenure-track position to begin 1 September 1988. Ph.D. preferred with appointment at the rank of instructor/assistant professor. Teaching responsibilities will include general biology, plus service courses for nursing majors or coordination of laboratories for survey biology courses as needed. Teaching in one of the following areas of specialization will be available on a limited basis: anatomy/physiology, botany, embryology, genetics/population-biology/evolution, microbiology, zoology. Interest in ongoing research is desirable. Applications will be accepted until 1 June 1988. Submit letter of application, transcript(s), three letters of recommendation, and current curriculum vitae to: **Dr. Wayne R. Faircloth, Department of Biology, Valdosta State College (VSC), Valdosta, GA 31698.** *VSC is an Equal Opportunity/Affirmative Action Employer.*

CHAIRPERSON DEPARTMENT OF NEUROLOGY THE UNIVERSITY OF VIRGINIA MEDICAL CENTER

Applications are invited for the position of professor and chairperson of the Department of Neurology at the University of Virginia Medical Center. Candidates must have a distinguished record of scholarship and professional achievement and proven leadership and administrative ability. Curriculum vitae and names and addresses of three references should be submitted by 15 July 1988 to the chairman of the Search Committee at the following address:

**Robert M. Epstein, M.D., Chairman
Department of Anesthesiology
University of Virginia
Medical Center Box 238
Charlottesville, VA 22908**

An Equal Opportunity/Affirmative Action Employer.

CLINICAL CHEMIST/TOXICOLOGIST. Director of Biochemistry Division. M.D. or Ph.D. Pathologist certified in AP/CP or CP preferred. Experience in supervising all technical and administrative functions in tertiary medical center required. Interest in teaching and research. Academic rank and salary based upon experience. Forward curriculum vitae to: **John T. Ellis, M.D., Department of Pathology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** *Equal Employment Opportunity/Affirmative Action M/F/H/V.*

EAST TENNESSEE STATE UNIVERSITY (ETSU)

COMPARATIVE ANIMAL PHYSIOLOGIST, Department of Biological Sciences: Assistant professor. Requires Ph.D. in comparative animal physiology; postdoctoral preferred. Research in discipline is expected. Duties include teaching comparative animal physiology and histology or endocrinology, participation in general biology program, and supervision of master's candidates. Application should include a brief statement of research interests, graduate transcripts, and letters of reference. Review of applications will begin 15 June 1988 and continue until position is filled. Contact: **Dr. Diane R. Nelson, Chair of Search Committee, Department of Biological Sciences, P.O. Box 23, 590A, ETSU, Johnson City, TN 37614.** *ETSU is an Equal Opportunity/Affirmative Action Employer and employs only U.S. citizens and aliens authorized to work in the United States.*

COMPARATIVE PHYSIOLOGIST. Assistant professor, 9-month tenure-track. Ph.D. in biological sciences required; emphasis in comparative physiology/neuroendocrinology and postdoctoral experience preferred. Responsibilities include participation in teaching undergraduate courses in human anatomy and physiology, development of a graduate course in comparative endocrinology, and development of graduate student and extramurally-funded research programs. Please submit curriculum vitae, transcripts, reprints of recent publications, evidence of teaching performance, a summary of teaching and research interests, and three to five letters of recommendation to: **Dr. John Pritchett, Professor and Head, Department of Zoology and Wildlife Science, Auburn University, AL 36849-5414.** Telephone: 205-826-4850. Applications will be accepted until 20 June 1988 or until a suitable candidate is identified.

Equal Opportunity/Affirmative Action Employer.



**NORTHWESTERN
UNIVERSITY**

**Department of Biochemistry,
Molecular Biology and
Cell Biology**

PROFESSOR

Established scientists are invited to apply for a **PROFESSORSHIP** in this nationally recognized department. It is expected that the candidate will provide major leadership by serving a five year rotation as Chairperson. Applicants should have a distinguished research program in molecular biology, cell biology or biochemistry.

Send curriculum vitae and names of 3-5 references to:

**Professor Robert A. Lamb,
Department of Biochemistry,
Molecular Biology and
Cell Biology,
Northwestern University,
Evanston, IL 60208**

*Northwestern University is an
Equal Opportunity/Affirmative Ac-
tion Employer.*

RORER CENTRAL RESEARCH, a division of **RORER GROUP INC.**, has the following positions open in its King of Prussia, Pennsylvania facility. Please submit all resumes to Ms. L. L. Stewart, Rorer Central Research, 640 Allendale Road, King of Prussia, PA 19406, by June 3, 1988. Please indicate on your resume the position number and title for which you are applying. No phone calls will be accepted.

#RA1 ASSOCIATE RESEARCH SCIENTIST to perform research and experiments to prepare receptor mutants by site-directed mutagenesis and express them in heterologous cells, exploring their biological response in order to define the ligand binding region of the EGF-receptor. Interface with other scientists to report on findings, prepare and present papers to international research community. **REQUIREMENTS:** Ph.D. in Chemical Immunology and hands on-experience performing research in cell biology, receptor-analysis and purification, as well as development of hybridomas. 40 hours per week. 8:15 a.m. - 4:45 p.m., Mon. thru Fri. **Salary: \$30K to \$40K per year.**

#RA2 ASSOCIATE RESEARCH SCIENTIST to develop monoclonal and polyclonal antibodies in living cells against receptors. Perform and report on experiments designed to identify mutants of EGF-receptors, explore their structure and expression. Write detailed reports concerning the results of the experiments and interface with other researchers on scientific team. **REQUIREMENTS:** Ph.D. in Cellular and Molecular Biology, 1 year's experience as a Scientific Researcher. Experience must include 1 year of hands-on experience researching the production of monoclonal antibodies by various types of cancer cells. 40 hours per week. 8:15 a.m. - 4:45 p.m., Mon. thru Fri. **Salary: \$30K to \$40K per year.**

#RA3 ASSOCIATE RESEARCH SCIENTIST to perform experiments designed to synthesize a large biologically active peptide with several disulfide bonds, and design a molecule that may have antagonist or inhibitory activity based on known agonist. Perform other experiments dealing with the synthesis, purification and characterization of biologically active peptides. Write detailed reports on findings and interface with other member of scientific research team. **REQUIREMENTS:** Ph.D. in Chemistry, 1 year's experience as scientific researcher. Year's experience must include 1 years hands-on experience researching the design and synthesis of complex organic and carbohydrate-nucleotide inhibitors and their application in the study of enzyme mechanisms. 40 hours per week. 8:15 a.m. - 4:45 p.m., Mon. thru Fri. **Salary: \$30K to \$40K per year.**

**INFECTIOUS DISEASE
DIAGNOSTIC
PRODUCTS**

**Senior Scientists/ PhDs
California**

Ortho Diagnostic Systems, Inc. is a leader in the development and manufacture of medical diagnostics, reagents, immunological and related products. Our Carpinteria, California location, just outside Santa Barbara, specializing in R&D, manufacture and marketing of infectious disease testing kits, has two excellent project team opportunities for Senior Scientists:

- 1) PhD in Immunology/Immunochemistry/Biochemistry/Biology/Microbiology with at least 2 years industrial experience in immunochemistry product development. A record of accomplishment, product introduction experience and supervisory ability are important. Background in infectious disease diagnosis.
- 2) PhD in Clinical Microbiology/Virology with at least 2 years industrial product development experience. Must have current working knowledge of clinical microbiology and virology related to developing state-of-the-art immunochemistry-based diagnostic products.

As part of the world's most diversified health care firm, we provide competitive salaries and superior benefits. Reply in confidence, with resume and salary history, indicating position of interest, to MARILEE MOY, Plant Personnel Manager, ORTHO DIAGNOSTIC SYSTEMS INC., 1125 MARK AVE., CARPINTERIA, CA 93013-9990.



Ortho Diagnostic Systems Inc.
A Johnson & Johnson COMPANY

**We are an Affirmative Action
Equal Opportunity Employer M/F/H/V**

A Unique Formula For Career Success

Molecular Biologist/ Physical Biochemist

A PhD level position is **available** within our Medical Products Department for a specialist with **expertise** in molecular biology or physical biochemistry. As a member of a group of scientists carrying out pharmacy research and development experiments you will be responsible for developing and implementing procedures to characterize the physical and chemical properties of polynucleotides or proteins and to assess the structure stability of these macromolecules in various physical states. To qualify, you should hold a PhD. Up to five years of industrial or postdoctoral experience is a plus.

You'll find a highly stimulating scientific environment in a modern research facility located near Wilmington, DE. We provide excellent compensation and benefits including relocation. Wilmington's Mid-Atlantic location offers an attractive lifestyle with easy access to affordable housing and a wide range of academic, cultural and recreational activities. Interested candidates should send their resumes and references to: Professional Staffing, Employee Relations Department, Room X-51161, Du Pont Company, Wilmington, DE 19898.



**An Equal Opportunity Employer M/F/H/V
U.S. Citizenship Required**

POSITIONS OPEN

DEVELOPMENTAL BIOLOGIST DEPARTMENT OF BIOLOGICAL STRUCTURE SCHOOL OF MEDICINE UNIVERSITY OF WASHINGTON

Applications for a tenure-track assistant or associate professorial position are invited from candidates in developmental biology who use contemporary experimental approaches. Candidates should have a Ph.D. and/or M.D. degree and a proven ability or high potential for an independently funded, productive research program. Send curriculum vitae, publication list, statement, of both research and teaching interests, status of funding, and four letters of reference by 30 June 1988 to: **Cornelius Rosse, Chairman, Department of Biological Structure, University of Washington, SM-20, Seattle, Washington, 98195.** *The University is an Equal Opportunity/Affirmative Action Employer.*

DIRECTOR, AIDS COORDINATION STAFF DHHS/PHS/FOOD AND DRUG ADMINISTRATION CENTER FOR BIOLOGICS EVALUATION AND RESEARCH

The Food and Drug Administration (FDA), Center for Biologics Evaluation and Research, invites applications for the position of Director, AIDS Coordination Staff, located in Bethesda, Maryland. This is a supervisory interdisciplinary position appropriate for medical officer, chemist, microbiologist or biologist. The Director is responsible for the management and coordination of all AIDS and AIDS-related program responsibilities within the FDA. The Director must be aware of new scientific trends and developments in the rapidly changing AIDS regulatory and research arena to provide FDA officials with authoritative scientific information and advice on current and anticipated problems on controversial AIDS issues.

Salary range for chemist, microbiologist, and biologist is \$46,679 to \$60,683 at the GM-14 level and \$54,907 to \$71,377 at the GM-15 level. Salary range for medical officer is \$53,917 to \$67,642 at the GM-14 level and \$58,135 to \$72,500 at the GM-15 level. Medical officers may also be eligible for a Physicians' Comparability Allowance up to \$20,000 per year. Salary is commensurate with education and experience. *U.S. citizenship is required.*

Position information and specific qualification requirements may be obtained by contacting **Ms. Marsha Pincus on 301-443-6233.**

Application for Federal Employment (SF-171) must be submitted to the following address no later than 7 July 1988: **FDA Personnel Office, Attention Vacancy Announcement FDS-88-132-B, Room 4B-18, 5600 Fishers Lane, Rockville, MD 20857.**

FDA is an Equal Opportunity Employer

UNIVERSITY OF IOWA COLLEGE OF PHARMACY ENDOWED PROFESSORSHIP IN DRUG DELIVERY TECHNOLOGY

The College of Pharmacy has obtained an endowment from the State of Iowa and private sources to endow a Professorship in Drug Delivery Technology. We are seeking an eminent senior scholar who will bring an established program of research and teaching to the College of Pharmacy. The college is defining drug delivery in the broadest possible sense to include, but not be limited to: controlled release systems; the use of non-traditional absorption sites for drug delivery; site-targeting; and protein and peptide delivery systems.

The person appointed to the position must have a Ph.D. or equivalent degree and qualify for the rank of Professor. Salary is open and commensurate with qualifications and experience. Applications or nominations including the candidate's curriculum vitae, a current list of publications and grant support, and the names of three references should be sent to:

**Dr. Lloyd E. Matheson,
Search Committee Chairman
College of Pharmacology
The University of Iowa
Iowa City, IA 52242
Telephone: 319-335-8821**

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

POSITIONS OPEN

DIRECTOR, ASIAN OPERATIONS

Major U.S. horticultural seed company with worldwide activities is seeking a high caliber individual to supervise and expand its Asian operations: multi-location production of hybrid vegetable seed, sales and marketing of vegetable and flower seed. The successful candidate will have an M.S. or Ph.D. in horticultural sciences or related and be fluent in Mandarin. A good command of Japanese is desirable. Ability to work independently and to supervise indispensable. Previous seed production experience a plus. The position is located in Hong Kong and requires extensive travel throughout Asia. Expatriate status. Compensation and benefits commensurate with experience. Send résumé and salary requirements to: **Box 79, SCIENCE.**

DIRECTOR, DNA DIAGNOSTIC LABORATORIES

New position. Available immediately. Expanding program. Ph.D. with at least 4 years of experience. Diagnostic and research opportunity, including collaboration with a large group of molecular geneticists. Send curriculum vitae to: **Audrey Milunsky, M.D., D.Sc., Director, Center for Human Genetics, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118.** *An Affirmative Action/Equal Opportunity Employer.*

EDITOR ACADEMIC MEDICINE JOURNAL

The Association of American Medical Colleges (AAMC) seeks an experienced editor to develop a national monthly academic medical journal. The editor will conceptualize and set the direction of the journal, originate editorial content and manage the editorial process for both the solicited and refereed sections of the journal.

