

expedition. About a third of the volume is thus devoted to descriptions of techniques for gathering desired data. About a fourth is devoted to descriptions of the results of studies in distant areas that used techniques intended to be used in the IKP. The remainder of the book mainly describes projects planned in Pakistan and neighboring areas. Six papers report new results from previous work in Pakistan that are of lasting value. Four papers report the results of glaciological studies by Chinese scientists. Israr-ud-Din of Pakistan reports the results of his studies of house construction in Chitral in relation to the geographic setting. H. M. Rendell reports new work on the Quaternary history of the Potwar plateau. This volume is largely superseded by the second volume.

The second volume contains the results obtained by the IKP. Much information is published here for the first time and not all of it can be reviewed. One of the most ambitious efforts of the IKP was a resurvey of the 1913 triangulation connection between India and Russia in an effort to detect tectonic deformation across the Karakoram. This effort entailed major mountaineering, for the stations to be reoccupied were mostly mountain peaks between 4000 and 6000 meters high. The survey itself was successfully accomplished, but significant tectonic deformation was not detected. A substantial effort was made in glaciology, and many new data were obtained that will be increasingly useful as these baseline studies are replicated. A microearthquake survey was made with a portable seismic network. Most of the seismicity was under the Hindu Kush to the west. However, important seismicity was observed for the first time in the Kohistan area of northern Pakistan (south of the Karakoram) and will provide guidance to future neotectonic studies. A large part of the volume is devoted to the study of housing and natural hazards. Many data on house construction and family use of homes were gathered that will interest ethnologists and anthropologists. A key element of the success of these studies was the presence of a female, F. D'Souza, for non-family males are not allowed inside the homes in this area. The housing team devoted considerable effort to attempts to determine the role of natural hazards in locating houses. Surprisingly in this area of very great natural hazard, they found that agricultural considerations, specifically preservation of cultivatable land and availability of irrigation supplies, essentially exclude natural hazards such as rockfall, mudflow, flood, and earth-

quake from consideration when new houses are located.

The longest part of the volume deals with geomorphology. Extensive data on current processes are reported. Perhaps the most unexpected result here is that a dissolved load yielding sediment of 90 tons per square kilometer per year was measured on the Hunza River, indicating that substantial chemical weathering occurs even in a high, cold, arid area where it had always been considered to be negligible. One of the best papers in the collection deals with the Quaternary history of the Hunza Valley. Eight separate glacial phases are recognized, the oldest of them more than 139,000 years old. The oldest stages are recorded by remnants several thousand meters above the Hunza Valley floor. The sole weakness of the study is a failure to consider the effects of tectonic uplift interacting with glacial episodes. With uplift rates of over 1 centimeter per year recorded in the area, the interaction must be significant. This is the first modern study of glacial chronology in northern Pakistan and will be of great value to other workers.

The IKP was an ambitious undertaking. Much was accomplished, but the project had the inherent weaknesses of short-term projects. In numerous instances previous work is not adequately recognized. Little effort was apparently made to assist Pakistani colleagues to continue the studies, particularly those that established baseline data. These proceedings volumes are not as tightly edited as one would wish, but they do contain substantial amounts of valuable information.

ROBERT D. LAWRENCE

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Books Received

Applied Nonlinear Analysis. Jean-Pierre Aubin and Ivar Ekeland. Wiley-Interscience, New York, 1984. xiv, 518 pp. \$47.50. Pure and Applied Mathematics.

Applied Oceanography. Joseph M. Bishop. Wiley-Interscience, New York, 1984. xvi, 252 pp., illus. \$32.95. Ocean Engineering.

Australia's Role in the Nuclear Fuel Cycle. A Report to the Prime Minister by the Australian Science and Technology Council. Australian Government Publishing Service, Canberra, 1984. viii, 312 pp., illus. Paper.

Basic Marine Biology. A. A. Fincham. Illustrated by A. Milne and P. Stebbing. British Museum (Natural History), London, and Cambridge University Press, New York, 1984. x, 157 pp. \$37.50; paper, \$14.95.

Basic Theory of Oscillations. V. V. Migulin *et al.* Mir, Moscow, 1983 (U.S. distributor, Imported Publications, Chicago). 400 pp., illus. \$11.95. Translated from the Russian edition (Moscow, 1978) by George Yankovsky.

Biogeography and Ecology of the Seychelles Islands. D. R. Stoddart, Ed. Junk, The Hague, 1984 (U.S. distributor, Kluwer Boston, Hingham, Mass.). xii, 691 pp., illus. \$115. Monographiae Biologicae, vol. 55.

Biology of Chrysopidae. M. Canard, Y. Séméria,

and T. R. New, Eds. Junk, The Hague, 1984 (U.S. distributor, Kluwer Boston, Hingham, Mass.). x, 294 pp., illus. \$57.50. Series Entomologica, vol. 27. **Biophilia.** Edward O. Wilson. Harvard University Press, Cambridge, Mass., 1984. viii, 159 pp. \$15.

The Birth of History and Philosophy of Science. Kepler's *A Defence of Tycho against Ursus* with Essays on Its Provenance and Significance. N. Jardine. Cambridge University Press, New York, 1984. x, 301 pp., illus. \$59.50.

The Body Book. A Fantastic Voyage to the World Within. David Bodanis. Little, Brown, Boston, 1984. xii, 295 pp., illus. \$24.95.

The Book of Edible Nuts. Frederic Rosengarten, Jr. Walker, New York, 1984. xxvi, 384 pp., illus. \$35.

Brain Tumor Biology. M. L. Rosenblum and C. B. Wilson, Eds. Karger, Basel, 1984. xvi, 258 pp., illus. \$94. Progress in Experimental Tumor Research, vol. 27.

Brain Tumor Therapy. M. L. Rosenblum and C. B. Wilson, Eds. Karger, Basel, 1984. xvi, 288 pp., illus. \$94. Progress in Experimental Tumor Research, vol. 28.

Cardiovascular Physiology. A Synopsis. Henry S. Bader. Karger, Basel, 1984. xvi, 276 pp., illus. \$34.75. Karger Continuing Education Series.

Conversations in Medicine. The Story of Twentieth-Century American Medicine in the Words of Those Who Created It. Allen B. Weiss. New York University Press, New York, 1984 (distributor, Columbia University Press, New York). xvi, 443 pp., illus. \$25.

Critical Reviews in Tropical Medicine. Vol. 2. R. K. Chandra, Ed. Plenum, New York, 1984. xvi, 273 pp., illus. \$45.

Current Medical Therapy. Robert W. Schrier, Ed. Raven, New York, 1984. xiv, 609 pp. Paper, \$16.95.

Cyclic Nucleotides in the Nervous System. George I. Drummond. Raven, New York, 1984. viii, 127 pp. Paper, \$17.

DNA Repair and Its Inhibition. A. Collins, C. S. Downes, and R. T. Johnson, Eds. IRL Press, Washington, D.C., 1984. x, 371 pp., illus. Paper, \$55. Nucleic Acids Symposium Series, No. 13. From a symposium, Cambridge, England, June 1982.

Deactivation of Catalysts. R. Hughes. Academic Press, Orlando, Fla., 1984. xviii, 265 pp., illus. \$42.

The Deaf Experience. Classics in Language and Education. Harlan Lane, Ed. Harvard University Press, Cambridge, Mass., 1984. x, 221 pp., illus. \$20. Translated from the French by Franklin Philip.

Emotions, Cognition, and Behavior. Carroll E. Izard, Jerome Kagan, and Robert B. Zajonc, Eds. Cambridge University Press, New York, 1984. x, 620 pp., illus. \$54.50. Based on workshops, San Francisco, Nov. 1979 and June 1980.

Endoscopic Interpretation. Normal and Pathologic Appearances of the Gastrointestinal Tract. Michael O. Blackstone. Raven, New York, 1984. xvi, 575 pp., illus. \$110.

Energy Intake and Activity. Ernesto Pollitt and Peggy Amante, Eds. Published for the United Nations University by Liss, New York, 1984. xiv, 418 pp. \$58. Current Topics in Nutrition and Disease, vol. 11. From a meeting, Bellagio, Italy, May 1983.

Equilibrium Properties of Fluids and Fluid Mixtures. Aleksander Kreglewski. Published for the Texas Engineering Experiment Station by Texas A&M University Press, College Station, 1984. xxii, 253 pp., illus. \$32.50. The Texas Engineering Experiment Station Monograph Series, No. 1.

Evaluating Chicago Sociology. A Guide to the Literature, with an Annotated Bibliography. Lester R. Kurtz. University of Chicago Press, Chicago, 1984. x, 303 pp. \$22. The Heritage of Sociology.

Evolution and Human Nature. Richard Morris. Avon, New York, 1984. 207 pp. Paper, \$3.75. A Discus Book. Reprint, 1983 edition.

The Fragile X Syndrome. Diagnosis, Biochemistry, and Intervention. Randi Jenssen Hagerman and Pamela McKenzie McBogg, Eds. Spectra Publishing, Dillon, Colo., 1983. xiv, 243 pp., illus. \$26.45; paper, \$16.95.

Fungal Nutrition and Physiology. Michael O. Garraway and Robert C. Evans. Wiley-Interscience, New York, 1984. x, 401 pp., illus. \$44.95.

The Gender Gap in Psychotherapy. Social Realities and Psychological Processes. Patricia Perri Rieker and Elaine (Hilberman) Carmen. Plenum, New York, 1984. xviii, 374 pp. \$35.

General Chemistry in the Laboratory. Julian L. Roberts, Jr., J. Leland Hollenberg, and James M. Postma. Freeman, New York, 1984. xvi, 464 pp., illus. Paper, \$18.95.

The Geology of the Belton 7½-Minute Quadrangle, Missouri-Kansas, with Special Emphasis on the Belton Ring-Fault Complex. Richard J. Gentile. Division of Geology and Land Survey, Missouri Department of Natural Resources, Rolla, 1984. viii, 111 pp., illus. Paper, \$6. Report of Investigations, No. 69.

The Grammar of Social Relations. The Major Es-

(Continued on page 1457)

BOOKS RECEIVED

(Continued from page 1414)

says of Louis Schneider. Jay Weinstein, Ed. Transaction Books, Rutgers University, New Brunswick, N.J., 1984. xlvii, 369 pp., \$39.95.

Grenzflächenaktive Athylenoxid-Addukte. Ihre Herstellung, Eigenschaften, Anwendung und Analyse. Nikolaus Schönfeldt. Ergänzungsband. Wissenschaftliche Verlagsgesellschaft, Stuttgart, 1984. xx, 602 pp., DM 254.

Group Theoretical Methods in Physics. G. Denardo, G. Ghirardi, and T. Weber, Eds. Springer-Verlag, New York, 1984. xxviii, 518 pp., Paper, \$20. Lecture Notes in Physics, vol. 201. From a colloquium, Trieste, Italy, Sept. 1983.

Groups and Geometric Analysis. Integral Geometry, Invariant Differential Operators, and Spherical Functions. Sigurdur Helgason. Academic Press, Orlando, Fla., 1984. xx, 656 pp., \$39.50. Pure and Applied Mathematics, 113.

Herbicides in War. The Long-Term Ecological and Human Consequences. Arthur H. Westing, Ed. Stockholm International Peace Research Institute, Solna, Sweden, and Taylor and Francis, Philadelphia, 1984. xiv, 210 pp., \$33. From a symposium, Ho Chi Minh City, Jan. 1983.

High-Energy Astrophysics and Cosmology. G. F. Bignami and R. A. Sunyaev, Eds. Published for the Committee on Space Research by Pergamon, New York, 1984. xii, 551 pp., illus. Paper, \$135. *Advances in Space Research*, vol. 3, Nos. 10-12. From a symposium, Rojén, Bulgaria, July 1983.

Historical Whaling Records. Michael F. Tillman and Gregory P. Donovan, Eds. International Whaling Commission, Cambridge, England, 1983. vi, 269 pp., illus. \$35. Reports of the International Whaling Commission Special Issue 5. From a workshop, Sharon, Mass., Sept. 1977.

Home Environment and Early Cognitive Development. Longitudinal Research. Allen W. Gottfried, Ed. Academic Press, Orlando, Fla., 1984. xiv, 384 pp., illus. \$45. Developmental Psychology Series.

Hormones and Cancer 2. Francesco Bresciani et al., Eds. Raven, New York, 1984. xxviii, 707 pp., illus. \$75. Progress in Cancer Research and Therapy, vol. 31. From a congress, Monte Carlo, Sept. 1983.

Inner Structures of Bacteria. Wouter van Isteron, Ed. Van Nostrand Reinhold, New York, 1984. xviii, 501 pp., illus. \$57.50. Benchmark Papers in Microbiology Series. A Hutchinson Ross Benchmark Book.

Insect Ultrastructure. Vol. 2. Robert C. King and Hiromu Akai, Eds. Plenum, New York, 1984. xxvi, 624 pp., illus. \$85. From a conference, Sapporo, Japan, Aug. 1982.

Insects of the World. Anthony Wootton, Facts On File, New York, 1984. 224 pp., illus. \$17.95.

Inside Plea Bargaining. The Language of Negotiation. Douglas W. Maynard. Plenum, New York, xiv, 257 pp., \$29.50.

Instrumental Analysis of Foods. Recent Progress. Vol. 2. George Charalambous and George Inglett, Eds. Academic Press, Orlando, Fla., 1983. xx, 539 pp., illus. \$51. From a symposium, Corfu, Greece, July 1983.

Long-Wave Optics. The Science and Technology of Infrared and Near-Millimetre Waves. George W. Chantry, Ed. Academic Press, Orlando, Fla., 1984. Two volumes. Vol. 1, Principles. xii, 429 pp., illus. \$60. Vol. 2, Applications. xii pp. + pp. 431-790, illus. \$55.

Lymphokines. A Forum for Immunoregulatory Cell Products. Vol. 9. Edgar Pick and Maurice Landy, Eds. Academic Press, Orlando, Fla., 1984. xxii, 378 pp., illus. \$84.

Mammalian Semiochemistry. The Investigation of Chemical Signals between Mammals. Eric S. Albone, with Stephen G. Shirley. Wiley-Interscience, New York, 1984. xii, 360 pp., illus. \$57.

Marihuana in Science and Medicine. Gabriel G. Nahas, with David J. Harvey, Michel Paris, and Henry Brill. Raven, New York, 1984. xii, 312 pp., illus. \$48.

Marijuana Effects on the Endocrine and Reproductive Systems. Monique C. Braude and Jacqueline P. Ludford, Eds. National Institute on Drug Abuse, Rockville, Md., 1984 (available from the National Clearinghouse for Drug Abuse Information, Rockville, Md.). viii, 135 pp., illus. Paper. NIDA Research Monograph 44. From a conference, Rockville, Md., March 1983.

Marine Ecological Processes. Ivan Valiela. Springer-Verlag, New York, 1984. x, 547 pp., illus. \$34. Springer Advanced Texts in Life Sciences.

Proceedings of the Expert Consultation to Examine Changes in Abundance and Species Composition of Neritic Fish Resources. (San Jose, Costa Rica, April 1983). G. D. Sharp and J. Csirke, Eds. Food and Agriculture Organization of the United Nations, Rome, 1983. Three volumes. xxvii, 1224 pp., illus. Paper. FAO Fisheries Report No. 291, vols. 1-3.

Personnel Placement

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

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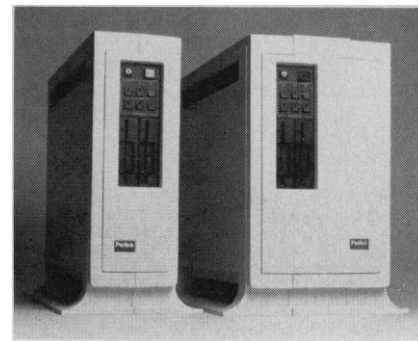
Anatomist. Ph.D. with 6 years of experience teaching medical/allied health students, administrative experience, and research interests in neurobiology. seeks a teaching/research position. Box 291, SCIENCE. X

Anatomist. Ph.D. Interest, expertise, and practical experience in: stereology, computer programming, statistics, and applying mathematics to solution of biological morphometric problems. Seeks position or collaboration where these skills can be used and improved. Box 297, SCIENCE. X

Biochemist/Computer Programmer: Seeks entry level industrial position. B.S. chemistry. Four years of Biochemistry graduate work. Knows Fortran, Pascal, Assembly, C, and APL. Will relocate; prefers New England/New York/Jew Jersey. Available January 1985. J. Gaston, 2514-A West 12th, Austin, TX 78703. X

Pathology resident seeks full-time position to start mid-1986. Has strong interest in clinical genetic toxicology work, including both research and patient specimen screening and follow-up. Job also should preferably include conventional pathology duties, for example, surgical pathology or laboratory medicine; teaching responsibilities acceptable. Currently involved in urine mutagenicity screening using Ames test. Prior experience in mammalian cell culture, including mutagenesis and DNA repair mutant isolation and characterization. [see *PNAS* 78, 3734 (1981)]. David B. Busch, Ph.D., M.D., University of Wisconsin, Department of Pathology, E5/379 CSC, 600 Highland Avenue, Madison, Wisconsin 53792. 12/21; 1/4

Physician (M.D.) with clinical research and teaching experience in physiology requires postdoctorate in molecular/cell biology at university/research institute or position in biotechnology/pharmaceutical industry. Box 284, SCIENCE. X



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Research Assistant, M.S. experienced with recombinant DNA, enzymology, electrophoresis, radioisotopes, nick translation, DNA hybridization, autoradiography, sterile techniques, DNA isolation. Seeks challenging position in molecular biology. Box 296, SCIENCE. X

Technical Editor/Writer/Coordinator seeks position with industry/government/university, Hartford-Springfield. Currently (4 years) with electric power industry, control systems: development of training, proposals, brochures. Experience in textbook publishing, 8 years in biophysics/biochemistry research. Box 238, SCIENCE. 12/21; 1/4

POSITIONS OPEN

VACANCY INT/003/84 AGRICULTURAL CHEMIST

The International Livestock Centre for Africa (ILCA) seeks an agricultural chemist/laboratory manager to be based at headquarters in Addis Ababa. He or she will be responsible for the operation of a central laboratory in which determinations in the fields of soil, vegetation, and nutritional chemistry are carried out. The laboratory is already well equipped and has a staff of approximately 20, including a qualified analyst and chief technician.

The successful applicant will have a degree in analytical agricultural chemistry or be an associate of the Royal Society of Chemistry or equivalent. He or she will have several years of experience in carrying out analyses in the fields mentioned above and will also have at least 5 years of experience in laboratory management, including ordering equipment, chemicals, supervision of staff, maintenance of laboratory standards, and so forth. While English is the main working language, knowledge of French would be an advantage.

Salary and related benefits will be in line with comparable international organizations.

Applicants should airmail personal history and names of three referees. Applications citing the reference number should arrive not later than 31 January 1985 to: **The Head of Personnel Department, International Livestock Centre for Africa, P.O. Box 5689, Addis Ababa, Ethiopia.**

ASSISTANT/ASSOCIATE DIRECTOR, RESEARCH LABORATORY—We are seeking a research scientist to lead the effort targeted toward the development of diagnostic reagents related to blood proteins in our Blood Derivatives Program. Ability to work independently essential. Appropriate candidates will have a Ph.D. in the biological sciences with a minimum of 2 years of postdoctoral training in areas related to monoclonal antibody production, blood protein isolation and/or diagnostic test development. Excellent fringe benefits including 4 weeks vacation. Salary: \$34,000 to \$40,000, depending on experience. Send résumé and salary history, in confidence, to: **BH, New York Blood Center Personnel, 310 East 67 Street, New York, NY 10021. Equal Opportunity Employer.**

ASSISTANT PROFESSOR. Department of Bacteriology, University of Wisconsin-Madison. Applications are invited from individuals with a Ph.D. degree for a 12-month, tenure-track appointment. The successful candidate will be expected to develop a dynamic research program in which he or she applies modern approaches to answer fundamental questions in microbiology. Research interests may be in any area of microbiology, but the individual must have sufficient skills, either through training and/or experience, to teach a general course in food microbiology. Ability to interact with the food industry and with food-related departments on campus would be desirable. Supervision of graduate students will also be required. This is an outstanding opportunity for development of a strong research program due to the excellent facilities and broad interactions within the department and university community. A detailed curriculum vitae, including research accomplishments and interests and a list of publications, as well as three letters of recommendation, should be sent directly to: **Dr. Ronald Hinsdill, Chairman, Department of Bacteriology, 1550 Linden Drive, University of Wisconsin, Madison, Wis. 53706,** by the 15 February 1985 deadline. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ANATOMY ASSISTANT PROFESSOR

We are seeking an assistant professor, tenure track, to join an outstanding Anatomy Department with strong research programs in **DEVELOPMENTAL NEUROBIOLOGY, NEUROGENETICS, CELL BIOLOGY, and DEVELOPMENTAL BIOLOGY.** Applicant should have demonstrated high potential regardless of area of specialization.

Send curriculum vitae and names, addresses, and telephone numbers of three referees to: **Marcus Jacobson, Chairman, Anatomy Department, University of Utah School of Medicine, Salt Lake City, Utah 84132.**

The deadline date for applications is 1 March 1985. Applications submitted after the deadline may be considered if no qualified candidates have applied by that date.

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

ASSISTANT PROFESSOR, UCLA

The Department of Microbiology, University of California, Los Angeles (UCLA), invites applications for a tenure-track position at the assistant professor level. Applicants should have training and research experience in medical microbiology and will teach a required course in this subject. Candidates should be motivated toward excellence in teaching and research. Applicants should submit, by 1 March 1985, curriculum vitae and names of three references to: **Dr. F. A. Eiserling, Chairman of Search Committee, Department of Microbiology, UCLA, Los Angeles, Calif. 90024. An Equal Opportunity Employer.**

The Department of Zoology at Miami University wishes to make a tenure-track, **ASSISTANT PROFESSOR** appointment on the Hamilton Campus to a person with advanced training in ecology and genetics. Consistent with the main mission of the regional Hamilton Campus, the primary duties are teaching courses at the freshman and sophomore levels, and providing service to the campus and the community. Some scholarly work also is expected. Ph.D. is required; teaching experience is desirable. Completed applications must be received by 28 January 1985. An application consists of a résumé, three letters of reference, and transcripts of all academic work. Send these materials to: **R. G. Sherman, Department of Zoology, Miami University, Oxford, Ohio 45056. Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR needed to participate in research activities concerning myosin assembly in thick filaments of *Caenorhabditis elegans*; to assist in the training of graduate students and postdoctoral fellows. Must have Ph.D. or equivalent in biochemistry or closely related discipline with 2 years of postdoctoral training in muscle protein biochemistry and one year of experience in myosin chemistry or closely related problems. Must speak and write English fluently and have strong record of research publication. Salary: \$27,000 per year; 40 hours per week. Apply at the Texas Employment Commission, Houston, Texas, or send résumé to: **The Texas Employment Commission, TEC Building, Austin, Texas 78778. J. O. number 3943006. Ad paid by an Equal Opportunity Employer.**

Outstanding candidates, with a Ph.D. or M.D. degree and postdoctoral training in biochemistry/molecular biology/cell biology, should apply for one tenure-track position at the **ASSISTANT PROFESSOR** level (1 July 1985 anticipated starting date). Successful candidates will have exceptional research and teaching potential as evidenced by current curriculum vitae, publication list, summary of research objectives, and three letters of reference. Address all correspondence to: **Search Committee Chairperson, Department of Biochemistry and Molecular Biology, Box J245, JHMC, University of Florida, College of Medicine, Gainesville, Florida 32610,** by 1 March 1985.

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Candidates with a Ph.D. degree in biochemistry/molecular biology should apply for a 2-year teaching appointment with the title **ASSISTANT RESEARCH SCIENTIST** (1 July 1985 anticipated starting date). Successful candidates will have exceptional teaching potential as evidenced by current curriculum vitae, summary of career objectives, and three letters of reference. Address all correspondence to: **Search Committee Chairperson, Department of Biochemistry and Molecular Biology, Box J-245, JHMC, University of Florida College of Medicine, Gainesville, Florida 32610,** by 1 March 1985.