Requirements include extensive editorial and management experience in magazine/journal publication, and experience in communicating medical education and health financing issues.

AAMC offers excellent benefits and a salary commensurate with experience. Qualified applicants should send curriculum vitae to: **Elizabeth M. Martin, Vice President, Communications, AAMC, One Dupont Circle, NW, Suite 210, Washington, DC 20036.**

An Equal Opportunity/Affirmative Action Employer.

The Department of Neurobiology, **Theodore J. Vontida, Ph.D.,** Chairman, Northeastern Ohio Universities College of Medicine, is seeking candidates for a **FACULTY** (12-month, tenure-track) position at the **ASSISTANT PROFESSOR** level. We are seeking an individual whose research interests complement those of the department and are in the area of sensory neurobiology. Our present strengths are in the areas of neuroanatomy and neurophysiology, emphasizing the neural bases of learning and memory, central control of cardiac function and evolutionary neurobiology. Responsibilities include the teaching of first and second year medical students and Ph.D. level graduate students. Submit curriculum vitae, statement of research interests, and names of three references by 17 June 1988 to: **The Office of Human Resources, Northeastern Ohio Universities College of Medicine, P.O. Box 95, Rootstown, OH 44272.** *An Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION

The Department of Pathology invites applications for a tenure-track assistant professor in cancer cell biology. The successful candidate will be expected to conduct a research program in cancer metastasis focusing on the molecular aspects of tumor cell interactions with components of the extracellular matrix and/or specific host cells. The candidate will also be expected to participate in the department's professional and graduate teaching programs in cell pathology. A Ph.D., D.V.M./Ph.D., or an equivalent degree with appropriate postdoctoral training and experience are essential. Applications will be accepted through 30 June 1988 and should contain curriculum vitae, a detailed statement of research and career goals, and three letters of reference. They should be sent to: **Dr. Bendicht U. Pauli, Professor and Chairman, Department of Pathology, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401.**

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

POSITIONS OPEN

FACULTY POSITION

The Department of Pathology invites applications for a tenure-track faculty position in experimental pathology. The successful candidate will be expected to emphasize the development of a strong independent and collaborative research program in the area of cellular pathobiology and the molecular pathogenesis of disease. The candidate will also be expected to assist in the department's professional and graduate teaching programs, to contribute to graduate research training, and to participate in residency training and service responsibilities in a fashion appropriate to his or her training and expertise. A D.V.M., Ph.D. or equivalent degree with appropriate research training and experience are essential. Academic rank and salary will be commensurate with background and experience.

Applications will be accepted through 30 June 1988. Candidates should send curriculum vitae, three letters of reference, and a statement of research and career goals to: **Dr. David O. Slauson, Chairman of Search Committee, Department of Pathology, Box 60, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401. Telephone: 607-253-3329.**

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

SCRIPPS INSTITUTION OF OCEANOGRAPHY FACULTY POSITION IN APPLIED OCEAN SCIENCE

The Scripps Institution of Oceanography (SIO) is seeking an outstanding scientist or engineer to fill a tenured or tenure-track professorial position, the level and salary commensurate with the experience of the successful applicant based on University of California pay scale. Assistant-level candidates will be expected to show evidence of their potential through letters of recommendation and a publication record appropriate for their experience. Associate- or full professor-level candidates must show evidence of a strong research record in their specialization. Applicants with an interest in conducting innovative observational work at sea will be given strongest consideration. Fields of interest include, but are not limited to, geology/geophysics/physical oceanography in the sea floor environment, ocean acoustics, coastal processes, radar oceanography, marine micrometeorology, and small-scale physical oceanography. Applicant must hold a Ph.D. degree, or be advanced to candidacy, and will be expected to teach and supervise students, primarily at the graduate level, conduct an extramurally funded research program, and participate in administrative functions of the SIO and UCSD. There is a possibility that more than one appointment can be made. Closing date for applications: 1 July 1988. Send a detailed résumé (including teaching experience), copies of selected recent publications, and names of at least five references to: **Chairman-AOS, SIO Graduate Department A-008, University of California, San Diego, La Jolla, CA 92093.** *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS—Department of Neurobiology and Behavior—State University of New York at Stony Brook: The Department of Neurobiology and Behavior of SUNY at Stony Brook is seeking candidates for tenure-track, state-funded positions in cellular, developmental, molecular and integrative neurobiology, beginning as early as academic year 1988 to 1989. The Department, which currently consists of 13 members, is undergoing significant redevelopment, and has the resources to grow to 20 members within the next 5 years. Positions are available at all levels; rank and competitive salaries will be commensurate with qualifications. All applicants should have a minimum of 2 years of postdoctoral experience. Candidates will be expected to develop a vigorous independent research program, and as such ample space and start-up fund will be provided. Applicants will also be expected to participate in undergraduate, graduate, and/or medical school instruction. Applicants should submit curriculum vitae, statement of research interests, and names and addresses of three references to: **Dr. Lorne Mendell, Chairman, Department of Neurobiology and Behavior, SUNY Stony Brook, Stony Brook, NY 11794-5230.** *SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. AK#137-A*

AIR QUALITY RESEARCH PROJECT MANAGEMENT

Environmental And Safety Research

If you're knowledgeable in various areas of air quality, we have a challenging opportunity for you. We're Gas Research Institute, an energy-oriented research organization serving the natural gas industry and gas consumers.

We need someone knowledgeable and interested in NOx formation in gas-fired equipment and in NOx chemistry in the environment. You'll be responsible for developing and managing research related to development of emission controls and the analysis of the environmental impacts of NOx, in our Environmental and Safety Research Department.

Research and project management experience is desirable, as is familiarity with environmental regulations. An advanced degree in an appropriate engineering or science discipline is preferred.

Gas Research Institute offers a competitive salary and comprehensive benefits, including relocation assistance to our Chicago headquarters. For consideration in confidence, send your resume to: **Human Resources, Dept. #8819, GAS RESEARCH INSTITUTE, 8600 West Bryn Mawr Avenue, Chicago, IL 60631.** We are an equal opportunity employer m/f/h.

 **Gas Research Institute**

G -

National Institutes of Health Staff Fellow Positions

The positions are located in the newly established Molecular Carcinogenesis Laboratory of the division of Intramural Research, National Institute of Environmental Health Sciences (NIEHS), in the Research Triangle Park, North Carolina. Investigators working in any area of molecular carcinogenesis are encouraged to apply but special consideration will be given to those working in the areas of tumor promotion, chemical carcinogenesis, signal transduction, oncogenes, transgenic mice, tumor suppressor genes, and other cancer susceptibility genes.

Two senior level positions are available. The incumbents must have several years of postdoctoral experience, a record of outstanding research accomplishments, and an indication of the ability to develop and maintain a program of highly imaginative and original research.

A Staff Fellow position studying tumor suppressor genes in Dr. J. Carl Barrett's group is available for an outstanding recent postdoctoral scientist

The applicants should be U.S. citizens with a Ph.D. degree or equivalent. Salary ranges from \$20,000 to \$38,753. Please send curriculum vitae, a brief description of present and proposed research, and the names of three of four references to:

Elena D'Orazio (Code: NHV22)
NIEHS Personnel Office
P.O. Box 12233
Research Triangle Park, N.C. 27709

Protein Biochemistry Associate Senior Investigator

The Protein Biochemistry Department of Smith Kline & French Laboratories, located in suburban Philadelphia, PA, is seeking an outstanding individual to fill a challenging Associate Senior Investigator position.

The successful candidate will:

- contribute to the direction of research in protein purification/characterization and the development of large scale purification processes.
- apply existing techniques to, or develop new methodologies for the isolation, characterization and assay of proteins.
- collaborate with other scientists in overall scientific efforts.
- train and supervise laboratory personnel.
- prepare scientific reports for oral presentation and publication in scientific journals.

Candidates are required to have:

- Ph.D. in Chemical or Biological Sciences with 2 or more years of relevant postdoctoral experience in the purification and characterization of biologically active proteins.
- Maintain familiarity of relevant literature and thorough knowledge of protein biochemistry.
- demonstrated scientific achievement as shown by publication in reputable scientific journals.
- excellent verbal and written communication skills.
- ability to interact in an interdisciplinary manner.
- experience in large scale protein isolation and cGMP's.

We offer an excellent compensation and benefits package as well as an attractive relocation policy. For confidential consideration, send your C.V. and names of three references to Robert F. Obst, Manager, Personnel Relations, Smith Kline & French Laboratories, Research and Development Division, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.


A SmithKline Beckman Company

Visiting Cardiovascular Scientist

A postdoctoral Visiting Scientist position is available within the Medical Products Department at Du Pont's Experimental Station in Wilmington, Delaware. The successful candidate will conduct basic research on the renin-angiotensin system, angiotensin II receptor. Candidates should have a strong background in cardiovascular, renal and/or molecular pharmacology. The appointment will be for one year, renewable for a second year upon mutual agreement.

At the world renowned Du Pont Company, you'll find a highly stimulating, multidisciplinary research environment in addition to an excellent salary. To be considered, please send your resume, bibliography, and references to: Dr. Pieter B.M.W.M. Timmermans, Division of Cardiovascular Science, Experimental Station, E400/4257, Du Pont Company, Wilmington, Delaware 19898.



An Equal Opportunity Employer
U.S. Citizenship Required

POSITIONS OPEN

FACULTY POSITION— MEDICINAL CHEMISTRY

A tenure-track position at the assistant/associate professor level is open in the Division of Medicinal Chemistry and Pharmacognosy. Research interests including but not limited to biotechnology, molecular immunology or molecular oncology will be considered. The selected candidate will be expected to develop a vigorous research program and participate in undergraduate and graduate training. Send résumé and names of three references to: **Dr. G. A. Digenis, College of Pharmacy, University of Kentucky, Lexington, KY 40536-0082. The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.**

GENETICIST

A one academic-year, nontenure-track position is available for a geneticist with excellent instructional skills to teach a state-of-the-art course in general genetics (two offerings, fall and spring) as well as a graduate/upper-division course in the successful candidate's field of expertise. Specific subdiscipline of genetics is open, rank and salary negotiable; Ph.D. preferred. The individual occupying this position will be eligible to apply for a tenure-track opening in genetics for the 1989 to 1990 academic year. Please send a statement of interest, curriculum vitae and three letters of reference by 10 June 1988 to: **Dr. Peter L. Starkweather, Chair, Department of Biological Sciences, University of Nevada (UNLV), Las Vegas, NV 89154. UNLV is an Equal Opportunity/Affirmative Action Employer.**

GEOCHEMISTRY

Scripps Institution of Oceanography of the University of California at San Diego (UCSD) invites applications for one or more **FACULTY POSITIONS** in the geochemistry of the ocean, of the solid earth, and of the atmosphere. The level and salary will depend upon the qualifications of the candidate and be based on UC pay scale. Assistant professor level candidates will be expected to show evidence of their potential through a publication record appropriate for their experience and letters of recommendation; associate and full professor level candidates must show evidence of a strong research record. Candidates must hold the Ph.D. degree, or be advanced to candidacy, and have demonstrated excellence in their specialization of research. Please send a letter of application, curriculum vitae including teaching experience, and names of five references to: **Chairman-K, A-008, Scripps Institution of Oceanography, UCSD, La Jolla, CA 92093, before 1 July 1988. An Equal Opportunity/Affirmative Action Employer, and not a bad place to live.**

IMMUNOGENETICIST/IMMUNOCHEMIST OR CELLULAR/DEVELOPMENTAL IMMUNOLOGIST. The University Department of Microbiology and Immunology at the University of Arizona invites applications for a full time, tenure track faculty position in immunology. Applicants must have a Ph.D. or equivalent degree and have demonstrated extensive research expertise in molecular immunology as evidenced by publications and competitive grant support. The candidate will be expected to develop a strong research program, supervise graduate students, and teach immunology to graduate, medical and undergraduate students. Rank and salary commensurate with qualifications. Submit curriculum vitae and three letters of recommendation to: **Dr. George Olson, Department of Microbiology and Immunology, Building #90, University of Arizona, Tucson AZ 85721.** Applications will be reviewed beginning 1 June 1988 but the position will be open until filled. *The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer.*

IMMUNOLOGIST-VIROLOGIST—The Stephen F. Austin State University Biology Department invites applications for a tenure-track position of assistant professor. A Ph.D. is required with substantial training in biochemistry. Duties include teaching immunology, virology, introductory biochemistry, and introductory biology; research and publication will be expected. Salary commensurate with training and experience. Duties begin in August and closing date for application is 15 June 1988. Send curriculum vitae and have three letters of recommendation sent to: **W. V. Robertson, Search Committee Chairman, Box 13003 SFA, Nacogdoches, TX 75962. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