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MENTAL RETARDATION RESEARCH CENTER (MRRC), University of California, Los Angeles (UCLA). Applications are invited for a university funded **ASSISTANT PROFESSORSHIP.** Candidates should have research interests in developmental neurobiology of the central nervous system with emphasis on molecular biology, pharmacology, or immunohistochemistry. Submit curriculum vitae and three referees by 4 January 1985 to: **Developmental Biology Committee, c/o Director, MRRC, 760 Westwood Plaza, Los Angeles, Calif. 90024. UCLA is an Equal Opportunity/Affirmative Action Employer.**

The Department of Animal Sciences at Rutgers, The State University of New Jersey, invites application for two separate 12-month, tenure-track appointments at the rank of **ASSISTANT OR ASSOCIATE PROFESSOR**, one in each of the following areas of expertise: (i) animal disease or pathology or parasitology, or molecular aspects of animal disease; and (ii) nutritional physiology or nutritional biochemistry of domestic animals. One position is currently available, the other is pending final approval. The successful candidates will be expected to establish an active research program capable of attracting competitive extramural grants. Teaching duties of each position will be one undergraduate course and the development of a graduate course in the individual's specialty, and the supervision of graduate students at the M.S. and Ph.D. levels. Applicants should submit curriculum vitae, statement of research interests, and names of three references to: **Dr. A. L. Johnson, Chairman of the Search Committee, Department of Animal Sciences, Bartlett Hall, Rutgers, The State University of New Jersey, New Brunswick, N.J. 08903.** Application deadline is 1 February 1985; Positions available on or before 1 July 1985.

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HARVARD SCHOOL OF PUBLIC HEALTH

The Harvard School of Public Health is seeking applications for an **ASSISTANT OR ASSOCIATE PROFESSOR OF BIOSTATISTICS.** The successful applicant will be required to lead research programs on statistical methodology in medical decision making, treatment allocation methods in clinical trials, and cancer epidemiology, in addition to the program studying referral patterns, patterns of care and treatment of cancer in the elderly. Especially important will be teaching duties associated with the above specialties.

Applicants must hold a Ph.D. degree in biostatistics and must have substantial research experience in each of the following areas: medical decision theory; clinical trials; and clinical epidemiology (with an interest in cancer in the elderly). In addition, experience with analyzing large, medical databases is essential.

Applications will close on 1 March 1985. *Women and minority applicants are particularly encouraged.* Please send complete curriculum vitae and the names of at least three references to:

**Professor M. Zelen, Chairman
Department of Biostatistics
Harvard School of Public Health
677 Huntington Avenue
Boston, Mass. 02115**

ASSISTANT PROFESSOR—CERAMIC SCIENCE AND ENGINEERING THE PENNSYLVANIA STATE UNIVERSITY

The Department of Materials Science and Engineering at the Pennsylvania State University, University Park, Pennsylvania, seeks an assistant professor of ceramic science and engineering for a tenure-track position effective summer-fall 1985.

The successful applicant will undertake teaching at the undergraduate and graduate levels in the general area of electroceramics. This individual will be expected to develop a strong research program in conjunction with the Materials Research Laboratory in the general area of electroceramics.

A Ph.D. in ceramics or related field is required. Excellence in research and enthusiasm for teaching are important criteria for candidates for this position.

Please submit curriculum vitae and references by 1 January 1985.

**The Ceramic Science and Engineering Program
Attention: Professor R. E. Newnham
The Pennsylvania State University
201 Steidle Building
University Park, Pa. 16802**

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RESEARCH INSTITUTE DIRECTOR

The Institute of Arctic Biology at the University of Alaska, Fairbanks, is seeking a **director** with outstanding qualifications and international recognition. The Institute is well known nationally as a center of organized research on the ecology and physiology of arctic and subarctic organisms. It has 18 faculty members and 39 support staff and associates. The central facility on the Fairbanks campus is complemented by field stations and research sites throughout the state. Applicants for the positions must hold a Ph.D. degree or equivalent in life sciences, have demonstrated success as an administrator of organized research, have a successful record of research, and have faculty experience with graduate programs.

The director will be expected to lead and promote the research activities of the Institute of Arctic Biology. Duties will include scientific leadership and internal management (personnel management and fiscal responsibility) of the Institute, and advocacy of the interests of the Institute within the university, state, federal, and other funding agencies. The director will encourage and direct organized research within the Institute and will also be encouraged to develop research in his/her own specialty. The director will be tenurable in the university system based on research, teaching and/or graduate advising.

Applicants should submit a letter of application and curriculum vitae by 1 March 1985 to: **Dr. David Klein, Chairman, Directorship Search Committee, 209 Irving Building, University of Alaska, Fairbanks, Alaska 99701**; letters of reference will be solicited after a preliminary screening of applications. Selection of the successful applicant should be made by 1 June 1985. Duties could begin as early as 1 July 1985. *The University of Alaska is an Affirmative Action/Equal Opportunity Employer, and Educational Institution.*

Marine Biological Laboratory Fellowships — Spring/Summer 1985

Frederik B. Bang Fellowship — invertebrate pathology

Charles Ulrick and Josephine Bay Fund — marine veterinary science

Frank A. Brown, Jr. Memorial Readership — for library research

E.E. Just Fellowships — for Blacks and other Minorities

Stephen W. Kuffler Fellowship — neuroscience

H.B. Steinbach Fellowships

MBL Summer Fellowships

Tinker Foundation Fellowships — for Latin Americans

These fellowships support either independent research or participation in the Laboratory's spring and summer courses.

For further details, contact the Office of Grants and Educational Services, MBL, Woods Hole, MA 02543. (617) 548-3705 x 216.

DEADLINE: January 15, 1985



Senior Scientist PLANTEK INTERNATIONAL

Plantek International (Pte.) Ltd. is a Singapore based biotechnology joint venture between NPI (USA), Tata Industries (India), Sumitomo Corp. (Japan) and Kyowa Hakko (Japan). We are seeking a highly qualified senior scientist to direct our ongoing and future research and development efforts in Singapore. Personal research history in plant physiology, genetics or biochemistry is required. Experience in the application of plant cell and tissue culture methods for plant improvement are desirable. The successful candidates will interact with concurrent programs in plant molecular biology, soil microbiology, phytochemistry and fermentation. Compensation and benefit packages are commensurate with experience. Interested applicants should send current curriculum vitae, publication list and statement of research interests to:

Vice President/Corporate Planning
NPI
University Research Park
417 Wakara Way,
Salt Lake City, Utah 84108 USA
telex: 820832 NPISLC



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POSITIONS OPEN

ASSISTANT PROFESSOR

The Department of Microbiology is searching for an assistant professor starting in fall 1985. Appointment at a higher rank is possible for an unusually qualified applicant. Preference will be given to individuals with experience in immunology, pathogenic mechanisms, transcriptional control, developmental biology, and eucaryotic microbial genetics. Applicants should submit curriculum vitae, including the names and addresses of three references, and a summary of research interests to: **Dr. Henry R. Bose, Jr., Chair, Department of Microbiology Search Committee, The University of Texas at Austin, Austin, Texas 78712.** Deadline is 1 March 1985. *The University of Texas is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF BIOCHEMISTRY

The Department of Biochemistry at the University of Rochester School of Medicine and Dentistry invites applications for tenure-track faculty positions at the level of assistant professor. Candidates must have postdoctoral experience and an established record of research productivity. All research areas will be considered including protein structure and function. Applicants should send curriculum vitae, a statement of research interests, and names of three references to:

Dr. Fred Sherman
Chairman of Biochemistry
University of Rochester
School of Medicine and Dentistry
Department of Biochemistry, Box 607
601 Elmwood Avenue
Rochester, New York 14642

The University of Rochester is an Affirmative Action/Equal Opportunity Education Institution, M/F.

DEPARTMENT OF PLANT PATHOLOGY WASHINGTON STATE UNIVERSITY

Assistant Professor of Plant Pathology, Assistant Plant Pathologist. Department of Plant Pathology, Washington State University. Washington State University seeks a plant pathologist to plan, conduct, and supervise research programs in plant pathology using state-of-the-art concepts and techniques of genetics of plant pathogens and plant pathogen interactions (70 percent) and teach six credit hours of graduate and/or undergraduate courses per biennium (30 percent). Appointment effective 1 July 1985. Salary commensurate with qualifications and experience. Tenure-track position. Earned Ph.D. required. Experience in plant pathology with specialization in genetics of plant pathogens highly desirable. Applications accepted until 1 March 1985. Send letter of application indicating: (i) areas of research interest and goals, (ii) areas of teaching interest and goals; curriculum vitae including official transcripts of all postsecondary education; list of publications and reprints of appropriate publications; and at least three references whom we may contact. Send to: **Arlen D. Davison, Chairman, Department of Plant Pathology, Washington State University, Pullman, Wash. 99164-6430.** *Washington State University is an Equal Opportunity/Affirmative Action Employer.*

Tenure-track **ASSISTANT OR ASSOCIATE PROFESSORSHIP IN TOXICOLOGY** starting in August 1985. Experience required in mechanisms of toxic action and metabolism of xenobiotics. Send résumé and five references to: **Dr. Wesley Birge, Director, Graduate Center for Toxicology, Room 202, Medical Center Annex 5, University of Kentucky, Lexington, Kentucky 40536-0078.** Closing date for applications: 31 January 1985. *Equal Opportunity/Affirmative Action Employer.*

BIOCHEMIST

ASSISTANT PROFESSOR: Tenure-track position available 1 July 1985. The Biology Department of Hamilton College seeks a biochemist to teach Microbiology and General Biochemistry. Candidates should have postdoctoral experience with a demonstrated research accomplishment in the area of cell biology. Applicants should have a strong interest in liberal arts education and an active research program that will involve students. Applications should be received by 14 January 1985 and include curriculum vitae, transcripts, and the names of three references. Send résumé to: **Professor Tom Brady, Chairman, Biology Department, Hamilton College, Clinton, N.Y. 13323.**

Hamilton College is an Equal Opportunity Employer. Women and members of minority groups are strongly encouraged to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY

The Department of Biology at Oberlin College invites applications for a full time continuing appointment in the area of vertebrate anatomy/systematics. Teaching responsibilities will include participation in team-taught introductory evolutionary and vertebrate structure and function courses, and advanced vertebrate morphology, and/or diversity courses with laboratory. Involvement in directing undergraduate student research projects and academic advising are required. The incumbent will be expected to pursue an active research program including sustained publication. The area of interest is open but should include quantitative and experimental approaches, ranging from molecular to organismal, involving some aspect of vertebrate biology. Some teaching experience is expected. Annual salary will be commensurate with training and experience. A Ph.D. must be in hand or expected by June 1985.

Submit applications by 25 February to: **Dr. David H. Benzing, Chairman, Department of Biology, Oberlin College, Oberlin, Ohio 44074.** Include curriculum vitae, transcripts of both undergraduate and graduate work, plus at least three letters of reference. Also provide a description of research interests and goals.

Oberlin College has adopted an Affirmative Action Plan, and, as an Equal Opportunity Employer, welcomes applications from female and minority candidates.

ASSISTANT/ASSOCIATE PROFESSORS—CELLULAR BIOLOGY/CANCER BIOLOGY. The Institute for Molecular Virology at the St. Louis University Medical Center invites applications for tenure-track faculty positions. Strong emphasis is placed on research. Candidate should be capable of (i) establishing a strong, independent research program in the areas of cell growth, gene regulation, or oncogenesis, and (ii) participating in the St. Louis University Cell and Molecular Biology graduate research training program supported by an NIH Training Grant and by the St. Louis University Medical Center. Send curriculum vitae, one-page statement of research goals, and names of three references to: **Dr. Maurice Green, Chairman, Institute for Molecular Virology, St. Louis University Medical Center, 3681 Park Avenue, St. Louis, Missouri 63110.** *St. Louis University is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE PROFESSOR OF IMMUNOLOGY

The Department of Microbiology, School of Medicine, University of Pittsburgh, invites applications for this senior tenure-track position. In addition to a primary appointment in the Department of Microbiology, the position also involves an affiliation with the Pittsburgh Cancer Institute. Candidates for this position should have an established and on-going research program in cellular or molecular immunology, and have an interest in the teaching of immunology to medical, and graduate students. Please send curriculum vitae, bibliography, a description of research plans, and the names and addresses of three references to: **Dr. J. S. Youngner, Department of Microbiology, School of Medicine, University of Pittsburgh, Pittsburgh, Pa. 15261.**

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ASSOCIATE PROFESSOR OF PEDIATRICS

The Department of Pediatrics, University of Cincinnati College of Medicine. Department of Pediatrics and Children's Hospital Foundation is seeking an associate professor of pediatrics. The individual will have major responsibility in directing the gas chromatography/mass spectrometry facility and in teaching to fellows, residents, postgraduates, and other investigators. He/she will also be responsible for the following duties: Purchase and set up of a productive facility to serve as a resource; carry out medical studies pertaining to bile acid metabolism and sterol metabolism; and supervise and teach other investigators within the facility. Requirements are a Ph.D. degree in medical research, 2 years of postdoctoral training in mass spectroscopy of steroids, 2 years research experience in GC/MS laboratory, expertise evidenced through publication in bile acid metabolism and GC/MS, determination of bile acids in biological fluids, and sterol metabolism. Duties include laboratory and teaching.

Send résumé to:

William Balistreri, M.D.
Children's Hospital Medical Center
Elland and Bethesda Avenues
Cincinnati, Ohio 45229

POSITIONS OPEN

ASSISTANT PROFESSOR VERTEBRATE ANATOMY

The Department of Biology, Southwest Texas State University (SWTSU), announces a **faculty position** in the above field for fall 1985. This tenure-track position requires a recent Ph.D. in biological sciences. Candidate should have a strong background in zoology with a strong commitment to excellence in teaching at both undergraduate and graduate levels. Teaching responsibilities will be in the areas of comparative vertebrate anatomy, human anatomy/physiology, advanced mammalian physiology, and introductory zoology and biology. Candidate will be expected to actively publish in the field of vertebrate anatomy and direct graduate student training in that field at the M.S. degree level. Deadline for receiving applications will be 18 March 1985. Send curriculum vitae, publications, graduate and undergraduate transcripts, and at least three letters of recommendation to: **Dr. Caroline Benjamin, Chairman, Search and Screen Committee, Department of Biology, Southwest Texas State University, San Marcos, Texas 78666.** *SWTSU is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF SYSTEMIC PHYSIOLOGY

Applications for an assistant professor (salary and level dependent upon qualifications and experience) are now being accepted from qualified candidates with both D.V.M. degree and Ph.D. in physiology (or associated field). Candidate must have demonstrated interest, aptitude, and experience in teaching areas of systemic physiology and demonstrated interest and achievement in research. Responsibilities will include lecture and laboratory instruction in systemic physiology for students in the professional veterinary program and to develop didactic instruction at the graduate level in their area of expertise. Supervision of graduate students in laboratory research will also be required. Candidate will be responsible for the development of a creative and productive basic and clinical research program in their area of interest as an indispensable and fundamental requirement of this position. Send curriculum vitae, including bibliography, and names of at least three references to: **Dr. Alfred A. Heusner, VM: Physiological Sciences, School of Veterinary Medicine, University of California, Davis, Calif. 95616.** Applications will be accepted through 1 March 1985, or until a suitable candidate is identified. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

BIOCHEMICAL PHARMACOLOGY OF ANTICANCER AGENTS

The Division of Biochemical and Clinical Pharmacology at St. Jude Children's Research Hospital has a challenging position available in a research group investigating mechanisms of sensitivity and resistance to selected drugs. A strong background in enzymology, medicinal chemistry, or molecular biology is required with at least two years of postdoctoral experience preferably related to anticancer drugs. We are seeking a highly motivated and creative research scientist to assume a position of responsibility within the group. This faculty position will initially be for 3 years with the possibility of indefinite renewal. The division is well equipped for tissue culture and modern methods of biochemical and chemical research with excellent opportunities for research collaboration between clinical and basic science faculty. The level of appointment will be according to qualifications and experience. Candidates should submit curriculum vitae and the names of three references to:

Dr. Raymond L. Blakely
Chairman, Division of Biochemical
and Clinical Pharmacology
St. Jude Children's Research Hospital
Box 318
Memphis, Tennessee 38101

An Equal Opportunity/Affirmative Action Employer

CHAIRMANSHIP: DEPARTMENT OF ANATOMY AND CELL BIOLOGY—The University of Michigan Medical School is seeking an individual to assume the position of **professor and chairman** of its Department of Anatomy and Cell Biology. Qualifications include: national stature in research in a relevant area, demonstrated commitment to teaching, and administrative ability. Respond to: **Sid Gilman, M.D., Chairman, Anatomy and Cell Biology Review and Search Committee, University of Michigan Medical School, B4908 Clinical Faculty Office Building Box 056, Ann Arbor, Michigan 48109.** *The University of Michigan is a nondiscriminatory, Affirmative Action Employer.*



PLANT PHYSIOLOGIST

Excellent opportunity to conduct research on the transfer of nutrients from soils to plants with emphasis on the root-soil interface. Initial effort will be to elucidate fundamental absorption processes at the root surface. Position requires advanced training in Plant Physiology with emphasis on root physiology and ion transport or inorganic plant nutrition and soil science. This position is located at the Plant, Soil and Nutrition Laboratory, Ithaca, New York. U.S. Citizenship is required and a Ph.D. is desirable. Position will be filled at GS-11, GS-12, or GS-13 level depending on qualifications of the person selected.

Salary ranges for above Federal positions:

GS-11—\$25,489—\$33,139
GS-12—\$30,549—\$39,711
GS-13—\$36,327—\$47,226

The usual Federal Government benefits apply to the above positions.

Application forms for the above position can be obtained by contacting:

**SPECIAL EXAMINING UNIT
AGRICULTURAL RESEARCH SERVICE
U.S. DEPARTMENT OF AGRICULTURE
ROOM 121, BUILDING 003, BARC-WEST-PA
BELTSVILLE, MARYLAND 20705**

**DEADLINE FOR RECEIPT OF APPLICATIONS IS
JANUARY 30, 1985**

USDA IS AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER. WOMEN AND MINORITIES ARE URGED TO APPLY.



SUPERVISORY PLANT PHYSIOLOGIST/ AGRONOMIST

Beckley, W. Va.

This is a Research Leader Position

Excellent opportunity to lead an interdisciplinary group of scientists concerned with plant adaptation to hill lands where soils are often acid and infertile. Must have capability of transferring fundamental plant science concepts and research results to forage production in Appalachian agriculture. Selectee will also conduct personal research in agronomy and plant physiology. The research is to develop and support improved agricultural production systems through the application of soil and water management practices in the Appalachian Region. Candidates must have a knowledge of plant physiology, agronomy, plant-soil interactions and crop adaptation to environmental stresses; and skill in root-physiology research and coordinating a multidisciplinary research team.

U.S. CITIZENSHIP IS REQUIRED
PH.D. IS DESIRABLE

Salary is based on qualifications and experience. Salary ranges:

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

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

**SPECIAL EXAMINING UNIT
AGRICULTURAL RESEARCH SERVICE
U.S. DEPARTMENT OF AGRICULTURE-PA
ROOM 409, BLDG. 003, BARC-WEST
BELTSVILLE, MD 20705**

**ALL APPLICATION FORMS MUST BE RECEIVED BY
JANUARY 30, 1985**

USDA IS AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER. WOMEN AND MINORITIES ARE URGED TO APPLY.



RESEARCH PROTEIN CHEMIST

The position involves basic, independent research on the molecular properties of foot-and-mouth disease virus, specifically in relation to structures and functions of viral produced proteins and immunogens. Duties of the position involve isolation, purification and sequencing of proteins from the virus, from procaryotic and eucaryotic biosynthesis, and by organic synthesis. This position is located with the U.S. Department of Agriculture, ARS, Plum Island Animal Disease Center, Greenport, L.I., NY. This is a permanent position. Prior research experience is essential.

U.S. CITIZENSHIP IS REQUIRED
POST-DOCTORAL TRAINING EXPERIENCE IS DESIRABLE

Position will be filled at GS-12, or GS-13 level depending on qualifications of the person selected.

Salary ranges:

GS-12—\$30,549—\$39,711
GS-13—\$36,327—\$47,226

The usual Federal Government benefits apply to the above position.

Application forms can be obtained by contacting:

**DOLORES KAUFFMAN
USDA-ARS-NER-PA
PERSONNEL OPERATIONS BRANCH
ROOM 417, BUILDING 003, BARC-WEST
BELTSVILLE, MARYLAND 20705**

**DEADLINE FOR RECEIPT OF APPLICATIONS IS
JANUARY 15, 1985**

USDA IS AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER. WOMEN AND MINORITIES ARE URGED TO APPLY.

Hartwick College having recently established an undergraduate major in biochemistry anticipates a tenure track faculty position in each of the departments of biology and chemistry to strengthen course offerings in these departments and offerings for the biochemistry major effective Fall, 1985.

Department of Biology: The successful applicant shall be committed to teach at the undergraduate level and will be responsible for teaching General Physiology, Parasitology, General Zoology and developing a course in Physiological Biochemistry. Additional duties will include direction of undergraduate research in physiology and biochemistry. Training in both physiology and biochemistry is desirable. Ph.D. preferred. Rank commensurate with experience, assistant or associate professor.

Department of Chemistry: The successful applicant shall have a Ph.D. degree in biochemistry. Auxiliary training in inorganic chemistry is desirable but not required. The anticipated teaching areas include biochemistry, general chemistry and health science chemistry. Additional duties will include direction of undergraduate research in biochemistry.

Address letters of application, resume, summary of projects for undergraduate research and three letters of recommendation to:

Biology position

Mr. M. Richard Segina
Department of Biology
Hartwick College
Oneonta, New York 13820

Chemistry position

Dr. David A. Bak
Department of Chemistry
Hartwick College
Oneonta, New York 13820

Deadline is February 1, 1985. Hartwick College is an Equal Opportunity Employer.

MACROMOLECULAR CRYSTALLOGRAPHY BS/MS

The Upjohn Company, a worldwide producer of pharmaceuticals, health care products and agricultural products has two openings at the BS/MS level in its Physical and Analytical Chemistry Research unit. Each opening is described below:

- Assist in the preparation and evaluation of protein and other macromolecular crystals for use in three-dimensional structure determination. This includes working out and setting up reproducible crystallization procedures, preparing heavy atom derivatives, mounting crystals, and surveying crystals by x-ray diffraction techniques and analysis of the results. The qualifications are a BS or MS degree in biochemistry or related field and experience in basic biochemical laboratory techniques required. Specific knowledge of techniques for isolation, purification, characterization, and crystallization of proteins is preferred.
- Assist in the macromolecular crystallography laboratory, including measurement and evaluation of single crystal diffraction data, computer processing of data, and supervision of maintenance of x-ray diffraction equipment (including low-temperature devices). The qualifications are a BS or MS degree in physical sciences with experience in using sophisticated experimental instruments and computers. Familiarity with FORTRAN programming and knowledge or experience with x-ray crystallographic techniques preferred. A solid mathematical background is required.

The ability to organize work and to work independently is necessary for both positions.

Kalamazoo is a medium-sized Southwest Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits, including numerous lakes and a four-season climate. Upjohn offers an excellent salary, commensurate with experience, and an outstanding benefits package.

For confidential consideration, please call from outside Michigan TOLL FREE 1-800-253-8600, ext. 3-6767; or inside Michigan COLLECT: (616) 323-6767 to request a specialized employment application to be sent to you immediately. Please refer to Ad Number 17137-B when calling.

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POSITIONS OPEN

ASSOCIATE DEAN FOR ACADEMIC AFFAIRS

The West Virginia School of Osteopathic Medicine (WVSOM) invites applications and nominations for the position of associate dean for academic affairs.

The associate dean reports to the dean for academic affairs. The position responsibilities include administering the budget for all basic and clinical science divisions, works with the dean for academic affairs leading the faculty in the design, and definition of the curriculum, assists the dean in the development of educational policy and philosophy, and supervises academic department chairs. The position also serves as the curricular coordinator, establishing teaching schedules and visiting lecturer programs.

Qualifications: An earned doctorate (Ph.D., D.O.), at least 5 years experience as a teaching faculty member in a medical or professional school, academic administrative experience at the departmental level or above, and familiarity with the systems approach to medical education.

Salary: Commensurate with experience and credentials.

Applications: Interested persons are requested to send a letter of application, résumé, and three letters of reference by 31 January 1985, to: **Harry P. Kornhiser, D.O., FACN, Dean for Academic Affairs, West Virginia School of Osteopathic Medicine, 400 North Lee Street, Lewisburg, West Virginia 24901.**

WVSOM is an Affirmative Action/Equal Opportunity Employer.