INVERTEBRATE ZOOLOGY DUKE UNIVERSITY MARINE LABORATORY

Duke University seeks an **INVERTEBRATE ZOOLOGIST** for a tenure-track appointment as assistant professor in zoology with residence at the Duke University Marine Laboratory. The specific research area is open though we are especially interested in candidates who have an outstanding research record with estuarine/coastal systems and in zooplankton biology or in chemical ecology. Teaching will include undergraduate and graduate courses. Applications should include curriculum vitae, statement of research and teaching interests, and names and addresses of three references to be submitted by 15 July 1988 to: **Invertebrate Search, Duke University Marine Laboratory, Beaufort, NC 28516.**

Duke University is an Equal Opportunity/Affirmative Action Employer

SCRIPPS INSTITUTION OF OCEANOGRAPHY/MARINE BIOLOGY

Applications are invited for one or more **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR** (tenure-track/tenured) positions; rank, level and salary will be commensurate with qualifications and experience, based on University of California pay scale. Research areas of interest are: (i) biomechanics of marine organisms, (ii) evolutionary studies of marine organisms using the techniques of molecular biology, and (iii) marine botany, especially biochemical, molecular or physiological aspects. Candidates will be expected to conduct an active research program supported by extramural funds and to be involved in graduate teaching and the supervision of graduate students. Applicants must hold a Ph.D. degree, or be advanced to candidacy, in an appropriate field and have demonstrated excellence and independence in research. Associate or full professorial level candidates must show evidence of a strong research record; assistant level candidates will be expected to show evidence of their potential through publication record appropriate for their experience and letters of recommendation. Send letter of application including description of research interests, list of publications, résumé of teaching experience and names of at least five references to: **Chairman (MB), Graduate Department, A-008, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA 92093.** Closing date for applications is 1 July 1988. *An Equal Opportunity/Affirmative Action Employer.*

MEDICAL RESEARCH ASSISTANT PROFESSOR—Nontenure-track teaching and research appointment in a laboratory investigating catecholamine neuronal plasticity and catecholamine receptors in vivo and in vitro using biochemical and morphological approaches. Preference will be given to applicants with a minimum of 3 years of postdoctoral experience in EM, immunocytochemistry, basic biochemical techniques, and cell culture. M.D. or Ph.D. in cell biology, biochemistry, pharmacology, or medicine. Salary based on experience. Please send curriculum vitae to: **Dr. James N. Davis, Box 2900, Duke University Medical Center, Durham, NC 27710.** If not a US citizen, please indicate visa status. *Affirmative Action/Equal Opportunity.*

MICROBIOLOGIST-GENETICIST. The Biology Department, Missouri Southern State College, invites applications for a tenure-track position with teaching responsibilities to include microbiology, medical microbiology, pathologic microbiology, genetics, general biology, virology, and immunology. Ph.D. preferred with a strong commitment to undergraduate teaching and research. Cell and molecular emphasis is desirable. Application deadline is 15 June 1988.

Send a letter of application, curriculum vitae, and three letters of reference to:

**Dr. Ray A. Malzahn, Dean
School of Arts and Sciences
Missouri Southern State College
Joplin, MO 64801-1595**

Missouri Southern State College is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

METEOROLOGIST, GS-1340-13 or STATISTICIAN (PHYSICAL SCIENCE), GS-1530-13. Salary: \$39,501. Department of Commerce, Air Resources Laboratory, Meteorology Division, Research Triangle Park, North Carolina. Selective factor: Climate change evaluation and interpretation. Primary objective will be the evaluation, interpretation, and/or application of mathematical models and statistical data to define and predict the impact on regional and global climate of increasing trace gases in the atmosphere. Meteorologist: A college degree in meteorology is required plus 3 years of professional experience of which 1 year is equivalent to GS-12 level of work. Statistician (physical science): A college degree which included 15 semester hours in statistics and 9 hours in one of the physical science or equivalent is required plus 8 years of related experience of which 1 year is equivalent to GS-12 level of work. Graduate work may be substituted for experience. For information on applying, call: **Patricia Parrott at 804-441-6880. An Equal Employment Opportunity Employer.**

MICROSURGICAL RESEARCH ASSOCIATE—D.D.S. or M.D. degree with a minimum of 1 year of training in orthodontics. Applicant must be technically capable of fabricating dental models and acrylic splints for use in orthognathic surgery and performing microsurgical procedures. Applicant must have a working knowledge of laboratory animal anatomy and physiology and a working vocabulary of terms related to plastic and reconstructive surgery. The supervision of one to three technicians, graduate students, and the residents in related research projects is required. Full-time, 40 hours per week. 9:00 a.m. to 5:00 p.m. Monday through Friday. Salary \$22,500 per year. Send résumé to: **Case #8470 Division of Employment Security, Charles F. Hurley Employment Security Building, Government Center, Boston, MA 02114. An Equal Opportunity/Affirmative Action Employer.**

MOLECULAR CELL BIOLOGIST/IMMUNOLOGIST THE UNIVERSITY OF CHICAGO THE BEN MAY INSTITUTE AND THE DEPARTMENT OF PATHOLOGY

The Ben May Institute and the Department of Pathology of the University of Chicago are seeking applicants for at least two junior faculty positions. We are committed to developing strong programs in the molecular aspects of the control of cell growth and differentiation. We are seeking outstanding individuals who are using the approaches of molecular biology or cell physiology to examine basic mechanisms of cell signaling events or regulation of gene expression. Existing related research programs in the Ben May Institute and the Department of Pathology include molecular and genetic aspects of receptor signalling mechanisms involving steroid hormone receptors, growth factor receptors, and T lymphocyte activation and regulation. Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Letters of application including curriculum vitae, bibliography, a brief statement indicating research interests, and the names of three references should be sent to: **Dr. Frank Fitch, Director, Ben May Institute, The University of Chicago, Box 424, 5841 South Maryland Avenue, Chicago, IL 60637.**

MOLECULAR CYTOGENETICIST

The Coriell Institute for Medical Research invites applications, nominations, and inquiries for a position in molecular cytogenetics. Responsibilities include directing a cytogenetic laboratory conducting confirmatory karyotype analyses of cultures received by the Human Genetic Mutant Cell Repository using state-of-the-art chromosome banding techniques including in situ hybridization for gene localization. Additional funds are available to develop an independent research program. A joint medical school faculty appointment is available. Newly constructed laboratory space and technical assistance will be provided. Salary commensurate with qualifications. Please send curriculum vitae and names of three references to: **Dr. Gerard McGarrity, President, Coriell Institute for Medical Research, Copewood Street, Camden, NJ 08103. Affirmative Action/Equal Employment Opportunity.**

Food and Drug Administration
CHEMISTS INTERESTED IN
REVIEWING CLINICAL RESEARCH

FDA seeks a chemist with knowledge of peptide and protein chemistry and molecular cloning, for an opening on multidisciplinary scientific teams involved in safety and efficacy review of new human drugs. This includes review chemistry, manufacturing processes, and quality controls of new human drugs, including recombinant DNA products.

Full-Time civil service position is available in the Washington D.C., metropolitan area. Salary \$33,218 - \$51,354 per year pending qualifications.

Send detailed resume or curriculum vitae with bibliography to:

HEALTH AND HUMAN SERVICES
Public Health Service
Food and Drug Administration
Division of Human Resources
Management, Room 4B-44
5600 Fishers Lanes
Rockville, MD 20857
ATTN: Joyce Conerly

An Equal Opportunity Employer

Commission in the U.S. Public Health Service, and commensurate pay scale, may also be possible.

Maryland Biotechnology Institute
Center for Agricultural Biotechnology
and Department of Animal Sciences

MOLECULAR/CELL BIOLOGIST
UNIVERSITY OF MARYLAND, COLLEGE PARK

The Center for Agricultural Biotechnology and the Dept. of Animal Sciences, University of Maryland, College Park, invite applications and nominations for a tenure track position at any rank commensurate with experience. The Center is a component part of the newly initiated Maryland Biotechnology Institute. The appointee will hold a position in the Center and a joint appointment with laboratory facilities in the Dept. of Animal Sciences. The Department has 21 faculty and offers B.S., M.S. and Ph.D. degrees. Mammary gland biology is a major area of department research activity. An outstanding individual with credentials and interests in Regulation of Gene Expression during Animal Growth and Development and related aspects of molecular biology is particularly sought. The successful candidate will be expected to develop a vigorous, independent extramurally-funded research program, direct research in one of the several graduate programs in life sciences and participate in the teaching program of the Department. Minimum qualifications for the position are a doctorate in Molecular/Cell Biology or a related area and clear evidence of excellence as demonstrated by publication record. Postdoctoral experience is preferred. Candidates for appointment at a higher rank must currently have an ongoing, externally-funded research program and an established record of productivity and sustained creativity as shown by grant support and research accomplishments. Generous start-up and supplemental funds from various intramural programs are available. Ample opportunities are available for collaboration with molecular/cell biologists at the N.I.H. and the Beltsville Agricultural Research Center, U.S.D.A. in close proximity to the College Park campus. Applications and nominations including Curriculum Vitae, brief statements of research accomplishments and a proposed research program, pertinent reprints and names and addresses of three references, should be sent by July 1, 1988 to:

Dr. Ian H. Mather, Chairman,
Molecular Biology Search Committee
c/o Center for Agricultural Biotechnology
H. J. Patterson Hall
University of Maryland
College Park, Maryland 20742, U.S.A.

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

Post Doctoral
Training In
Molecular And
Cell Biology

Post doctoral fellowships are available for training in various areas of cancer research including cell differentiation, chemical carcinogenesis, retroviruses, membrane biochemistry, genetics and immunology. The Wistar Institute, the oldest independent biomedical research facility in the nation, is located on the University of Pennsylvania campus in Philadelphia. Wistar is organized as a community of laboratories, uniting investigators whose broad research objectives are concerned with defining cellular and molecular characteristics and function in healthy and diseased organisms. Wistar is equipped with the latest scientific technologies - DNA and peptide syntheses, flow cytometry and hybridoma facilities.

Strong background in molecular biology, virology, biomedical genetics, molecular immunology and/or protein chemistry is required. Applicants are requested to send curriculum vitae and the names of three references to **Dr. Giovanni Rovera, Coordinator of Research Training, THE WISTAR INSTITUTE, 36th & Spruce Streets, Philadelphia, PA 19104.** Equal opportunity employer, M/F.

THE
WISTAR
INSTITUTE



Ph.D.
RESEARCH SCIENTIST
RESPIRATORY PHARMACOLOGIST

As a result of the recent merger of American Home Products Corporation's two pharmaceutical divisions, Wyeth Laboratories and Ayerst Laboratories, we are now one of the largest pharmaceutical companies in the world. WYETH-AYERST RESEARCH has an immediate opening for a Respiratory Pharmacologist in the Immunopharmacology Department at its expanding research facility located in the Princeton, New Jersey area.

The candidate we seek will establish in vivo models of pulmonary function assessment for utilization in the study of mechanisms of hyper-reactivity, bronchoconstriction, and chronic inflammatory diseases of the lung. Extensive knowledge and experience in the use of in vivo methodology for the assessment of pulmonary function will be considered an asset.

A Ph.D. in Pharmacology or Physiology with a minimum of 2 years experience is required. Candidates should possess highly developed oral and written communication skills and a strong publication record in major scientific journals.

We offer an excellent salary and benefits package plus opportunities for career advancement along with an ultra-modern research facility. Interested candidates please submit resume and salary requirements to:

PERSONNEL MANAGER, DEPT. DG



WYETH-AYERST
RESEARCH

CN 8000
Princeton, NJ 08543-8000

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POSITIONS OPEN

MOLECULAR GRAPHICS— DRUG DESIGN

A position is available in September 1988 for a **SCIENTIST/PROGRAMMER** to join a group of protein x-ray crystallographers (**Don Wiley and Stephen Harrison**), organic chemists (**Jeremy Knowles and George Whitesides**) and a theoretical chemist (**Martin Karplus**) in a project aimed to develop the structural basis for the design of antiviral drugs. Candidates should have postdoctoral experiences in molecular graphics, x-ray crystallography or theoretical chemistry. Opportunities include systems management responsibility for a Stellar Graphics Supercomputer (or equivalent), implementing and developing molecular graphics software with real-time energy calculations, and working with synthetic chemists and crystallographers to develop design strategies. We are looking for a highly motivated individual who wants to develop a central role in an emerging scientific field.

Please send résumé and two references to:

Don C. Wiley
Department of Biochemistry and Molecular Biology
Harvard University
7 Divinity Avenue
Cambridge, MA 02138
BITNET Address: WILEY @ HUXTAL.

UNIVERSITY OF ALABAMA AT BIRMINGHAM DEPARTMENT OF NEUROLOGY NEUROIMMUNOLOGIST

The Department of Neurology invites applications at the level of research assistant professor (non-tenure-track) beginning 1 July 1988. Candidates should hold an M.D. or Ph.D. and have at least 2 years of postgraduate research experience. Candidates are expected to establish a research program in an area of neuroimmunology. Applications are especially sought from individuals with research interests in demyelinating diseases or proteolysis. Submit curriculum vitae, description of research interests and names of three references by 20 June 1988 to: **John N. Whitaker, M.D., Chairman, Department of Neurology, University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294.**

An Equal Opportunity/Affirmative Action Employer.