BIOCHEMISTRY

The Department of Biochemistry of the Schools of Medicine and Dentistry invites applications for a full-time, tenure-track position at the assistant professor level. Responsibilities include teaching medical/dental/graduate students and developing an independent research program. A Ph.D. in biochemistry with postdoctoral experience is preferred. Salary is dependent upon experience. Please submit application with curriculum vitae; publication list, reprints, brief summary of research interest, and names of three references to: **Dr. L. Preston Mercer, Chairman, Department of Biochemistry, Oral Roberts University, Tulsa, Okla. 74171.**

BIOLOGY—Animal physiologist, assistant professor (Ph.D. required); begin fall 1985. Participate in team-taught general biology, offer one-semester courses each in introductory biology, animal physiology, and supervise senior research projects. Send résumé, undergraduate and graduate transcripts, description of research interests, and three letters of recommendation by 15 January to: **Personnel Director, Saint Vincent College, Latrobe, Pennsylvania 15650.** Equal Opportunity/Affirmative Action Employer.

The University of Arkansas is searching for a **CHIEF OF HUMAN TOXICOLOGY**. The candidate should have an M.D. degree with an interest in investigating the effect of long-term exposure to environmental and/or industrial toxins. The candidate should have training as a clinical/scientist with a proven record in clinical research and attracting extramural funding. This person will have the opportunity to develop a Division of Clinical Toxicology to be integrated with an ongoing Interdisciplinary Toxicology Ph.D. program. *The University of Arkansas is an Equal Opportunity Employer.* Reply to: **Peter O. Kohler, M.D., Department of Medicine, Box 640, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, Ark. 72205.**

THE ATLANTA UNIVERSITY COMPUTATIONAL PHYSICIST

The Physics Department of Atlanta University will have an opening beginning 1 January 1985 for a person in the areas of computational physics and software development. Candidates must have at least M.S. degrees in physics and/or computer science, with at least 2 years of experience in numerical analysis and computing. Candidates with a B.S. degree in computer technology and/or electrical engineering preferred. Ability to work on DEC VAX machines required. The salary is negotiable, depending on qualifications and experience. Qualified applicants should send their résumés, names of three professional references, and salary history to: **Professor Ronald E. Mickens, Department of Physics, Atlanta University, Atlanta, Ga. 30314.** Atlanta University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOLOGISTS—Two 1-year sabbatical replacements, beginning July 1985. Ph.D., entry-level positions. **PLANT PHYSIOLOGIST** to teach vascular plants, general biology and molecular biology, or another upper-level course. **CELL BIOLOGIST** to teach cytology, general biology and molecular biology, or another upper-level course. Complete résumé, undergraduate and graduate transcripts, and three letters of reference must be received prior to 23 January by: **Professor Richard Lane, Biology Department, Dickinson College, Carlisle, Pa. 17013.** An Affirmative Action/Equal Opportunity Employer.

CELLULAR OR DEVELOPMENTAL BIOLOGIST

The Department of Molecular and Cellular Biology at the National Jewish Hospital/National Asthma Center invites applications for a full-time research position at the level of assistant or associate professor. The department consists of nine faculty members whose interests range over various aspects of molecular biology, biochemistry, and cell physiology; all hold concurrent faculty positions at the University of Colorado Health Sciences Center. We particularly encourage candidates interested in the molecular basis of development in eukaryotic cells including the control of gene expression or the role of membranes and cytoskeleton. Applicants should submit a brief statement of present and future research interests, curriculum vitae with bibliography and representative reprints, and the names of three persons whom we may contact for letters of reference to: **Dr. F. M. Harold, Search Committee, MCB, National Jewish Hospital/National Asthma Center, 3800 East Colfax Avenue, Denver, Colorado 80206.** Application deadline: 28 February 1985. An Affirmative Action/Equal Opportunity Employer.

CELL BIOLOGIST UNIVERSITY OF SOUTH CAROLINA

Applications are invited for a tenure-track position at the level of assistant professor in the Department of Biology. Candidates must develop an independent and externally funded research program. Preference will be given to individuals employing biochemical, molecular, or genetic techniques to study the structure and function of cell components, cell recognition, and cell cycle. However, individuals in other areas of cell and developmental biology are encouraged to apply. Successful candidates will be offered nationally competitive salaries and excellent laboratory space and equipment. Ample opportunities exist for interaction with a large group of scientists actively pursuing research in modern biology. Active participation in the departmental teaching program at both the undergraduate and graduate levels is expected. Applicants should send their curriculum vitae, reprints, a statement of research and teaching interests, and the names and addresses of three referees by 15 February 1985 to: **Michael J. Dewey, Chairman, Biology Search Committee, Biology Department, University of South Carolina, Columbia, South Carolina 29208.** The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

CHAIR PROFESSORSHIP IN QUANTITATIVE FOREST ECOLOGY COLLEGE OF FOREST RESOURCES UNIVERSITY OF MAINE, ORONO

Applications and nominations are invited for a new chair professorship position, Curtis Hutchins Professorship in Quantitative Forest Ecology. This will be an academic year, tenure-track position in the College of Forest Resources. The person selected will be expected to develop a strong research program in quantitative forest ecology, and will be encouraged to develop a research program which includes interdisciplinary studies of northern forest ecosystem structure and function. Instruction will constitute a lower proportion of the total effort. It is expected that graduate or upper-level undergraduate courses in forest resources' ecology will be developed. A doctoral degree is required, with at least one of the degrees being in forestry, or in a closely related discipline with a strong record of professional performance in quantitative forest ecology. The applicant must have had at least 5 years of experience in quantitative ecological research. Salary will be negotiable, depending on experience. Applications should be received by 1 April 1985, should include a letter of application, personal résumé, and names of three references, and should be sent to: **Dr. Gregory N. Brown, Dean, College of Forest Resources, 202 Nutting Hall, University of Maine at Orono, Orono, Maine 04469.** Nominations of candidates also are invited. The University of Maine is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

CEPHALOPOD NEUROBIOLOGIST

Applications are invited for a junior tenure-track faculty position to be filled by fall 1985. Appointee is expected to utilize cephalopods as the principal experimental animal in neurobiologically related research. The institute has squids and octopuses available year-round either through laboratory culture or field capture; thus, there is a particularly good opportunity to study aspects of developmental neurobiology.

Applicants should provide curriculum vitae, a letter outlining their research interests and proposed use of cephalopods, and the names of three references to: **Chairman, Search Committee, Marine Biomedical Institute, University of Texas Medical Branch, 200 University Boulevard, Galveston, Texas 77550.**

University of Texas Medical Branch is an Affirmative Action/Equal Opportunity Employer.

Chairperson Department of Biochemistry Tufts University Health Science Campus

Tufts University is seeking an accomplished scientist to lead its Department of Biochemistry. Candidates should have an outstanding record of research achievement as well as the administrative skills to develop a leading academic department. They should be capable of playing a key role in the formulation of curricula for the Schools of Medicine, Dental Medicine, Veterinary Medicine, as well as in the graduate programs of the Sackler School of Graduate Biomedical Sciences.

Tufts is an affirmative action institution and encourages the recruitment of women and members of minority groups. Nominations or applications with curriculum vitae should be sent to: **Dr. Joel D. Feinblatt, Dean for Undergraduate Medical Education, Tufts University School of Medicine, 136 Harrison Ave., Boston, MA 02111.**



CHAIRMAN— DEPARTMENT OF ANATOMY AND CELL BIOLOGY

The Eastern Virginia Medical School (EVMS) is currently searching for a chairman for the Department of Anatomy and Cell Biology. EVMS is a 10-year-old community-supported medical school, located in Norfolk, Virginia.

Candidates for this position should be actively engaged in research as evidenced by appropriate publications. Experience in undergraduate medical student and graduate education, as well as administration, are considered prerequisites.

Letters of application should include complete curriculum vitae, bibliography, and a list of references and should be addressed to: **Charles R. Peterson, M.D., Chairman, Anatomy and Cell Biology Search Committee, EVMS, P.O. Box 1980, Norfolk, Virginia 23501.** Applications should be received no later than 31 January 1985. Affirmative Action/Equal Opportunity Employer.

POSITION AVAILABLE AT THE UNIVERSITY OF WASHINGTON IN DEVELOPMENTAL PSYCHOLOGY

A senior position at the University of Washington (associate or full professor) is available for an outstanding scholar in developmental psychology. The successful candidate is expected to have a strong reputation of programmatic research in any area of development, in the range birth through adolescence. A major consideration for the successful candidate will be potential for providing university-wide leadership among faculty involved in developmental research. We hope to fill this position by fall 1985. Applicants should provide curriculum vitae, three current publications, and four letters of recommendation by 1 March 1985 to: **Chair, Department of Psychology NI-25, University of Washington, Seattle, Washington 98195.** An Affirmative Action/Equal Opportunity Employer.

MANAGER ENVIRONMENTAL RESEARCH WASTE MANAGEMENT PROGRAM

Argonne National Laboratory—a renowned research and development organization—invites inquiries from individuals qualified to direct and enhance an existing multidisciplinary program of research, development and assessment on chemical and radioactive waste management.

Candidates should have an outstanding record of accomplishment in a scientific or engineering discipline related to waste management. Credentials should include management and scientific leadership of major projects, awarded grants and contracts, and professional recognition. Familiarity with the methods and requirements of environmental impact assessment and waste management practices and standards for both radioactive and chemical wastes are important.

Interested and qualified candidates should write:

Rosalie L. Bottino
Box J-ERD-8396-55
ARGONNE NATIONAL LABORATORY
9700 South Cass Avenue
Argonne, IL 60439

*An Equal Opportunity/
Affirmative Action Employer*

Senior Health Physicist

The State of Illinois, Department of Nuclear Safety is actively recruiting an experienced health physicist to oversee its Technical Projects Division. Applicants must be capable of directing the activities of special task forces, committees, commissions, advisory boards, etc., comprised of peer scientists, public officials, nuclear industry representatives and environmentalists. Expertise in the fields of Health Physics, Nuclear/Radiochemistry and/or Radiation Biology is required. Experience in the areas of nuclear power, nuclear waste disposal, radioactive materials transportation, radioecology as well as public and regulatory administration is highly desirable.

Salary: \$26,300 to \$40,400 annually
Location: Springfield, Illinois.

Nuclear/Radiochemist

The State of Illinois, Department of Nuclear Safety is actively recruiting an experienced radiochemist to oversee the operation of its Mobile Nuclear Laboratories. Applicants must be familiar with alpha and gamma spectroscopy, gas flow proportional counting, liquid and crystal scintillation, radioisotope concentration/separation techniques, thermoluminescent dosimetry, computer programming (Fortran 77), and statistical reduction of counting data. Experience in the areas of nuclear power and radioecology as well as public and regulatory administration is also desirable. Willingness to travel mandatory.

Salary: \$23,400 to \$35,500 annually
Location: 50% Springfield, 50% other locations throughout Illinois

For either Position Contact:

David D. Ed, Manager
Office of Technical Support
Illinois Department of Nuclear Safety
1035 Outer Park Drive
Springfield, IL 62704
(217) 546-8100

Postdoctoral Fellows SK&F - Tumor Biology

We are seeking outstanding individuals to join a multidisciplinary team seeking novel therapeutic agents for the treatment of human colon carcinoma. The successful candidates will join an established effort investigating several aspects of the pathogenesis of colon adenocarcinoma, including the participation of oncogenes in tumor progression, growth regulation of the colon mucosa by gastrointestinal peptides and the regulation of epithelial cell differentiation and proliferation by endo-, para- and autocrinological control mechanisms. Specifically, we are interested in recruiting individuals to work on the following projects:

- Generation and control of phenotypic heterogeneity in human colon carcinoma cell populations.
- DNA methylation as a potential pharmacological target for the modulation of tumor cell behavior.
- The role of oncogenes in the growth regulation of the colon epithelial cells.
- Reconstitution of the colon epithelial extracellular matrix and its influence on mucosal proliferation, differentiation and hormonal responsiveness.

Candidates should have:

- A Ph.D. in Cell Biology/Biochemistry/Molecular Genetics
- 0-3 years postdoctoral experience
- Research experience in the project of interest
- A growing publication record
- Clear and concise communication skills

We offer excellent compensation and benefits, an attractive relocation policy and a work environment that offers considerable opportunity for personal and professional growth. For confidential consideration, send your curriculum vitae and names of three references to Walter B. Flagg, Senior Employment Consultant, SMITHKLINE BECKMAN CORPORATION, 1590 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
A SmithKline Beckman Company

Associate Senior Investigator Morphologic Pathology

Smith Kline and French Laboratories, a leader in pharmaceutical research, is seeking an experienced scientist with a background in cell biology, pathology or anatomy to assist with the scientific and supervisory requirements of the morphologic pathology unit located in suburban Philadelphia.

The successful candidate will:

- supervise three Associate Histologists and seven Histotechnologists, monitoring laboratory productivity and quality and coordinating laboratory efforts.
- assume leadership role in developing improved procedures and in implementing new procedures.
- conduct independent investigational studies relevant to the pathobiology of therapeutic agents and the drug development process.
- collaborate with morphological pathologists to complete investigational studies which require unique technical input or which differ considerably from routine tissue processing.
- interact with investigators in Research Departments, and in conjunction with the Associate Director of Pathology or Departmental Pathologists, determine if morphological assistance would support research efforts and if support can be provided by the Histology Laboratory Staff.

Candidates are required to have:

- a Ph.D. in Anatomy, Cell Biology, Pathology or demonstrated equivalent experience (4 to 5 years laboratory experience in one of the aforementioned disciplines and research publications which demonstrate independent research efforts).
- competence in histotechnology including tissue processing, staining technology and experience with various embedding materials.
- experience in immunohistochemistry and histochemistry.
- supervisory experience.

We offer excellent compensation and benefits, an attractive relocation policy and a work environment that offers considerable opportunity for personal and professional growth. For confidential consideration, send your resume and names of three references to: Walter B. Flagg, Senior Employment Consultant, SmithKline Beckman Corporation, 1584 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
A SmithKline Beckman Company

POSITIONS OPEN

CLINICAL NEUROSCIENTIST

Applicant should have an M.D./Ph.D. degree with at least 3 years of postdoctoral experience in neuroanatomical research. Experience in EM-immuno-histochemistry and Golgi-EM techniques required. Starting date: July 1985. Send curriculum vitae to: N. A. MacDougall, Department of Neurology, Box 394, University of Virginia Medical Center, Charlottesville, Virginia 22908.

DEAN
College of Arts and Sciences
The University of Wyoming

The University of Wyoming invites applications and nominations for Dean of the College of Arts and Sciences. Candidates are expected to have an earned doctorate, a record of excellence in scholarship and teaching, demonstrated abilities of administration and leadership, and a commitment to liberal education. The College of Arts and Sciences is composed of about 400 faculty members and enrolls over 30 percent of the 10,000 students at the university. There are 23 departments in the college in the areas of humanities, fine arts, social sciences, biological and physical sciences, and mathematics. Most departments offer one or more advanced degrees, and there are nine doctoral programs. Central roles for the College of Arts and Sciences are to maintain quality undergraduate programs benefiting the entire university and to support graduate studies and faculty research. Because the university is the only 4-year institution of higher learning in Wyoming, its colleges are also deeply committed to off-campus service and interaction with the state's seven community colleges. Inquiries and nominations, including the candidate's résumé and at least three letters of recommendation, should be received prior to 15 February 1985 by:

Professor Leon E. Borgman
Chair, Search Committee
c/o Office of the Dean
College of Arts and Sciences
University of Wyoming
Laramie, Wyoming 82071

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

POSITIONS OPEN

DEVELOPMENTAL BIOLOGIST

ASSISTANT PROFESSOR, tenure-track. Preference will be given to those using contemporary molecular techniques to study eukaryotic systems. The candidate is expected to establish a vigorous research program capable of attracting extramural funding. Responsibilities include supervising M.S. and Ph.D. students and teaching a course in developmental biology and a graduate course in specialty area. Postdoctoral experience preferred. Send curriculum vitae, statement of research plans and teaching interests, graduate transcripts, and names and telephone numbers of four references to: Dr. Glen Collier, Department of Biological Sciences, Illinois State University, Normal, Illinois 61761. Evaluation of applications will begin 1 February 1985.

Illinois State University is an Equal Opportunity/Affirmative Action University.

U.S. CONSUMER PRODUCT SAFETY COMMISSION

Director, Associate Executive Director for Health Sciences. Responsible for management of Consumer Product Safety Commission's Health Science Program. Must have a degree and at least 6 years of experience in field relating to health sciences, biological sciences, or related sciences. Senior Executive Service position, \$59,223 to \$69,900. Send SF-171 (application for federal employment) to: Consumer Product Safety Commission, 5401 Westbard Avenue, Room 300, Bethesda, Md. 20207, attention: Beverly McGrath.

FORENSIC SCIENCE/CRIMINALISTICS. Subject to availability of funds, tenure-track position at junior or senior level effective fall 1985. Applicants should have Ph.D. in appropriate discipline; ABD's nearing completion of degree will be considered. Send résumé, names and addresses of three references, and set of off-prints to: Dr. Michael D. Maltz, Chair, Faculty Recruitment Committee, Department of Criminal Justice, University of Illinois at Chicago, Box 4348, Chicago, Ill. 60680. Deadline for applications: 15 January 1985. *The University of Illinois at Chicago is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

We invite applications for the position of **DIRECTOR** of the Division of Hematology in the Department of Medicine of Jefferson Medical College and head of the Cardeza Foundation for Hematologic Research. The director is responsible for the organization and implementation of programs of research, teaching and clinical programs at Jefferson Medical College of Thomas Jefferson University. Please respond with curriculum vitae to: Willis C. Maddrey, M.D., Chairman, Department of Medicine, Jefferson Medical College, 1025 Walnut Street, Philadelphia, Pa. 19107.

The Institute of Neuroscience and the Biology Department at the University of Oregon seek a **NEW FACULTY MEMBER**. Extensive opportunities exist for scientific interaction with molecular biologists, chemists, and psychologists both within and outside the Institute. A concurrent search is being made for a neurochemist. The major criteria for selection will be promise of an outstanding research career and potential for productive interaction with colleagues. We anticipate filling this position at the assistant professor level, although more senior candidates will be considered. Interested persons should forward curriculum vitae, a statement of research interests, and at least three letters of recommendation to: Neuroscience Search, Institute of Neuroscience, University of Oregon, Eugene, Ore. 97403. Closing date is 1 February 1985. *The University of Oregon is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION Instructor/Assistant Professor

Postdoctoral experience and a commitment to research and teaching required.

Candidates interested to participate in a project in nutritional aspects of cancer preferred. However, qualified candidates in other areas of research interest that can generate grant money will be considered.

Send curriculum vitae and names of three references immediately to: Dr. Shukri El-Khatib, Chairman, Department of Biochemistry, Universidad Central del Caribe, School of Medicine, Box 935, Cayey, Puerto Rico 00634.

Affirmative Action Employer

UNIVERSITY OF MISSOURI-ST. LOUIS SCHOOL OF OPTOMETRY FACULTY POSITIONS



The University of Missouri-St. Louis School of Optometry is seeking two faculty members, with Ph.D. degrees, or O.D./Ph.D. degrees, working in areas of vision science. Specific responsibilities could include teaching courses in some of the following areas: visual psychophysics, visual neurophysiology, binocular vision, gross anatomy, or neuroanatomy. Applicants should be active researchers. Evidence of scholarly research activities, in the form of published articles in refereed journals and papers presented at professional meetings will be heavily weighted, as well as evidence of teaching ability. The persons selected will be expected to develop new research proposals and to obtain support for new or continuing research activities. Post-doctoral research experience is desirable.

Rank and salary will be commensurate with experience. The dates of appointment are negotiable. Letters of application with current resumes, including the names of three references, should be submitted no later than February 15, 1985 to:

Dr. Jerry L. Christensen
Dean, School of Optometry
University of Missouri-St. Louis
8001 Natural Bridge Road
St. Louis, Missouri 63121

The University of Missouri is an equal employment and education opportunity institution.

FACULTY APPOINTMENTS IN MOLECULAR BIOLOGY

The E. A. Doisy Department of Biochemistry at St. Louis University School of Medicine intends to develop a center of excellence in Molecular Biology. Three appointments were made so far, and at least four more tenure track appointments in this area will be made over the next three years. At least one appointment can be made at the Associate or Full Professor level. This represents a major expansion of the interdisciplinary, multidisciplinary Cell and Molecular Biology program at St. Louis University School of Medicine. Applicants should be capable of developing a strong, independent research program employing molecular biological, genetic, and/or biophysical approaches to address fundamental biological questions, and/or studies of the molecular bases of human disease. Excellent start-up funds and salary are available. Send curriculum vitae, description of research plans, and names of three references by February 1, 1985 to:

Dr. William S. Sly
Chairman
Department of Biochemistry
St. Louis University School of Medicine
St. Louis, Missouri 63104

CELLULAR AND MOLECULAR BIOLOGY OF NEOPLASIA

The Department of Medicine, Oregon Health Sciences University has initiated a comprehensive development program for the Division of Hematology & Medical Oncology. The department expects to fill two full-time assistant or associate professorships during the current academic year with individuals who have completed clinical training in medical oncology or oncology/hematology and whose investigative interests relate directly to cellular and/or molecular biology of the neoplastic process. Although the minimum requirement is the MD degree, the positions are otherwise broadly defined and will be filled on the basis of excellence.

Please submit by February 10, 1985, curriculum vitae, copies of selected publications, a brief statement (one page) of research interests and the names of three references to:

Grover C. Bagby, Jr., M.D.
Head, Division of Hematology
& Medical Oncology
Oregon Health Sciences University
3181 SW Sam Jackson Park Road
Portland, OR 97201

Review of applications will begin December 10, 1984.

Oregon Health Sciences University is an affirmative action, equal opportunity employer.

Program Manager MATHEMATICIAN

The Air Force Office of Scientific Research, Air Force Systems Command, located at Bolling Air Force Base, Washington, DC, invites applications from U.S. citizens qualified to manage an established program of basic research in applied mathematics. The successful applicant will manage the United States Air Force program of basic research grants and contracts in areas that involve applied analysis, mathematical optimization, and finite mathematics. The Program Manager will have multi-disciplinary interactions with the program areas of mathematical research in signal processing and communication, dynamics and control, and computer science. The ability to communicate effectively with leading scientists and senior Government officials is crucial. A PhD or equivalent in mathematics is desired, along with a solid record of research and publications. The position is career civil service GM-13 (\$36,327-\$47,226 per year) or GM-14 (\$42,928-\$55,807 per year) depending on qualifications. No prior Government service is required. Send Office of Personnel Management Standard Form 171 "Personnel Qualifications Statement," and/or resume and list of publications to:

Civilian Personnel Office
1776 ABW/DPCS
ATTN: Mrs. Hittinger
Andrews AFB, MD 20331

Include Announcement #800-84 on your application.

Applications must be received by January 21, 1985.

For further information, contact Dr. D. W. Fox, Director of Mathematical and Information Sciences, AFOSR, (202) 767-5025 or AUTOVON 297-5025.

AN EQUAL OPPORTUNITY EMPLOYER

A MEMBRANE LIPID BIOCHEMIST

We are a research based European pharmaceutical company.

We are looking for an enthusiastic, energetic scientist with experience in membrane lipid biochemistry.

This individual would have the *unique* opportunity of being involved in an interdisciplinary preclinical project which will bridge research in a variety of areas with particular emphasis on the *central nervous* system.

This position will be in the framework of a novel collaborative effort between university and industrial research in the pharmaceutical field.

The job will entail a two year training period in the USA followed by a permanent position in our research in one of the western European countries.

All interested should send application, resumes and a list of at least 3 references to the review, Box 285, *Science*.

KING SAUD UNIVERSITY (Formerly University of Riyadh) RIYADH, SAUDI ARABIA COLLEGE OF AGRICULTURE

King Saud University has vacant faculty positions of Professor, Associate Professor, and Assistant Professor for Ph.D. holders and/or holders of academic titles earned at accredited universities who would be employed on contract basis as of commencement of the academic year 1985-86, which begins on July 27, 1985. THE LANGUAGE OF INSTRUCTION AT THE COLLEGE IS ARABIC. THE COLLEGE HAS THE FOLLOWING DEPARTMENTS:

ANIMAL PRODUCTION

PLANT PROTECTION

AGRICULTURAL ENGINEERING

AGRICULTURAL ECONOMICS AND RURAL COMMUNITY

SOIL SCIENCE

FOOD SCIENCE

PLANT PRODUCTION

NUTRITION AND HOME ECONOMICS

NOTEWORTHY BENEFITS:

1. Free return air tickets annually for faculty member and family.
2. Furnished accommodation or housing and furnishing allowances.
3. Monthly transport allowance.
4. Relocation allowance.
5. End-of-service gratuity.
6. Free medical and dental care covering family.
7. Contribution by University to tuition fees of non-Arabic-speaking children.