NUTRITION SCIENTIST—HUMAN NUTRITION—The U.S. Department of Agriculture, Cooperative State Research Service, is seeking an individual with recognized credentials to serve as a staff expert in the area of human nutrition, biochemistry, and food science research. This is a full-time permanent position providing leadership and direction to nationwide and international research programs and projects. Salary: \$46,679 to \$60,683 based on experience and salary history. Full Federal benefits package. For further information call: **Wayne Winker at 202-475-4811.** Send SF-171 form and course listing to: **USDA, ES, PMSD, Room 3547-S, 14th and Independence Avenue S.W., Washington, DC 20250-0900.** Reference announcement 332-A. Applications must be postmarked by 6 June 1988. *USDA is an Equal Opportunity Employer.*

PEPTIDE CHEMIST/ MOLECULAR NEUROBIOLOGIST

A faculty position is available at the assistant professor level for a Ph.D. with training and expertise in peptide chemistry, tissue culture and molecular neurobiology to join a developing program in neuroendocrine peptide biology and physiology. A track record of research accomplishment and possession of laboratory management skills essential. Send application, including curriculum vitae and names of three references by 5 July 1988 to: **Ivor Jackson, M.D., Director, Division of Endocrinology, Brown University, Rhode Island Hospital, Providence, RI 02903.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW. Position available summer 1988 for an NIH-funded project to elucidate functions of the steroid hormone 1,25-dihydroxyvitamin D in new targets. Tissues/cells emphasized are heart, testis, and lung. Prior experience in biochemical endocrinology, tissue culture, and/or intracellular calcium homeostasis would be helpful. Send curriculum vitae and three letters of recommendation to: **Marian R. Walters, Ph.D., Department of Physiology, Tulane Medical School, New Orleans, LA 70112.**

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE position(s) available in a neuroscience laboratory which studies neurotransmitter release due to pain and analgesia, especially with respect to substance P and excitatory amino acids. Experience doing HPLC, receptor binding or in vivo microdialysis is desirable. Ph.D. in biological sciences required. Positions available to start between 15 June 1988 and 15 June 1989. Send curriculum vitae as soon as possible and/or before 15 May 1989 to: **Alice A. Larson, Ph.D., Department of Veterinary Biology, University of Minnesota, 1988 Fitch Avenue, St. Paul, MN 55108.** *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

POSTDOCTORAL FELLOW to work on the molecular biology of activation genes in Type I diabetes. Previous experience in immunology and recombinant DNA techniques required. Apply to: **George Eisenbarth, M.D., Ph.D., Chief Immunology Section, Research Division, Joselyn Diabetes Center, One Joselyn Place, Boston, MA 02215.** *An Equal Opportunity Employer.*

POSTDOCTORAL FELLOW to participate in studies on the mechanism of action of mitochondrial ATPase (F_1) in oxidative phosphorylation. The program will include studies on the enzyme from beef heart mitochondria and site-directed mutagenesis of the enzyme from yeast mitochondria. Appointment available 15 September 1988. Contact:

Dr. Harvey S. Penefsky
Department of Biochemistry and Molecular Biology
SUNY Health Science Center
766 Irving Avenue
Syracuse, NY 13210
*An Affirmative Action/
Equal Employment Opportunity Employer.*

POSTDOCTORAL FELLOW

Becton Dickinson Immunocytometry Systems, a leader in the development of instruments and reagents for cellular analysis, has positions open immediately for postdoctoral level scientists to work in areas of autoimmunity for AIDS. Applications are invited from individuals with strong record of research in the areas of immunology, protein chemistry, or molecular biology.

The positions involve multidisciplinary approaches to study the cellular and molecular mechanisms of autoimmunity and to develop new approaches to the characterization of HIV immunity in AIDS.

These positions offer excellent opportunities for professional recognition and career growth in basic biomedical research. Becton Dickinson Monoclonal Center is a rapidly growing biotechnology company located in the San Francisco Bay area supporting a strong basic research group with focused efforts in the areas of T cell differentiation, NK cell function, hematopoiesis, molecular immunology, and autoimmunity.

Becton Dickinson offers a competitive salary and an excellent benefits package. For immediate consideration, please send your résumé and salary history to: **Manager, Human Resources, Becton Dickinson Immunocytometry Systems, 2375 Garcia Avenue, Mountain View, CA 94043.** *An Equal Opportunity Employer.*

BECTON DICKINSON

POSTDOCTORAL FELLOWSHIP available for studies on the molecular basis of cell differentiation. Limited to those with recent doctorate. Prefer background in molecular biology. Send curriculum vitae and letters of reference to:

Frank E. Stockdale, M.D., Ph.D.
Stanford School of Medicine, M211
Stanford, CA 94305-5306

POSTDOCTORAL FELLOWSHIP IN ENDOCRINOLOGY—Available 1 July 1988. Two to 3-year appointment to study thyroid hormone regulation of cell growth in tissue culture systems. Candidates with a Ph.D. degree interested in applying contemporary techniques of molecular biology, ligand-receptor interactions and protein purification should submit their curriculum vitae, reprints, and names of three references to: **Martin I. Surks, M.D., Montefiore Medical Center, 111 East 210th Street, Bronx, NY 10467.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP IN NEUROPHYSIOLOGY/NEUROPHARMACOLOGY to study effects of acute and chronic ethanol at defined sites within the CNS. Experience with extracellular electrophysiology and pressure ejection is desirable. Funding is through an NIAAA training grant. Stipend: \$16,000 to \$26,000. Send curriculum vitae and names and addresses of references to: **Larry P. Gonzalez, Ph.D., University of Oklahoma Health Sciences Center, Research Building, 306-R, P.O. Box 26901, Oklahoma City, OK 73190.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Division of Pediatric Hematology, University of Pennsylvania School of Medicine. To study disorders of globin gene expression in humans and structure/function relationships of hemoglobin using recombinant DNA techniques. Prior experience required in gene cloning, DNA sequence analysis, or site-directed mutagenesis. Send curriculum vitae with names and telephone numbers of three references to: **Saul Surrey, Ph.D., Division of Hematology, The Children's Hospital of Philadelphia, 34th Street and Civic Center Boulevard, Philadelphia, PA 19104.** *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available to study the alteration of lipid biosynthesis and metabolism in transgenic plants. The project includes gene isolation, vector construction, plant transformation, regeneration, and analysis. Send curriculum vitae and three letters of reference to: **Dr. D. Hildebrand, Department of Agronomy, University of Kentucky, Lexington, KY 40546-0091.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. A position is available for a rapidly expanding NIH-supported program to study the structure and function of the human immune deficiency virus (HIV) genome, and to investigate the effects of HIV infection on cellular gene expression. Applicants should have a Ph.D. or M.D. degree and a strong background in virology and molecular biology. Position will include an appointment at the College of Physicians and Surgeons of Columbia University. Send curriculum vitae and list of references to: **D. J. Volsky, Ph.D., Molecular Virology Laboratory, St. Luke's/Roosevelt Hospital Center, 432 West 58th Street, New York, NY 10019.**

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study cell cycle specific RNA synthesis or the effects of chromosome structure on transcriptional regulation in yeast. Salary at NIH level. Experience in recombinant DNA methods and/or yeast molecular genetics preferred. Send curriculum vitae and names of three references to:

Dr. Michael Grunstein
Molecular Biology Institute
University of California
Los Angeles, CA 90024
An Equal Opportunity Employer

COLORADO STATE UNIVERSITY DEPARTMENT OF PATHOLOGY

POSTDOCTORAL POSITION for the study of virological and immunological aspects of the pathogenesis of lentivirus infections in sheep. The candidate must have a D.V.M. and/or Ph.D. in a related biomedical discipline, and previous laboratory experience in pathology, virology or immunology. Stipend level is \$18,000 to \$20,000 per year. Please send curriculum vitae, college transcripts, statement of career goals and objectives, and three letters of reference to: **Dr. James C. De Martini, Department of Pathology, Colorado State University, Fort Collins, CO 80523.** Application deadline is 15 June 1988, this deadline may be extended. *Colorado State University is an Equal Opportunity and Affirmative Action Employer.*

POSTDOCTORAL POSITION: To study regulation of human pituitary glycoprotein hormone gene expression. Experience in molecular biology necessary. Highly interactive laboratory, affiliated with Harvard Medical School. Send curriculum vitae and three letters of recommendation to: **Anne Klibanski, M.D., Thyroid Laboratory, Department of Medicine, Massachusetts General Hospital, Boston, MA 02114.** *An Affirmative Action/Equal Opportunity Employer.*

ANTICIPATED ASSISTANT PROFESSOR Environmental Planning and Management

The Institute for Environmental Studies is seeking exceptional candidates to apply for a tenure track faculty position in the area of environmental planning and management at the assistant Professor level. It is anticipated that the successful applicant will focus his/her research efforts in appropriate aspects of the relatively broad field of natural resource management and land use planning as well as management through the use of computer based geographic information systems (GIS) or other data acquisition and manipulation approaches. Resource management is intended to include data acquisition, creation of data bases, manipulation of the data to derive management principles and information to support the development of regulations and permits, and the design of implementation strategies and policy analysis. Implementation of environmental management procedures should involve the development of recommended environmental regulations and permit strategies.

Areas of related interest and expertise could include impact assessment, landscape ecology, regional planning, systems modeling or other systems approaches to management, flood plain and water resource management, residuals management (air and water quality), applications of remote sensing, hazardous waste management, and developing an interface to facilitate the application of sound scientific knowledge during governmental formulation of environmental policy and management strategies. The successful applicant will be expected to develop coordinated and supported research programs within the Institute and contacts with other university departments and state environmental regulatory agencies.

The position will involve both graduate and undergraduate teaching in the general area of environmental planning and management. Additional duties will include daily interaction with students at all levels, designing and implementing new courses as interest and need develop, and maintaining a familiarity with new developments in the field.

Interested applicants should send a brief statement of professional interest, vitae and three letters of reference to **Dr. E. B. Overton, Rm. 42, Atkinson Hall, Louisiana State University, Baton Rouge, LA 70803, telephone (504)388-8521.**

LSU is an Equal Opportunity Employer.

Scientist Drug Metabolism

Smith Kline & French Laboratories, a leader in pharmaceutical research, is seeking an experienced scientist with a background in pharmacology or toxicology for its drug metabolism unit located in suburban Philadelphia.

The successful candidate will:

- develop methods for characterizing the metabolism of research compounds using isolated hepatocytes from various species.
- generate models for extrapolation of the *in vitro* data to predict metabolic pathways and activities *in vivo*.
- prepare internal reports of experimental results and publish data in the scientific literature.

Candidates are required to have:

- Ph.D. in Pharmacology, Toxicology or a closely related field. Two to three years of postdoctoral experience is preferred.
- knowledge of pharmacokinetic theory and methodology (highly desirable).
- scientific and research accomplishment evidenced by a strong publication record in quality journals.
- excellent communication (written and verbal) and interpersonal skills.

We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. For confidential review, please forward your C.V. and names of three references to: **Marianne J. Shandy, Manager, Personnel Relations-J0007, Smith Kline & French Laboratories, Research & Development, P.O. Box 1539, King of Prussia, PA 19406-0939.** We are an Equal Opportunity Employer, M/F/H/V.

SK&F
A SmithKline Beckman Company

Merck Sharp & Dohme Research Laboratories is currently offering several excellent career opportunities for Molecular Biologists/Cell Biologists to join the expanding Department of Cellular and Molecular Biology. Research in this department is applied to the analysis and expression of genes of potential pharmaceutical interest.

MOLECULAR BIOLOGISTS

Responsibilities for these positions will include the utilization of a broad spectrum of techniques, including construction of cDNA and genomic DNA libraries, DNA/RNA preparation, blot analyses, DNA sequencing, plasmid vector construction, and transfection and culturing of microbial and mammalian cells.

An M.S. or B.S. degree in Biochemistry, Molecular Biology, or the equivalent with at least 2 years of broad and significant experience in molecular biology is required.

CELL BIOLOGIST

Responsibilities for this position will include maintenance, characterization and analysis of mammalian and invertebrate cultured cell lines, serum-free media development, scale-up culture, and cell and media harvesting and processing. In addition, molecular biological procedures, such as DNA/RNA preparation, plasmid vector construction, DNA transfection, and transient and stable gene expression analysis will be performed.

An M.S. or B.S. degree in Cell Biology, Biochemistry, or the equivalent, with at least 2 years of significant experience in mammalian cell culture is required. Experience in molecular biological techniques is a plus.

Excellent salary and benefits programs accompany these positions at our modern research buildings in West Point, Pennsylvania and Rahway, New Jersey.

Please send your resume, three professional references who we may contact, and salary requirements in complete confidence to:

If interested in RAHWAY, NJ (Molecular Biologist and Cell Biologist positions) respond to the address below:

**Mr. Jacques P. Kueny
Merck Sharp & Dohme Research Laboratories
Research Personnel (R80MTL1)
P.O. Box 2000, Rahway, NJ 07065**

If interested in WEST POINT, PA (Molecular Biologist position only) respond to the address below:

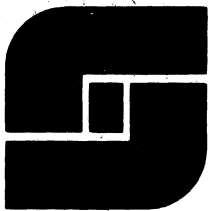
**Mr. Jacques P. Kueny
Merck Sharp & Dohme Research Laboratories
Research Personnel (W42-2)
West Point, PA 19486**

Merck Sharp & Dohme Research Laboratories

EEO/AA/VH Employer



MERCK & CO., INC.