Interested academicians are kindly requested to send non-returnable photocopies of their academic diplomas and specialized experience certificates together with their resumes (including lists of their publications and references) and written applications indicating the position applied for and the subjects qualified to teach to:

Dean, College of Agriculture
King Saud University
P. O. Box 2460
Riyadh 11451, Saudi Arabia

and

Ms. Aida Ganim
King Saud University Office
2425 West Loop South, Suite 450
Houston, TX 77027 USA

Address and telephone number, if available, should also be included so that applicant may be contacted for interview.

POSITIONS OPEN

ENVIRONMENT, TECHNOLOGY, AND SOCIETY CLARK UNIVERSITY

The tenure-track position advertised on 26 October (*SCIENCE*, page 476) begins fall 1985. Applications accepted until 1 February 1985.

EXPERIMENTAL PSYCHOLOGIST

Applications are invited for a new appointment in the Department which is open to those who have active research interests in some aspect of the psychology of perception. The facilities which are available are excellent, as is the support which the University provides for active research programmes.

Salary ranges for 1985-1986 will be: assistant professor: \$26,398 to \$38,002; associate professor: \$32,729 to \$52,242; professor: \$41,167 to \$64,374.

Applications, which should include curriculum vitae, the names of three referees, and reprints of recent publications, should be sent to:

Dr. Henry James
Department of Psychology
Mount Allison University

Sackville, New Brunswick, Canada E0A 3C0

Closing date for receipt of applications is 31 January 1985.

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL INVITES APPLICATIONS FOR POSITION AS TENURE-TRACK FACULTY MEMBER TO DEVELOP PROGRAM IN MOLECULAR GENETICS OF THE CENTRAL NERVOUS SYSTEM.

Qualifications: Research background in recombinant DNA technology (preferably also in somatic cell genetics) and working knowledge of the nervous system. M.D. and/or Ph.D. in appropriate field. Successful candidate will establish and direct operations of a new laboratory in the Biological Sciences Research Center (a multidisciplinary facility for research relating to developmental disorders of the central nervous system) and hold a tenure-track appointment (assistant or associate professor, depending upon qualifications) in the Department of Biochemistry or Physiology. Joint appointments in relevant academic clinical departments are also possible. Laboratory space and basic equipment will be provided. Initial laboratory support is also available. The successful candidate will devote the majority of his/her effort to establish and maintain an independent research program related to neurobiology.

Applicants should send curriculum vitae, a brief description of past and present research experience, and the names of three or more references to: **John S. Kizer, M.D., Biological Sciences Research Center, 220H, University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27514. Minorities and women are encouraged to identify themselves voluntarily. An Affirmative Action/Equal Opportunity Employer.**

GROUP LEADER, MICROBIAL FERMENTATIONS

Enzyme Technology Corporation, a manufacturer of both bulk and specialty enzymes, seeks an experienced individual to lead a group of scientists whose primary responsibility is to develop our microbial fermentation processes through pilot plant scale.

The position requires an individual holding a Ph.D. in microbiology or a related field and 5 or more years of experience in an industrial microbiology setting. Previous experience in project and budget planning, as well as supervisory experience, are an asset, as these are a part of the responsibilities of the position.

Qualified candidates should submit a résumé with complete salary history to:

Employment Coordinator
Enzyme Technology Corporation
783 U.S. 250 East
Ashland, Ohio 44803

Enzyme Technology Corporation is an Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS: Three new tenure-track assistant professor positions are anticipated in the areas of: (i) **CELLULAR/MOLECULAR BIOLOGY**, (ii) **EXPERIMENTAL-THEORETICAL ECOLOGY**, and (iii) **COMPARATIVE BIOCHEMISTRY/COMPARATIVE TOXICOLOGY**. Teaching responsibilities will include an advanced course in the specialty area and teaching an introductory course in alternate semesters. Candidates must have the Ph.D. degree, and postdoctoral experience is preferred. Applicants should correspond with the appropriate search committee and include curriculum vitae, teaching copies, a statement of research and teaching interests, and names of three references by 1 February 1985.

Department of Zoology and Physiology
Louisiana State University
Baton Rouge, La. 70803

Louisiana State University is an Equal Opportunity Employer.

FACULTY POSITION AT YALE UNIVERSITY SCHOOL OF MEDICINE

A junior faculty position for a virologist with training and experience in molecular virology is available immediately in the Section of Comparative Medicine. Research interests within the section include the pathogenesis of viral diseases of rodents, development of animal models of human disease, and development of diagnostic tests for rodent virus infections. Current interests include murine coronaviruses, Sendai and ectromelia viruses, and rodent parvoviruses. Applicants should be familiar with the application of molecular techniques to viral diagnosis, pathogenesis, and epizootiology. Salary is negotiable. Applicants should send curriculum vitae and names and addresses of three references by 18 January 1985 to: **Dr. Abigail L. Smith, Section of Comparative Medicine, Yale University School of Medicine, 375 Congress Avenue, New Haven, Conn. 06510. Yale University is an Equal Opportunity/Affirmative Action Employer.**

UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA) SCHOOL OF MEDICINE DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY FACULTY POSITION

Academic appointment for an Assistant Professor in a tenure-track position is available for an individual with training and research experience in the area of immunoparasitology. Applicant must possess a doctoral degree and postdoctoral experience in the general fields of parasitology and immunology with training in molecular biology. Molecular biologists with interests in parasitology will also be considered and are encouraged to apply. Applicant must be able to develop an independent research program and interact with individual members of the department whose interests are in the areas of microbiology and immunology. Responsibilities include participation in the departmental teaching of medical and graduate students, as well as development of graduate courses. Opportunities are available to interact with parasitologists from other departments.

Applicants should submit curriculum vitae, list of publications, a description of current and future interests, and names of three references. The deadline for receipt of application is 15 March 1985.

Complete application should be sent to:

Benjamin Bonavida, Ph.D., Professor
Chairman of the Search Committee
Department of Microbiology and Immunology
UCLA School of Medicine
Los Angeles, California 90025

UCLA is an Equal Opportunity/Affirmative Action Employer.

The **RESEARCH SCHOOL OF CHEMISTRY** of the **AUSTRALIAN NATIONAL UNIVERSITY** invites applications for a tenured appointment at the level of **FELLOW/SENIOR FELLOW** in biological chemistry, to establish a small independent research group working in the interface between biology and chemistry. Appointment for 5 years initially; reappointment to retiring age subject to satisfactory review of performance. Salary ranges: fellow, \$A28,958 to \$38,796; senior fellow, \$A38,847 to \$45,279 per annum (\$A1:Stg. 68P:U.S.\$86). Reasonable travel expenses. Assistance with housing. Superannuation. Closing date: 28 February 1985. Further information from: **The Acting Registrar, The Australian National University, G.P.O. Box 4, Canberra, ACT 2601, Australia.**

The University is an Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITION FACULTY OF PHARMACY UNIVERSITY OF TORONTO

Applications are invited for a tenure-stream appointment at the level of assistant professor and commencing immediately. Candidates must hold a Pharm.D. degree and have at least 3 years of post-doctoral research training in the field of drug toxicology. It is expected that the candidate will have demonstrated an ability to function as an independent investigator, as evidenced by grants and publications and should have experience in teaching toxicology at the undergraduate and graduate levels. The candidate will be expected to develop an independent programme of research, to supervise graduate students, and to develop collaborative associations with existing investigators in the faculty and elsewhere within the university. Upon arrival, the candidate will be required to develop and teach undergraduate courses in toxicology in the Faculty of Pharmacy, and in the baccalaureate program of toxicology in the Faculty of Arts and Science. At the graduate level, the candidate will be expected to teach in a number of toxicology courses in the School of Graduate Studies. *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and landed immigrants.* Send curriculum vitae, the names of three referees, and a brief outline of future research by 15 January 1985 to: **Dean, Faculty of Pharmacy, University of Toronto, 19 Russell Street, Toronto, Ontario, Canada M5S 1A1.**

FACULTY POSITION-ASSISTANT PROFESSOR and CHIEF, Data Processing Facility in the School of Veterinary Medicine at Louisiana State University. Salary commensurate with academic training and experience. Qualifications include D.V.M. or comparable biomedical degree and Ph.D. with emphasis in biomedical statistics and computing, or Ph.D. in biomedical statistics with 3 to 5 years experience in biomedical statistical and computing support and consultation. Responsibilities of the Data Processing Facility include school-wide computing and database management; to provide biomedical statistical consultation to administrators and faculty-scientists and participate in research programs; and participate in teaching of professional and graduate students. Tenure-track professional appointment will be in the Department of Epidemiology and Community Health. Applicants should submit curriculum vitae and names of three references to: **Dr. Kirklyn M. Kerr, Assistant Dean for Research and Advanced Studies, School of Veterinary Medicine, Louisiana State University and A & M College, Baton Rouge, La. 70803-5606.**

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

FACULTY POSITIONS IN PHARMACOLOGY

The Department of Pharmacology and the Comprehensive Cancer Center at the University of Alabama in Birmingham invite applications for two tenure-track faculty positions. Applicants should have postdoctoral research experience and have the potential to attract research support and to establish an independent research program. Applicants with an interest and background in molecular pharmacology focusing on drug-DNA interaction, modulation of gene expression, and mechanisms of drug resistance are encouraged to apply. Responsibilities include teaching in graduate and medical education programs and participation in doctoral and postdoctoral training. Applications, including curriculum vitae and plans for future research, should be sent to: **Dr. Robert B. Diasio, Department of Pharmacology and Comprehensive Cancer Center, University of Alabama in Birmingham, Birmingham, Ala. 35294. An Equal Opportunity/Affirmative Action Employer.**

The Digestive Diseases Division of the Uniformed Services University is seeking applicants with a strong background in **GENERAL PHYSIOLOGY** and, if possible, in **COMPUTER SCIENCE**. The incumbent should have a Ph.D. The successful candidate would be responsible for the initiation of his/her own research project and work in close collaboration with physicians actively involved in studies of the upper gastrointestinal tract in animals and humans relevant to digestive diseases. Salary based on applicant's qualifications. Interested candidates should submit curriculum vitae, bibliography, and names of three references to: **Directorate of Civilian Personnel, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Maryland 20814-4799.** Applications will not be returned. *The Uniformed Services University is an Equal Opportunity/Affirmative Action Employer.*

Pharmaceutical Research Immunochemistry—Drug Metabolism Ann Arbor, Michigan

Continued expansion of the Warner-Lambert/Parke-Davis Pharmaceutical Research Division has created the need for a Scientist/Senior Scientist in two sections of our Pharmacokinetics-Drug Metabolism Department:

Immunochemistry

The successful candidate for this position will be responsible for initiating development and synthesis of appropriate antigens and production of antibodies with optimum binding characteristics for assay development. Major emphasis will be on identification and preparation of appropriate chemical derivatives of drugs for development of sensitive immunoassays in biological fluids.

Position requirements include a Ph. D. degree or equivalent in chemistry, pharmaceutical chemistry or closely related field, with strong background in immunochemistry. Expertise in development of immunoassays for drugs in biological fluids involving preparation of radio-, or other ligands is preferred.

Drug Metabolism

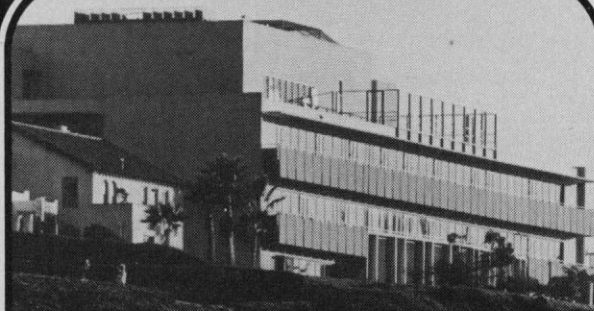
The successful candidate for this position will be responsible for development of analytical methods (LC, GC, MS) suitable for trace analysis of drugs and metabolites in biological fluids, and application of these methods to elucidate metabolic pathways of drugs in experimental animals and men. Much of this work will also include radiotracer methods. Other duties will include study design, data evaluation, and report writing (publishing is strongly encouraged).

Position requirements include a Ph. D. degree or equivalent in drug metabolism or closely related field with strong background in chemistry. Expertise in chemistry, chemical analysis, metabolite and identification, radiotracer work, and pharmacokinetics is preferred.