VIROLOGISTS

Southern Research Institute has immediate positions available for two Ph.D. virologists to participate in expanded research programs in antiviral drug development for government and industry. Positions require a Ph.D. in virology or other appropriate field with specialization in virology. Preference will be given to candidates with training or experience in retrovirology, especially with human immunodeficiency virus (HIV), or in work with exotic RNA viruses.

Research involves evaluation and development of new drugs for use in treatment of AIDS and other viral diseases. Some work will be conducted in a BL-3 containment facility.

Responsibilities include work on current and anticipated research contracts and grants, supervision of junior staff members, the writing of research proposals and reports; and collaboration with other scientists in the conception, development, and performance of virus-related research programs. Opportunity available to publish and present papers at scientific meetings.

Located in a 20-acre complex with a staff of approximately 700, Southern Research Institute is a diversified, not-for-profit research organization in its fifth decade of operation. The metropolitan Birmingham area, with a population of approximately one million, offers a mild four-season climate, lower-than-average cost of living, many recreational and cultural opportunities, and a variety of convenient and attractive housing alternatives. To apply, send c.v. to **James G. Kerr, Personnel Office, Dept. 288, SOUTHERN RESEARCH INSTITUTE, P.O. Box 55305, Birmingham, AL 35255.**

An Affirmative Action/Equal Opportunity Employer

Research Scientist Immunology & Cell Biology

G.D. Searle Research & Development is seeking a research scientist interested in joining the Cell Biology Section headed by John McKearn in its Molecular and Cell Biology Department. Applicants must have a doctorate degree; postdoctoral experience is preferred.

Qualified candidates must possess cellular immunology and molecular genetic expertise in at least one of the following areas: regulation of the immune system with interleukins and cytokines, cell-cell interactions involved in lymphoid and hematopoietic development and/or autoimmune disorders, antigen processing and presentation. Candidates must have a record of publication demonstrating ability to undertake independent and creative research in Immunology and Cell Biology. Send curriculum vitae to: **Joan M. Lineberry-UW807Z; Personnel Office; G.D. SEARLE & COMPANY; c/o Monsanto Company-BB4E; 700 Chesterfield Village Parkway; St. Louis, MO 63198.** An Equal Opportunity Employer.

SEARLE

Research Scientists in Transgenic Science

Smith Kline & French Laboratories, a leader in Pharmaceutical Research, is developing a new research program whose primary purpose will be the production of transgenic animals. Research efforts are underway on the production of probes for the identification of specific characteristics in animals. Topics of interest include animal models for human and animal diseases, immunology, molecular genetics and cell biology.

Career opportunities exist in the following positions:

Associate Senior Investigator

Requirements include a Ph.D. or equivalent degree from a recognized university with evidence of research experience in a biological science. Candidates should be experienced in techniques for gene insertion in vertebrate eggs and embryos, methods for screening offspring for incorporation and expression of the gene vectors, and recombinant DNA techniques. Refer to Position J0004

Associate Scientist/Scientist

Requirements include a BS or MS degree in a biological science with 1-5 years lab experience including experience in necrosurgical techniques. A knowledge of basic immunology, genetics and molecular biology is highly desirable. Candidates should be familiar with computer systems in a research environment and should have experience with the handling and breeding of mice. Refer to Position V0037.

Smith Kline & French Laboratories is located in suburban Philadelphia, near Valley Forge, PA. We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. For confidential review, please forward your C.V. and names of three references to: **Marianne J. Shandy, Manager, Personnel Relations, Smith Kline & French Laboratories, Research & Development, P.O. Box 1539, King of Prussia, PA 19406-0939.** We are an Equal Opportunity Employer, M/F/H/V.

SK&F
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LAB AND WE WILL DO THE REST.

WRITE TO:

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

Coors BioTech, Inc.

RESEARCH SCIENTISTS

Coors BioTech, Inc., is currently seeking qualified scientists to work as key members of a multidisciplinary effort to develop fermentation processes for the production of specialty chemicals and nutritional supplements. Both positions require a Ph.D degree, and a minimum of 3-5 years of relevant industrial experience.

Microbial Geneticist: Demonstrated skills in working with multi-enzyme biosynthetic pathways for the overproduction of metabolites are required. Experience with recombinant DNA technology is required, as well as familiarity with more traditional methods of strain improvement.

Microbial Physiologist: Successful candidate will have experience in studying and optimizing fermentation processes from shake flask through laboratory fermenters. Must have experience in screening and evaluating organisms isolated for superior production of pharmaceuticals or other metabolites. Preference will be given to those individuals having experience with more than one species of microorganism. Scale up experience to pilot fermenters is desirable, but not necessary.

Coors BioTech, Inc., a biotechnology company with research facilities in Fort Collins, Colorado offers an excellent compensation and benefits package, as well as opportunities for personal and professional growth. Fort Collins is an attractive university community convenient to the outstanding recreational opportunities found in Colorado.

Send your resume, along with salary history to:

**Personnel/
Coors BioTech, Inc.
6204 South College Ave.
Fort Collins, CO 80625**

An Equal Opportunity Employer M/F/H/V

PhD Research Pharmacologist

A **PhD** level position is available within our Medical Products Department for a specialist with a strong central nervous system pharmacology background and skilled in behavioral pharmacological techniques. The position requires a flexible individual whose responsibilities will include work with non-human primates and rodents with an emphasis on cognitive performance and antipsychotic pharmacological research.

You'll find a highly stimulating scientific environment in a modern research facility near Wilmington, DE. We provide excellent compensation and benefits including relocation. Wilmington's Mid-Atlantic location offers an attractive lifestyle with easy access to affordable housing and a wide range of academic, cultural and recreational activities. Interested candidates should send their resumes and references to: Professional Staffing, Employee Relations Department, Room X-51162, Du Pont Company, Wilmington, DE 19898.



*An Equal Opportunity Employer M/F/H/V
U.S. Citizenship Required*

Geneticist/Molecular Geneticist

Research Institute — University Appointment

The Addiction Research Foundation, an Agency of the Province of Ontario and its teaching hospital affiliated with the University of Toronto are seeking a Geneticist/Molecular Geneticist. The incumbent will have a Ph.D., M.D., or V.M.D., with training in genetics/molecular genetics and knowledge of recent techniques in molecular biology. The incumbent will be responsible for research in the area of Genetic Predisposition to Alcoholism. This is a permanent track position. It is expected that the incumbent will have credentials for an appointment at the Assistant or Associate Professor level and will devote 10-20% of his/her time in academic duties at the University.

Research and technical support will be available during the first three years, after which it is expected that significant contribution will be obtained from granting agencies.

Please forward your curriculum vitae to: **Ms. J. Kussner, Manager, Employee Relations & Recruitment, Personnel Department, Addiction Research Foundation, 33 Russell Street, Toronto, Ontario, M5S 2S1.**

Addiction Research
Foundation



POSITIONS OPEN

POSTDOCTORAL POSITION DEVELOPMENTAL NEUROBIOLOGY

To study mechanisms of axonal guidance and pathway formation by spinal cord interneurons in the chick embryo using both in vivo and in vitro preparations. Experience in electron microscopy, immunocytochemistry and neuroanatomical tracing methods required. Send curriculum vitae and three letters of reference to: **Ronald W. Oppenheim, Department of Anatomy, Wake Forest University, Bowman Gray School of Medicine, Winston-Salem, NC 27103. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION HUMAN MOLECULAR GENETICS

A position is available to study the molecular genetics of human diseases associated with defective mitochondrial energy metabolism. Applicant should have research experience in molecular biology and/or genetics. Send curriculum vitae and names and addresses of three references to: **Dr. Neil Howell, Division of Research, Department of Radiation Therapy, The University of Texas Medical Branch (UTMB), Galveston, TX 77550.**

UTMB is an Equal Opportunity M/F/H/V Affirmative Action Employer. UTMB hires only individuals authorized to work in the United States.

POSTDOCTORAL POSITION IN CYSTIC FIBROSIS RESEARCH available fall 1988 to join a team at Children's Hospital of Philadelphia to examine the role of endogenous peptides in the ion permeability of airway epithelia. Applicants should have a background in electrophysiology, preferably patch clamping. Send curriculum vitae and names of three references to: **Dr. Michael White, Departments of Pharmacology and Pediatrics, University of Pennsylvania, Philadelphia, PA 19104-6084.**

POSTDOCTORAL POSITION: INOSITOL CYCLE

Postdoctoral position to study the effects of psychotropic drugs and seizures on the inositol lipid cycle. A background in lipid neurochemistry, HPLC techniques desirable. Salary range from \$20,000 to \$28,000. Send curriculum vitae, research interests and two references to: **Dr. R. E. Vадnal, Department of Psychiatry, University of Tennessee, Memphis, 66 North Pauline, Memphis, TN 38163. The University of Tennessee is an Equal Opportunity Employer/Affirmative Action/Title IX/Section 504 Employer.**

POSTDOCTORAL POSITION IN SPEECH RESEARCH

The Research Department of Central Institute for the Deaf (CID) seeks a postdoctoral research scientist to study the acoustic correlates of speech sounds in a well-equipped computerized laboratory. This position is part of a continuing project and includes studies of various categories of speech sounds, including those of other languages. A knowledge of and/or interest in several of the following areas is desirable: phonetics, signal processing and mathematics, simple quantitative modeling, and/or perceptual experimentation. This is an annual position to start on or after 1 July 1988 and will be renewable for approximately 3 years. Applicants should promptly submit résumés, a statement of research interests, and the names and addresses of four references to: **Dr. James D. Miller, Central Institute for the Deaf, 818 South Euclid Avenue, St. Louis, MO 63110. CID is an Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS

Available 1 July 1988. Research on protein targeting to peroxisomes in yeast. Recent Ph.D. in biochemistry or closely related area. Expertise in organelle isolation, working with membrane proteins, electrophoresis, transformation, cloning, and sequencing desirable. Competitive stipend with full benefits. Send curriculum vitae and arrange to have two letters of recommendation sent directly to: **Dr. Edward Bellion, Department of Chemistry, The University of Texas at Arlington, Arlington, TX 76019. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

Experimental and theoretical **POSTDOCTORAL POSITIONS** in nonlinear dynamics: Applications in membrane transport, excitable media, fluid dynamics, and electrochemical processes. Theoreticians who apply should have experience with either ordinary or partial nonlinear differential equations, chaos, bifurcation theory, and/or stochastic processes. Starting date, which can be delayed for exceptional applicants, is 1 July 1988. Send curriculum vitae and two letters of reference to: **Dr. Mark Schell, Department of Chemistry, Southern Methodist University, Dallas, TX 75275.**

POSTDOCTORAL POSITIONS are available from 1 July 1988 in two areas of molecular virology research: (i) Molecular biology of human immunodeficiency virus (HIV) and immune response in AIDS patients to different regions of HIV proteins, (ii) Molecular biology of human herpes virus-6 (HHV-6) and its interactions with HIV. Funds include competitive stipends as well as travel to meetings and training workshops, and are available from The Wesley Foundation of Wichita, Kansas. Experience in recombinant DNA, cDNA cloning, expression systems and/or immunochemistry are desirable. Send curriculum vitae and names of two references to: **Dr. C. Wood (HIV), Department of Microbiology, University of Kansas, Lawrence, KS 66045; Dr. Bala Chandran (HHV-6), Department of Microbiology, University of Kansas Medical Center, Kansas City, KS, 66103. University of Kansas is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS CORNELL UNIVERSITY

Two openings to study cell differentiation, triggered by substrate topography, in the plant pathogen *Uromyces* [Science 235, 1659 (1987)]. (i) Role of fungal membrane potentials, ionic currents and stretch-activated channels in signaling process. Involves LM, image processing, and electrophysiology; (ii) Characterization of post-transcriptionally expressed cell differentiation proteins induced thigmotropically. Involves protein purification, Mab developed via neonatal tolerization, LM immunocytology. Send curriculum vitae, three letters, and transcripts to: **H. C. Hoch, Department of Plant Pathology, New York State Agricultural Experiment Station, Geneva, NY 14456. Telephone: 315-787-2332. Cornell University is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS MOLECULAR NEUROBIOLOGY

Postdoctoral positions will be available in my laboratory beginning summer/fall 1988, to investigate two aspects of synapse formation: (i) the role of postsynaptic membrane proteins associated with the acetylcholine receptor, and (ii) the molecular structure, regulation, and distribution of voltage-sensitive calcium channels in muscle and neurons. These studies currently involve the use of membrane biochemistry, immunology, and recombinant DNA technology; expertise in one or more of these areas is desirable.

For more information, please send curriculum vitae and names of three references to: **Dr. Stanley C. Froehner, Department of Biochemistry, Dartmouth Medical School, Hanover, NH 03756.**

POSTDOCTORAL POSITIONS—TOXICOLOGY AND BIOCHEMISTRY—Two positions are available to conduct independent research to: (i) Systematically define the biochemical reactions controlling the chemical form, distribution, and biological lifetimes of neurotoxins and link them to quantitative pharmacodynamics; and (ii) Investigate the cellular and subcellular biochemical and physiological mechanisms responsible for the toxicity of chemicals. Research will be performed in the Toxic Hazards Division, Armstrong Aerospace Medical Research Laboratory, Dayton, Ohio. For further information contact: **Ralph Crow, Jr., Program Manager, AF HSD Scholarly Research Program, Operational Technologies Corporation, 5825 Callaghan Road, Suite 225, San Antonio, TX 78228. Telephone: 512-684-0000.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN IMMUNOLOGY are available in an expanding Division of Rheumatology and Clinical Immunology at the University of Maryland School of Medicine. Faculty research areas include (i) autoimmunity and murine models of diabetes mellitus and systemic lupus erythematosus (**Barry Handwerger, M.D.**); (ii) murine autoreactive T cells and fibroblast abnormalities in scleroderma (**Barbara Needleman, M.D.**); (iii) antigen-specific recognition and activation of murine T cells (**Barbara Fox, Ph.D.**); (iv) murine models of graft vs. host disease (**Charles Via, M.D.**). Please send curriculum vitae and the names of three references to: **Dr. Barry S. Handwerger, University of Maryland School of Medicine, MSTF 8-34, 10 South Pine Street, Baltimore, MD 21201.**

POSTDOCTORAL POSITIONS MOLECULAR AND CELL BIOLOGY

Tumor Cell Biology Department has several funded postdoctoral positions available for investigators interested in studying signal transduction by the CSF-1 receptor (*c-fms* proto-oncogene) and its oncogene-coded (*v-fms*) counterpart. Current topics of research include: identification of "activating" mutations in the *c-fms* and *v-fms* transduction into target cells of different lineages, and biochemistry of oncogene- and receptor-mediated signal transduction. Ongoing studies emphasize interdisciplinary molecular, cell biological, and biochemical approaches, with a focus on hematopoietic systems. Previous experience in molecular and cell biology and/or biochemistry is preferred, and general familiarity with oncogenes, growth factors, and their receptors would be desirable. Minimum stipend: \$22,000 per annum plus fringe benefits. Send curriculum vitae, brief statement of research interest, and names of three references to: **Dr. Charles J. Sherr, Department of Tumor Cell Biology, St. Jude Children's Research Hospital, Memphis, TN 38104. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS (TWO)

Interested in joining a successful research team in an established cardiovascular research laboratory to study structure/function relationships of plasma apolipoproteins. For the first position, candidates should have experience in site-directed mutagenesis and bacterial expression of proteins; for second position, experience in protein isolation and physical-biochemical characterization of proteins. Send curriculum vitae and names of three references to: **Dr. Karl H. Weisgraber, Gladstone Foundation Laboratories for Cardiovascular Disease, University of California at San Francisco, P.O. Box 40608, San Francisco, CA 94140-0608.**

POSTDOCTORAL RESEARCH ASSOCIATE BIOMEDICAL ENGINEERING LABORATORY RICE UNIVERSITY

There is a postdoctoral research position open in the Biomedical Engineering Laboratory of Rice University. The Biomedical Engineering Laboratory is a well-established research facility for the purpose of promoting interdisciplinary research involving personnel of Rice University and those of the Texas Medical Center. The laboratory has excellent equipment—including a variety of modern biorheological equipment—and has an experienced staff in addition to a number of predoctoral students and postdoctoral research associates.

Candidates should have training in engineering, biophysics, physiology, or related fields and have an interest in the microcirculation. The opening is in an established research program on oxygen transport in the microcirculation. The research involves use of an in vitro artificial capillary system for studying oxygen transport processes under controlled, measured conditions.

The stipend will be \$20,000 to \$25,000 annually, depending on qualifications. *Rice University is an Affirmative Action/Equal Opportunity Employer.*

Interested parties should write or call:

**J. D. Hellums
Dean of Engineering
Rice University
P.O. Box 1892
Houston, TX 77251
Telephone: 713-527-4009**



Agricultural
Research
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US Department of Agriculture
Plum Island Animal Disease Center
Molecular Biology Laboratory

RESEARCH ASSOCIATES—MOLECULAR BIOLOGY

Three postdoctoral RESEARCH ASSOCIATE appointments are immediately available in a multi-disciplinary group studying foot-and-mouth disease (FMD) including basic viral molecular/biological properties and new molecular approaches to detection, characterization, and control. The research group operates on a fully funded research program in laboratories providing the latest equipment. The areas of research are:

- Role of FMDV proteins in shut-off at host protein synthesis. Experience in recombinant DNA techniques is required and knowledge of either expression systems &/or protein purification is desired. Contact Dr. M. Grubman. Applications must be marked 8N012.
- Identification of macromolecules in the FMDV cellular receptor site. Requires expertise in monoclonal antibody technology; experience in membrane biochemistry is desirable. Contact Dr. B. Baxt. Applications must be marked 8N013.
- Molecular basis for variation of FMDV antigenicity, host range, and biochemical properties. Requires experience in molecular cloning and nucleotide sequencing. Knowledge of immunology and virology technique is desirable. Contact Dr. D. Moore. Applications must be marked 8N014.

Appointments are for up to two years and are funded at \$27,716 to \$33,218 depending on qualifications. Candidates must have obtained a relevant PhD within the last three years. Applicants should send a Curriculum vitae and the names and addresses of three references to: **USDA-ARS-NAA, Plum Island Animal Disease Center, PO Box 848, Greenport, NY 11944. For information call (516) 323-2500. Applications must be received by June 30, 1988.**

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MAMMALIAN CELL BIOLOGIST

The successful candidate will have a recent Ph.D. in cell biology or related discipline and experience in immunology. The successful candidate will have experience in handling multiple cell lines and associated analytical techniques.

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

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Department M-2
P.O. Box 1655
Midland, MI 48641-1655



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The mission of NeoRx Corporation is to develop, manufacture, and market injectable pharmaceutical products for the detection and treatment of cancer.

CLINICAL RESEARCH. Applicant will design, implement, and interpret the laboratory component of clinical trials. Position requirements include Ph.D. in Immunology or related field, experience in clinically oriented research, and a commitment to team effort.

IMMUNOLOGIC ASSESSMENT. Applicant will oversee the development of immunoassays and various biochemical tests to assist product development. Job requirements include Ph.D. in Immunology, Biochemistry or related field, experience in immunoassay development, and a commitment to team effort.

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B. H. Walters
Director Human Resources
NeoRx Corporation
410 W. Harrison Street
Seattle, WA 98119
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POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE positions to begin September 1988 and renewable for 2 years, to study the mechanism of action of tumor necrosis factor. Applicants must have a Ph.D. and experience in cell biology, biochemistry or molecular biology. Minimum salary \$20,000. Send curriculum vitae, reprints of publications, and names of three references to: **Dr. Corrado Baglioni, Department of Biological Sciences, State University of New York at Albany, Albany, NY 12222.** *Affirmative Action/Equal Opportunity Employer. Applications from women, minority persons, handicapped persons and special disabled or Vietnam era veterans are especially welcome.*

POSTDOCTORAL RESEARCH ASSOCIATE available August 1988. Recent Ph.D. in biochemistry or related field. For studies to determine the mechanism of resistance to platinum anticancer agents, with emphasis on the formation and repair of platinum-DNA adducts. Experience with recombinant DNA techniques preferred. Send curriculum vitae with description of research background and names and addresses of three references to: **Dr. Stephen Chaney, Department of Biochemistry, CB# 7260, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7260.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE. A postdoctoral position is available for the production, isolation, and characterization of new siderophores from aerobic microorganisms, as well as the purification of the membrane receptor proteins involved in the transport of siderophores. Experience with microbial techniques, plasmids, NMR, MS, chromatography and labeling is preferred. Salary range is from \$18,000 to \$22,000. Send curriculum vitae and names of three references to: **Dr. D. van der Helm, Department of Chemistry, The University of Oklahoma, Norman, OK 73019.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE position available to work on the cloning of the cDNAs of human DNA polymerase delta and its associated replication proteins. Applicants with prior experience in recombinant DNA techniques and enzyme purification preferred. Competitive salary. Send curriculum vitae and names of three references to: **Dr. M. Y. W. T. Lee, Department of Medicine (R57), University of Miami, School of Medicine, P.O. Box 016960, Miami, FL 33101.**

POSTDOCTORAL RESEARCH FELLOWS

Two positions available 1 July 1988. One for the characterization of lymphoid protein subsets associated with malignancy, and the other for the detection of mutations in lymphoid cells resulting from exposure to radiation or chemotherapeutic agents. *The University of Michigan is an Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae to: **Dr. Sam M. Hanash, University of Michigan Medical School, Department of Pediatrics, R4451 Kresge I, Box 0510, Ann Arbor, MI 48109-0510.**

PROFESSOR AND HEAD, DEPARTMENT OF MICROBIOLOGY

The Department of Microbiology, The University of Georgia invites applications for a headship position in this expanding department. The candidate should have an exceptional record of research, a commitment to undergraduate and graduate education, and outstanding leadership and administrative abilities. Consideration will be given to applicants having research interests in any area of microbiology or closely related disciplines. The deadline for receipt of applications is 1 September 1988 with the goal of filling the position by 1 July 1989. The University is prepared to negotiate with the candidate to make an attractive and competitive offer. Send curriculum vitae and a list of at least four references to: **Microbiology Department Head Search Committee, Dr. Leonard Mortenson, Biological Sciences, The University of Georgia, Athens, GA 30602.** *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE REPRODUCTIVE ENDOCRINOLOGY

Seeking a postdoctoral research associate (100% research) to investigate molecular heterogeneity of luteinizing hormone as related to control of gonadal function. Requires Ph.D. in physiology, biochemistry, animal science, or endocrinology. Forward detailed résumé plus three letters of reference by 1 June 1988 to: **Dr. Edward Grotjan, Department of Animal Science, University of Nebraska-Lincoln, Lincoln, NE 68583-0908.** *Affirmative Action/Equal Opportunity Employer.*

PROFESSOR OF GEOPHYSICS—The Department of the Scripps Institution of Oceanography at the University of California, San Diego (UCSD), is accepting applications for assistant, associate, or full professorial positions (tenure track/tenured) in order to lead a program in geodynamics or earthquake seismology. Candidates must possess a Ph.D. degree, or be advanced to candidacy, in geophysics or another branch of the earth sciences. Successful candidates should have a broad range of expertise including one or more of the following: plate tectonics, seismology, the study of crustal and lithosphere deformation using satellite methods, the geoid, and the gravity field of the earth. An interest in seagoing experimentation will be considered an advantage. The position(s) will involve graduate and undergraduate teaching and the supervision of graduate student research. Associate or full professorial level candidates must show evidence of a strong research record in their specialization; assistant level candidates will be expected to show evidence of their potential through a publication record appropriate for their experience and letters of recommendation. The appointment(s) is planned to begin 1 January 1989, and the rank/level and salary will be commensurate with qualifications and experience based on UC pay scale. Applications (including names of five persons who can be contacted as references and résumé of teaching experience) should be submitted to: **Chairman-G, Department of the Scripps Institution of Oceanography, A-008, UCSD, La Jolla, CA 92093.** Applications received after 1 July 1988 may not be considered. *An Equal Opportunity/Affirmative Action Employer.*

Senior/Principal Scientist

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If you want to diversify your research capabilities contributing to the development of drug delivery systems for proteins and related new drug entities, Schering-Plough has the challenges to enhance your expertise. We are fast taking the lead in research and development of protein pharmaceuticals, creating exceptional opportunity for a Ph.D. Scientist within our Parenteral Products Formulation R&D group.

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As a \$2.7-billion leader in the pharmaceutical and health care products industry, we offer a commensurate salary and attractive benefits package. Qualified candidates should forward their resume to: Ms. I. Brenneman, Schering-Plough Corporation, Box HK, 2000 Galloping Hill Road, Kenilworth, NJ 07033. We are an equal opportunity employer.



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BIOCHEMIST B.S./M.S.

Merck Sharp & Dohme Research Laboratories has an immediate opening for a scientist to join our growing atherosclerosis program. The selected candidate will be involved in basic research activities in the area of growth factors and growth factor receptors.

A B.S. or M.S. in Biology or Chemistry or the equivalent is required with 2-3 years of relevant experience in molecular biology/biochemistry. A broad background in molecular biology, gene expression, protein chemistry and/or monoclonal antibodies is desirable.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia.

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Manager Department of Chemical Safety

Yale University is currently seeking a Manager for the Department of Chemical Safety. The Department of Chemical Safety is responsible for surveillance of all laboratory research activities involving the use of chemical agents and all additional problem areas within the confines of the university.

Primary duties of the Manager will include implementation of policy, the articulation of overall chemical safety objectives and the direction of the personnel of the Department, review and inspection of facilities and experiments using hazardous chemicals; training of university personnel; chemical waste disposal; and assuring compliance with all Federal, state and local laws. Emphasis will be on development and implementation of the Hazard Communication program and SARA Title III.

The successful candidate will possess an advanced degree in industrial hygiene, chemistry, chemical engineering or toxicology with extensive laboratory experience. Familiarity with government regulations concerning hazardous waste and personal initiative are also necessary.

Liberal fringe benefit program includes 1 month vacation, 13 holiday/recess days, comprehensive group health and life insurance, pension plan and tuition assistance.

Forward resume, salary history and requirements to: C. Parler, Yale University Department of Human Resources, 155 Whitney Ave., P.O. Box 1404, Yale Station, New Haven, CT 06520-1404.

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Yale University

Staff Scientist

The Health Effects Institute (HEI) is an independent, non-profit organization that sponsors and evaluates biomedical research on the health effects of automotive pollutants. It is jointly funded by the United States Environmental Protection Agency, and the domestic and foreign automotive industry. Studies funded by HEI are subject to a rigorous peer-review process before publication as HEI Research Reports.

HEI has an immediate opening for a Staff Scientist who will work with the Institute's Director for Scientific Review and Evaluation. The candidate will direct and manage the review process, and interact with HEI investigators, other experts in the field, and the HEI Review Committee which is composed of highly distinguished scientists. The candidate will also write and prepare the Institute's reports, which contain a scientific evaluation of HEI-sponsored studies, and put the work into scientific and public policy contexts.

The applicant must have demonstrated ability to write well and to communicate scientific information in a simple and comprehensive fashion. Familiarity with the scientific peer-review system is also desirable. Applicants should have a background in toxicology, physiology, environmental health sciences, or cell biology.

HEI offers a competitive salary and an excellent benefits package. **Please send a curriculum vitae, names and addresses of three references, and recent writing samples to: Dr. Rashid Shaikh, Director for Scientific Review and Evaluation, Health Effects Institute, 215 First Street, Cambridge, MA 02142.** An affirmative action/equal opportunity employer.

HEI

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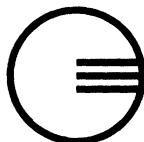
Science

GROUP LEADER

Gillette Research Institute, a Division of The Gillette Company, seeks to fill an opening for an innovative and enthusiastic senior scientist to lead a group in applied research related to personal care product opportunities. The successful candidate will possess the ability to employ a multidisciplinary approach to the research. Disciplines including biochemistry (particularly lipids and proteins), physiology, cell biology, microbiology, spectrometry, and microscopy will all bear on the research and the applicant should at least be familiar enough with them to effectively interact with co-workers actively involved in these disciplines.

Ph.D. in biochemistry, biology, chemistry, or a related field is required. The position also requires at least five years experience in research and/or teaching; R & D experience in an industrial laboratory would be an advantage. The applicant must possess excellent oral and written presentation skills, as well as demonstrated technical expertise.

Gillette Research Institute is located in a new facility, near Washington, DC, in an area rich in Government, private, and academic scientific laboratories. Please send your resume, in confidence, to:



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RESEARCH INVESTIGATOR GENETIC TOXICOLOGIST

This position will be responsible for designing and directing experiments in mammalian cytogenetics as well as the overall conduct of preclinical safety assessment studies within our Genetic Toxicology Group. You should be a recent Ph.D. (or highly experienced M.S.) with extensive research experience in mammalian cytogenetics. Disciplines considered include genetics, cell biology or toxicology, though cytogenetics or genetic toxicology would be ideal. 1-2 years post-doctoral research experience in mammalian cytogenetics is preferred.

We offer a stimulating and rewarding environment with growth and challenge, excellent salary and benefits, relocation assistance and much more. Please submit curriculum vitae to: **G.D. Searle & Co., Dept DW15, 4901 Searle Pkwy., Skokie, IL 60077.** Equal Opportunity Employer.

SEARLE

POSITIONS OPEN

PROTEIN BIOCHEMIST

The Jackson Laboratory in Bar Harbor, Maine is in the process of setting up a protein analysis facility. The successful candidate for the position of protein biochemist will assist in the purchase of equipment and will oversee its operation by a small technical staff. A Ph.D. in protein biochemistry is preferred. The position will involve interaction with molecular biologists, geneticists, cell biologists, and biochemists in the application of modern protein analysis techniques to ongoing research projects. Salary is competitive and fringe benefits are liberal. Familiarity with the following is required:

- Amino acid analysis
- Protein sequencing
- HPLC
- Peptide synthesis

Send completed applications (letter of interest, curriculum vitae, and three letters of reference) to: Mr. Harold Wheeler, Personnel Office, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609. The closing date for receipt of applications is 15 June 1988.

The Jackson Laboratory is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE \$20,000 per year; 8:00 a.m. to 4:30 p.m.; 40 hours per week. Synthesize heterocyclic organic compounds having high quantum fluorescence yields to be tested as laser dyes. Use hypervalent iodine chemistry for structural modifications. Use appropriate instruments such as NMR, UV, IR, MS spectrometers and chromatographic techniques. The candidate must have a Ph.D. in chemistry, research experience in synthetic organic chemistry supported by publications, and a good academic record.

Contact: Louisiana Office of Employment Security, Job Order 656445 617 St. Charles Avenue, New Orleans, LA 70130.

UNIVERSITY OF CONNECTICUT HEALTH CENTER RESEARCH ASSOCIATE/ POSTDOCTORAL FELLOW

This position involves the development of acoustical and electrical measurements to be used for evaluation of the functional state of the peripheral and central components of the auditory system. The research will be conducted in both laboratory and clinical settings. The position provides an excellent opportunity for strengthening skills in computer applications and knowledge of the auditory system. Qualifications: Doctoral degree. Applicants should send curriculum vitae and letters of recommendation to: Dr. D. O. Kim, Director of Research, Division of Otolaryngology, University of Connecticut Health Center, Farmington, CT 06032. Telephone: 203-679-3690. *An Affirmative Action/Equal Opportunity Employer M/F/H/V.*

Michael Reese Hospital and Medical Center in affiliation with the University of Chicago has the following **RESEARCH POSITIONS** available:

RESEARCH ASSISTANT (OR ASSOCIATE)—IMMUNOLOGY. Study of immune responses to *Toxoplasma gondii* with unicellular organism, mice, rabbits and human lymphocytes and monocytes; tissue culture and cellular immunology techniques; ELISAs, IFAs, Sabin Feldman dye tests; monoclonal antibody production; cDNAs, HPLC; affinity columns.

RESEARCH TECHNICIAN—CARDIOLOGY. Studies include cell and tissue culture, RNA/DNA extraction and Northern/Southern assays. Position also entails the use of spectrophotometers, HPLC and electrophoretic apparatus.

RESEARCH ASSISTANT—GASTROENTEROLOGY. Study of electrolyte transport in the large intestine with biochemical techniques and be capable to work under minimal supervision. Familiarity with lab animals, radioisotopes, and computer analysis is preferred.

All positions require a B.S. or M.S. degree in a science discipline with one or more years of research experience with normal laboratory routine. Research assistant/associate position requires a Ph.D. Qualified candidates please send résumé indicating position of interest to: Dennis Lee, Human Resources, Michael Reese Hospital and Medical Center, Lake Shore Drive at 31st Street, Chicago, IL 60616. *Equal Opportunity Employer M/F.*

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR

Applications are invited from candidates interested in joining an interdisciplinary research group investigating various aspects of mitochondrial biology. Research focus will be on (i) the control of mitochondrial movement in cells, and (ii) the diffusion and collisional interactions of inner membrane proteins related to electron transport and ATP-synthesis. Methodological approaches include membrane and cytoskeletal biochemistry, fluorescence recovery after photobleaching, resonance energy transfer, fluorescence UV/VIS spectroscopies, nanometer particle video microscopy, multiparameter digitized video microscopy, and freeze fracture electron microscopy. Support technicians and computer facilities provided. Salary competitive with research faculty levels. Ph.D. and good record of research publications required. Send applications, including curriculum vitae and the names of three references to: Dr. C. R. Hackenbrock, Laboratories for Cell Biology, Department of Cell Biology and Anatomy, University of North Carolina at Chapel Hill, School of Medicine, CB#7090, 108 Swing Building, Chapel Hill, NC 27599-7090 by 30 June 1988. *An Equal Opportunity/Affirmative Action Employer.*

RESEARCH OPPORTUNITIES at the National Center for Toxicological Research (NCTR)—Opportunities for faculty and postgraduate to conduct collaborative research at NCTR, a Food and Drug Administration laboratory in central Arkansas. Research efforts focus on testing the assumption used in assessing risks posed by toxic chemicals emphasizing studies in biomarkers, modulators of toxicity, and extrapolation/risk assessment. *U.S. citizenship or PRA status required.* For more information contact: ORAU Research Program at NCTR, University Programs Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-3190. Please indicate if interested in faculty and/or postgraduate program.



California Institute of Biological Research

RESEARCH PROGRAM DIRECTORS

California Institute of Biological Research (CIBR), a non-profit institute, has recently been established with financial support from Stratagene in La Jolla, CA. The institute is in a beautiful, coastal location in close proximity to the Salk Institute, Research Institute of Scripps Clinic, Medical Biology Institute, La Jolla Cancer Research Center and the University of California, San Diego. CIBR will consist of laboratories with research interests in eukaryotic gene regulation, oncogenes, cellular and molecular transformation, control of immune responses, molecular biology of differentiation, and mammalian development. CIBR research programs are funded by extramural granting agencies and aided by significant core supplementation. Its research laboratory directors may also serve as consultants to Stratagene with the opportunity to engage in collaborative projects. Investigators with appropriate research interests are encouraged to apply.

Send curriculum vitae to: Personnel, California Institute of Biological Research, 11099 North Torrey Pines Road, La Jolla, CA 92037.

RESEARCH SCIENTIST—Ph.D. (chemistry, biochemistry or pharmacology) sought to organize and operate the biochemical and pharmacological laboratory of the Department of Anesthesiology. Highly collaborative individual needed with good supervisory skills. Knowledge of and experience with assays for muscle relaxants, narcotics, hormones (especially catecholamines), substrates and nitrogen balance. Experience with HPLC, TLC, GC, and RIA. Candidate's area of research and publications would be in pharmacokinetics, pharmacodynamics or muscle relaxants and narcotics, substrates and hormonal responses to surgical stress and related areas. Apply with curriculum vitae to: Dr. Richard Matteo, Department of Anesthesiology, Columbia University College of Physicians and Surgeons, P & S Box 46, New York, NY 10032.

POSITIONS OPEN

THE UNIVERSITY OF WESTERN AUSTRALIA PERTH

SENIOR LECTURER (tenurable) (ref: A21/88) Department of Anatomy and Human Biology. The department has strong teaching and research commitments in the Faculties of Science and Medicine. Extensive research, both basic and applied is being undertaken in such areas of human biology as evolution, genetics, variation and ecology; comparative and functional anatomy including biomechanics and morphometrics; reproduction, development, growth and aging; histology and cell biology and growth, plasticity and regeneration in the nervous system. Techniques available include light and electron microscopy, stereology, computer modeling and data analysis of various types.

Applications are invited from persons with academic qualifications and teaching and research experience in one or more of the above general fields. The major staffing need of the Department at this time is in human (primate) evolution, functional anatomy and morphometrics, but applications in all areas will be considered. Duties will include research development and supervision, and coordination of courses, lecturing, laboratory and tutorial teaching. For further details please contact: The Head of Department, Professor C.E. Oxnard on (09) 380 3298.

Salary range: A\$38,216 to A\$44,403 per annum. Closing date: 8 June 1988.

Benefits include superannuation, fares to Perth for appointee and dependent family, removal allowance, study leave, leave, and long service leave.

Written applications quoting reference number, telephone number, qualifications and experience, names and addresses of three referees should reach The Manager, Appointments and Payroll Section, The University of Western Australia, Nedlands 6009 by the closing date. *Equal Employment Opportunity is University Policy.*

TECHNICAL DIRECTOR— RESEARCH SERVICES

The Winship Cancer Center of Emory University School of Medicine is recruiting a scientist with a Master's or Ph.D. degree who could serve as Technical Director of the core shared facilities of the Winship Cancer Center. The individual will be responsible for all administrative, budgetary, personnel and professional activities of the technical staff who are involved in support of core facilities consisting of microchemistry, clinical immunology, tissue culture, animal resource facility, and other core activities of the Center. The individual must have had experience in cancer research and, in particular, the application of research technologies to coordinate cooperative research resource support. The individual sought should also have a capability to assist in the development of proposals for support of core research activities. The position is that of instructor, research-track, at a salary of \$22,000 to \$28,000, depending on experience. Send curriculum vitae and references to: Kenneth W. Sell, M.D., Ph.D., Professor and Chairman, Winship Cancer Center, 701 Woodruff Memorial Building, Emory University School of Medicine, Atlanta, GA 30322. *Emory University is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.*

TECHNICAL EDITOR MATERIALS RESEARCH SOCIETY

The Materials Research Society, headquartered in Pittsburgh, seeks a creative and assertive leader to serve as editor of a rapidly growing monthly magazine serving materials research professionals. Responsibilities include establishing issue themes, acquiring and evaluating technical overview articles, writing and directing the rewriting of articles, and soliciting and evaluating news from government, industry, and education. Master's degree in a technical field relevant to materials science and engineering required and knowledge of current developments in one or more major materials research areas desirable. Well-organized individual sought with strong writing and editing skills and prior experience in writing and editing for publications serving the technical community. Salary and benefits commensurate with experience. Send résumé, samples of writing, names of two references, and relevant salary history to: Chairman of Technical Editor Search Committee, Materials Research Society, 9800 McKnight Road, Suite 327, Pittsburgh, PA 15237.

ENZYMOLOGIST

The Department of Enzymology of Merck Sharp and Dohme Research Laboratories has an opening at the level of Senior Research Biochemist. Candidates will have a Ph.D. in chemistry or biochemistry and no less than two years post-doctoral experience in enzymology. Experience in enzyme kinetics and purification and a firm understanding of mechanisms of enzyme catalysis and inhibition are a must.

The successful candidate will work in a multi-disciplinary atmosphere and develop a research program aimed at the inhibition of enzymes that play a pathogenic role in human disease.

Merck Sharp and Dohme Research Laboratories is located in Rahway, New Jersey, approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. Please send resume with salary history to **Ms. Jacqueline A. Eiermann, P.O. Box 2000, Rahway, New Jersey 07065.**

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Staff Fellowship in Cell Biology—Experimental Morphology

The Laboratory of Neurosciences, National Institute on Aging, National Institutes of Health (NIH), invites application for a Staff or Senior Staff Fellowship position to study the structure of peripheral nerve and brain, with particular reference to the blood-nerve and blood-brain barriers; as well as cell surface properties determining morphogenesis in the nervous system. The successful candidate should be competent in light microscopy and electron microscopy, with demonstrated experience in freeze-fracturing, rapid freezing and scanning techniques, as well as techniques of tritiated autoradiography, enzyme histochemistry, immunocytochemistry and possibly in situ hybridization.

Applications are invited from qualified individuals having a Ph.D., M.D., or both, with experience in cell biology and morphology of the nervous system. Salary range is \$20,000 to \$43,452 commensurate with qualifications. Interested candidates should submit a Curriculum Vitae and a statement of research interests, as well as three letters of recommendation, to Stanley I. Rapoport, M.D., Chief, Laboratory of Neurosciences, National Institute on Aging, NIH, Bldg. 10, Rm. 6C-103, 9000 Rockville Pike, Bethesda, Maryland 20892.

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Immunologist/ Immunochemist

Research Institute — University Appointment

The Addiction Research Foundation, an Agency of the Province of Ontario, and its teaching hospital affiliated with the University of Toronto are seeking an immunologist/immunochemist. The incumbent will have a Ph.D., M.D., or V.M.D. with training in immunology/immunochemistry, and good knowledge of recent techniques in these fields. The incumbent will be responsible for research in Immunology of Alcoholism and Drug Abuse. This is a permanent track position. It is expected that the incumbent will have credentials for an appointment at the Assistant or Associate Professor level at the University of Toronto and will devote 10-20% of his/her time in academic duties at the University.

Research and technical support will be available during the first three years of this position, after which it is expected that a significant contribution will be obtained from granting agencies.

Please forward your curriculum vitae to: **Ms. J. Kussner, Manager, Employee Relations & Recruitment, Personnel Department, Addiction Research Foundation, 33 Russell Street, Toronto, Ontario, M5S 2S1.**

Addiction Research
Foundation



POSITIONS OPEN

TECTONICS/SCRIPPS INSTITUTION OF OCEANOGRAPHY

Applications are invited for one or more **TENURED OR TENURE-TRACK FACULTY POSITIONS** in tectonics. Applicants must hold the Ph.D. degree, or be advanced to candidacy, and will be expected to conduct a vigorous research program in the general field of tectonics. Areas of interest are not restricted to but include such diverse subjects as kinematic reconstructions, lithospheric deformation, processes at plate boundaries and rock mechanics. Ocean-related experience and/or interests, while not a condition of candidacy, will be considered in the selection process. Teaching and supervision of graduate research will be an integral part of the responsibilities of the successful candidate. The level of appointment and salary will be commensurate with the qualifications and experience based on University of California pay scale. Associate or full professorial level candidates must show evidence of a strong research record; assistant level candidates will be expected to show evidence of their potential through a publication record appropriate for their experience and letters of recommendation. Send letter of application including a description of research interests, list of publications, statement of teaching interests and experience and names of at least five references to: **Chair (TEC), Graduate Department, A-008, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA 92093.** Closing date for applications is 1 July 1988. *UCSD is an Equal Opportunity/Affirmative Action Employer.*

TEMPORARY ASSISTANT PROFESSOR MARINE FINFISH ECOLOGY/COMMERCIAL FISHERIES. Candidates with additional interest and expertise in invertebrate fisheries preferred. Successful candidate will teach courses in commercial fisheries, marine fish ecology, mariculture and others as appropriate. Ph.D. required, teaching experience at the university level preferred. Applicants should submit a curriculum vitae (including reprints), transcripts of academic work, and three letters of reference to: **Dr. Richard L. Ridenhour, Dean, College of Natural Resources, Humboldt State University, Arcata, CA 95521.** Telephone: 707-826-3561. Closing date is 16 July 1988. *Humboldt State University is an Equal Opportunity/Affirmative Action Title IX Employer.*

UROLOGY FACULTY POSITION

The Department of Urology, Tulane University School of Medicine in New Orleans is seeking an individual with research interests in reproductive biology. The candidate should have training in all aspects of clinical andrology (computerized semen analysis, immunologic studies and hormonal assays). A Ph.D. scientist is needed with an interest in reproductive biology and immunology. The candidate should be prepared to participate in resident teaching, assist in research projects, and should be capable of interdigitating research efforts with clinical faculty, as well as working independently on related basic projects.

Send curriculum vitae and bibliography to:

Wayne J. G. Hellstrom, M.D.
Department of Urology
Tulane University School of Medicine
1430 Tulane Avenue
New Orleans, LA 70112
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GRANTS



The American Health Assistance Foundation is accepting 1-year **GRANT** applications for Alzheimer's disease research with a maximum of \$100,000 renewable. Deadline: 30 October 1988. For further information, please write to:

American Health Assistance Foundation
Alice E. Massa
15825 Shady Grove Road, Suite 140
Rockville, MD 20850

CONFERENCES

MOLECULAR BIOLOGY AND PATHOLOGY Copper Mountain, Colorado 24 to 29 July 1988

Teaching and research conference on advanced techniques and recent progress on the molecular basis of cystic fibrosis, lymphomas, leukemias, hereditary neurologic disorders, and the pathogenesis of HIV, and other viral, bacterial, and parasitic agents. Participant fee (\$585) includes housing, meals, course materials, and monograph. Adult guests (\$260) may accompany participants. Registration, CME, program, and air travel discount information available from: **M. Marsh, Conference Coordinator, 9650 Rockville Pike, Bethesda, MD 20814.** Telephone: 301-530-7093.

REQUEST FOR STATEMENTS OF QUALIFICATIONS

CITY OF NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUEST FOR STATEMENTS OF QUALIFICATIONS

Engineering/scientific consulting firms are hereby invited to submit statements of qualifications to provide environmental engineering and science consulting services for an analysis of volatile organic compound (VOC) emissions from the New York City wastewater collection and treatment system.

The type of work to be performed may include, but not be limited to, the following:

- oversight of water/air quality monitoring
- development and refinement of generic predictive model(s)
- determination of fate of VOCs across wastewater collection/treatment system
- estimate and evaluation of health effects
- identification and evaluation of control measures

Seven copies of the statements of qualification, comprising a financial statement, a preliminary project organization chart, a statement of intent to propose, and Federal Forms 254 and 255, must be delivered no later than 4:00 p.m. on 10 June 1988 to: **Mr. Martin T. Pai, P.E., Project Engineer, Water Quality Section, New Administration Building Room 213, New York City Department of Environmental Protection, Wards Island, NY 10035.** Telephone: 212-860-9378.

The qualification of the applicants will be evaluated on criteria including, but not limited to: financial capability, contract experience with government agencies for similar services, staff levels, and qualification and experience by project disciplines.

The City, at its sole discretion, may reject any or all of the submissions of qualifications. Firms whose qualifications are considered by the City to be appropriate and most suited for this project, will be invited to submit proposals for the performance of the work.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP MOLECULAR BIOLOGY. Position available 1 July 1988 to study the genetics and molecular biology of bacterial DNA topoisomerases (**Dr. Depew**) or to study human papilloma virus and herpes virus cell interactions. Research in this area includes construction of expression vectors and protein-DNA interactions (**Dr. DeLucia**). Indicate area of research preference and send résumé and three letters of reference to: **Dr. John Docherty, Department of Microbiology/Immunology, Northeastern Ohio Universities College of Medicine, Rootstown, OH 44272.**

POSTDOCTORAL/FELLOWSHIP POSITION available July 1988 in cellular immunology with specific application to studies on bone marrow transplantation and adoptive immunotherapy of cancer. Opportunity to work in basic research laboratory that actively interacts with clinical program. Experience in biological therapeutics or molecular techniques desirable. Applicants must have earned M.D. or Ph.D. degree. Send curriculum vitae, statement of research interests, and names of three references to: **R. L. Truitt, Ph.D., Department of Pediatrics, Medical College of Wisconsin, P.O. Box 1997, Milwaukee, WI 53201.** *Equal Opportunity Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP, NIH. Research in: evolution and molecular genetics of genes coding for enzymes that metabolize drugs, carcinogens and occupationally hazardous substances; positive and negative regulatory elements; characterization of genes encoding trans-acting factors; developmental and tissue-specific gene expression. Clinical applications: predicting individual risk of certain malignancies and adverse drug reactions. Background in molecular biology or biochemistry is required. Salary commensurate with experience and qualifications. Send curriculum vitae and the names of three references to: **Dr. Daniel W. Nebert, Building 6, Room 416, National Institutes of Health, Bethesda, MD 20892.** *Equal Opportunity Employer.*

RESEARCH FELLOWSHIP IN NEUROSCIENCE

The Department of Biology, McGill University, invites applications from Canadian citizens and landed immigrants to Canada who wish to be sponsored for an NSERC University Research Fellowship. Applications from persons working in any field of neuroscience will be welcomed. The fellowship will be awarded for 5 years, carries a salary at the assistant professor level, and includes financial support for research. A small amount of teaching will be expected. Send curriculum vitae, representative reprints, and letters from three referees by 15 August 1988 to: **Dr. Barid Mukherjee, Department of Biology, McGill University, 1205 Avenue Docteur Penfield, Montreal, Quebec, Canada H3A 1B1.**

STAFF FELLOWSHIPS IN BIOMEDICAL RESEARCH

DHHS, PHS, Food and Drug Administration, Center for Biologics Evaluation and Research, Division of Virology, has staff fellowships available for outstanding candidates with Medical or Doctor of Philosophy/Science Degrees. This program offers an initial two-year fellowship focusing research efforts in the area of hematopoietic and/or growth factors. This research will play a vital role in accelerating our progress in regulation of hematopoietic and growth factor products.

Candidates must have a strong background in hematology, growth factor biology, cell and molecular biology, and/or immunology.

Salary range for candidates with a Doctor of Philosophy/Science Degree is from \$20,000 to \$42,600. Salary range for candidates with a Medical Degree is from \$24,000 to \$49,266. Salary, research support, and level of responsibility are commensurate with education and experience. *Applicants must be U.S. citizens or resident aliens eligible for citizenship within 4 years.*

Interested candidates should send a current curriculum vitae and bibliography to: **FDA/Center for Biologics Evaluation and Research, Building 29, Room 114, E, 8800 Rockville Pike, Bethesda, MD 20892.** For further information, call: **Ms. Boyer or Ms. Hutchinson on 301-496-5394.** *FDA is an Equal Opportunity Employer.*

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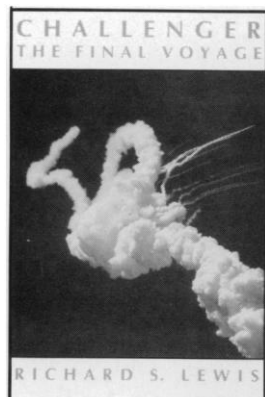
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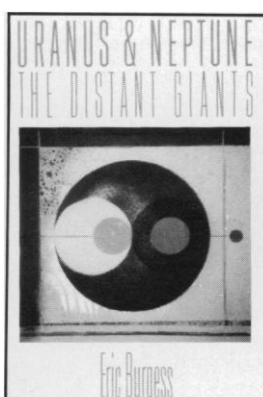
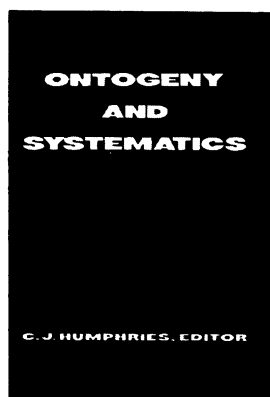
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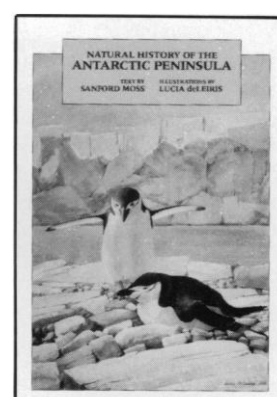
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