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

Join the exciting Research and Development team of this dynamic, expanding organization and enjoy an outstanding compensation plan and environment. Qualified applicants should send a resume and salary requirements in confidence to: Ms. M. Wolin, Senior Human Resources Representative, WARNER-LAMBERT/PARKE-DAVIS, Dept. 3384, 2800 Plymouth Road, Ann Arbor, MI 48105. An Equal Opportunity Employer M/F/H.

**WARNER
LAMBERT**



SIBIA is an established biotechnology company involved in a wide spectrum of innovative research programs. SIBIA, with a staff comprised of leading scientific members and with close ties to very senior academic consultants, provides an exceptional scientific research environment in which to work plus a modern laboratory located near the ocean on Coast Boulevard in La Jolla. The broad range of research programs encourages multidisciplinary interaction. Positions open are:

RESEARCH ASSOCIATES

MOLECULAR CELL BIOLOGY

BS/MS in Molecular and Cellular Biology, Microbiology, or Biochemistry. Experience with recombinant DNA techniques such as cloning and nucleic acid hybridization analysis is required. Research experience in molecular cell biology of:

- Animal Virus Systems
- Yeast Systems
- Mammalian Systems
- Plant Systems

NUCLEIC ACID CHEMISTRY/MOLECULAR BIOLOGY

BS/MS in Molecular and Cellular Biology, Biochemistry or Organic Chemistry with experience in nucleic acid chemistry and chemical modification of nucleotides. Research experience desirable in nucleic acid hybridization, DNA sequencing, oligonucleotide synthesis and purification.

PEPTIDE CHEMISTRY

BS/MS in Organic Chemistry or Biochemistry with experience in modern techniques involved in the synthesis and characterization of natural peptides and peptides and peptide analogs.

FERMENTATION

BS/MS in Microbiology or Fermentation technology. Industrial experience preferred.

MICROBIOLOGY

BS/MS in Microbiology with experience in anaerobic microbiology. One position in procaryotic biochemistry, another in culturing and characterization plus procaryotic genetics and plasmid biology.

We offer a comprehensive benefits package and competitive salaries. For confidential consideration, please submit your curriculum vitae, a statement of research interests and goals, a list of publications, if applicable, and the names of three professional references to: SIBIA, DEPT. 4042, 505 COAST BOULEVARD SOUTH, LA JOLLA, CALIFORNIA 92037.



SIBIA

THE SALK INSTITUTE
BIOTECHNOLOGY/INDUSTRIAL
ASSOCIATES, INC.

SIBIA is an equal opportunity employer M/F/H/V

POSITIONS OPEN

The Department of Neurosciences, University of California, San Diego (UCSD), is seeking qualified applicants for a tenured position at the **FULL OR ASSOCIATE PROFESSOR** level. Candidates should have a Ph.D. or M.D. degree and be recognized as an authority in the area of comparative anatomy, physiology, or molecular biology with some interest in marine animals as demonstrated by a strong, independent research program in one or more of those areas. The position requires teaching of neurosciences at the graduate and medical school undergraduate levels. Opportunities exist for collaborative research with the broad, interdisciplinary neurosciences group at UCSD and the Scripps Institution of Oceanography. Salary will depend on qualifications of the applicants. All applications received by 28 February 1985 will receive thorough consideration. Send curriculum vitae, bibliography, and names and address of five references to: (SIO/FTE) **Dr. Robert Katzman, Department of Neurosciences, M-024, University of California, San Diego, La Jolla, California 92095.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

GENERAL BIOLOGY. One-year position (sabbatical replacement) to teach introductory biology courses designed for the major and nonmajor, as well as an upper-level course in an appropriate specialty. Starts 1 September 1985. Ph.D. is preferred; an ABD with a strong teaching background will be considered. Applicants should submit letter of application, curriculum vitae, and three letters of recommendation by 1 February 1985 to: **Dr. David Richard, Chair, Department of Biology, Rollins College, Winter Park, Fla. 32789.** *Equal Opportunity/Affirmative Action Employer.*

National Institutes of Health National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) Immunochemist

An **IMMUNOCHEMIST POSTDOCTORAL RESEARCH** position is available to study the membrane and cytoplasmic antigens of glioma-derived tissue culture lines. The presence of the antigenic proteins, their induction by differentiation agents, and their characterization are to be studied. A background in tissue culture and cell biology, as well as gel electrophoresis, is desirable.

Collaboration with other immunologists, molecular biologists, and tumor biochemist is essential. Immunochemistry laboratory facilities are available, as well as microcinematography, fluorescent microscopy, quantitative morphometrics image analysis and processing, and SEM-EDX (microanalysis), to study the antigenic characteristics of brain tumors.

This position will be in the Surgical Neurology Branch, NINCDS, National Institutes of Health, Public Health Service. Salary range for this staff fellowship position is \$27,000 to \$35,467 per year, commensurate with experience. Send curriculum vitae and three references to: **Janet E. Follin, Personnel Department, NINCDS, National Institutes of Health, 9000 Rockville Pike, Building 31, Room 8A23, Bethesda, Md. 20205.** *NIH is an Equal Opportunity Employer.* (For more information, telephone: Ms. Follin on 301-496-6334.)

INSTRUCTOR IN PHYSICS AND DIRECTOR OF PHYSICAL SCIENCE LABORATORIES. Nontenure-track position to begin September 1985. Master's degree required. To teach introductory physics courses and direct lower-division physics laboratories. Commitment to teaching in liberal arts institution required. Applications, résumés, and references to: **Leonard DiLillo, Dean, Centre College, Danville, Kentucky 40422.** *Equal Opportunity Employer.*

INVERTEBRATE ZOOLOGIST

ASSISTANT PROFESSOR: Tenure-track position available 1 July 1985. The Biology Department at Hamilton College seeks an invertebrate zoologist with a specialty other than ecology to complement existing faculty. The successful candidate will teach principles of biology for nonmajors and in alternating years courses in invertebrate biology and areas of specialty. Candidates should have postdoctoral experience with a demonstrated research accomplishment, a strong interest in liberal arts education, and an active research program involving students. Applications should be received by 21 January 1985 and include curriculum vitae, transcripts, and the names of three references. Send materials to: **Professor Tom Brady, Chairman, Biology Department, Hamilton College, Clinton, N.Y. 13323.**

Hamilton College is an Equal Opportunity Employer. Women and members of minority groups are strongly encouraged to apply.

POSITIONS OPEN

HEAD, DEPARTMENT OF BOTANY, North Carolina State University. Candidates for the position must have an earned doctorate in botany or related area, a distinguished record in research and teaching, and other scholarly and professional accomplishments. Preference given to candidates with demonstrated leadership abilities and a commitment to developing strong research and academic programs. Send curriculum vitae, names of three references, and a summary of research and teaching experiences by 15 February 1985 to: **Chairman, Nomination Committee, Dr. B. E. Caldwell, Head, Department of Genetics, Box 7620, North Carolina State University, Raleigh, N.C. 27695-7620.**

HISTOLOGIST/ICHTHYOLOGIST/ ELECTRON MICROSCOPIST

The Department of Life Sciences of Eastern New Mexico University seeks a person for a tenure-track position in fall 1985. This person must demonstrate excellent teaching ability and a commitment to research. Teaching responsibilities include histology, microtechnique, electron microscopy, ichthyology, and general biology. The successful applicant will also become curator of fishes and will be expected to carry on a research program in ichthyology and/or histology. Salary competitive and rank commensurate with qualifications. Send curriculum vitae, a statement of future research plans, and four letters of evaluation by 1 February 1985 to: **Dr. Gary S. Pfaffenberger, Chair, Search Committee, Department of Life Sciences, Eastern New Mexico University, Portales, New Mexico 88130.** *Eastern New Mexico University is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

IMMUNOLOGIST

M.S. or Ph.D. with experience in research on identification, characterization, and isolation of antigens and antibodies for well-established academic medical research group with solid financial basis. Please send curriculum vitae and references to: **Kurt Lange, M.D., FACP, FACC, Renal Section, Immunology, Lenox Hill Hospital, 100 East 77th Street, New York, N.Y. 10021.**

ISOTOPE GEOCHEMIST OR ECONOMIC GEOLOGIST/UNIVERSITY OF WASHINGTON

The Department of Geological Sciences invites applications for a tenure-track appointment at the assistant professor level with specialization in isotope geochemistry or economic geology. The position will be available in fall 1985. Candidates must hold a Ph.D. degree and be committed to establishing a nationally prominent research program. Applicants in isotope geochemistry should have experience in the measurement of isotopic abundances in radiogenic systems, and in the application of isotopic data in solving problems in petrology, crust and mantle evolution, or cosmochemistry. Applicants in economic geology should have a strong background in geochemistry with particular research interests in the application of chemical principles to the processes of ore genesis. Candidates will be expected to teach at both the undergraduate and graduate levels and to supervise graduate research.

Send letter of application, (including description of research interests), curriculum vitae, and names of four referees to: **Chairman, Search Committee, Department of Geological Sciences, AJ-20, University of Washington, Seattle, Washington 98195.**

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

DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY SCHOOL OF MEDICINE UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Is seeking outstanding candidates to fill two junior-level tenure-track positions in newly renovated laboratories. Demonstrated creativity and productivity with molecular or genetic approaches to prokaryotes, yeast or other fungi, or viruses is an essential criterion for employment. Interested candidates should immediately send curriculum vitae, statement of future research plans, and names of referees to:

**Microbiology Search Committee, S-412
Department of Microbiology and Immunology
University of California Medical Center
San Francisco, California 94143**

The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

LABORATORY MANAGER ARIZONA DEPARTMENT OF HEALTH SERVICES

\$24,610 to \$35,641

Manage chemistry section of State Health Laboratory.

Bachelor's degree in chemistry and 6 years of professional lab experience engaged in analytical, research, and consultative services. Master's degree in chemistry substitutes for 2 years of experience. Prefer environmental chemistry background, particularly environmental toxicological analytical procedures.

Send résumé by 4 January 1985 to: **Arizona State Personnel Division, Attention: Ruth Buckner, 1831 West Jefferson, Phoenix, Ariz. 85007.**

LEADER—PLANT MOLECULAR BIOLOGY CENTER

The College of Natural and Agricultural Sciences at the University of California, Riverside, is developing a Center of Excellence in Recombinant DNA Technology as applied to plants. We wish to appoint a senior scientist working in the area of plant molecular biology/recombinant DNA technology to provide leadership for the center. The appointment will be at the full professor level with an appointment in the Department of Biochemistry and the Agricultural Experiment Station. The center will bring together a consortium of scientists from the Department of Botany and Plant Sciences, Entomology, Plant Pathology, Biochemistry, and Biology. At least five additional tenure-track faculty appointment will be made in this area in the college over the next 3 years.

The center represents a major expansion of the multidisciplinary interests in biotechnology at the University of California, Riverside. Applicants should have an outstanding record in the application of recombinant DNA technology to plants and should be capable of establishing a strong, nationally recognized independent research program. Salary will be commensurate with experience. Teaching duties will be in the Department of Biochemistry in the area of recombinant DNA technology.

Qualified candidates should submit curriculum vitae and the names of three individuals who can provide letters of reference to: **Darold Holtz, Chair, Search Committee, Department of Biochemistry, University of California, Riverside, Riverside, Calif. 92521.**

Applications will be considered until a suitable candidate is found.

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

The Department of Chemistry of The University of Chicago invites applications for the position of **LECTURER IN ORGANIC CHEMISTRY.** This nontenure-track academic position will carry responsibility for the management and supervision of the undergraduate organic chemistry laboratories. It is expected that this person (with a Ph.D. in organic chemistry) will take an active part in the design of laboratory curriculum and experiments.

Qualified applicants should submit curriculum vitae and publication list and should arrange for two or more letters of recommendation to be sent to:

**Professor Donald H. Levy
Chairman, Department of Chemistry
The University of Chicago
5735 South Ellis Avenue
Chicago, Illinois 60637**

An Equal Opportunity/Affirmative Action Employer

MICROBIOLOGIST. The Department of Biology at Memphis State University is accepting applications for an anticipated tenure-track position at the assistant professor level available August 1985. A Ph.D. is required and postdoctoral experience is desirable. The area of microbiological research is open; however, investigators with an emphasis in microbial physiology will be given preference. The successful candidate will develop a strong research program and seek external support. Teaching duties include developing a graduate microbial physiology course and participation in the microbiology curriculum at the undergraduate and graduate levels. Memphis State University is a state-supported, urban university with more than 20,000 students. The Biology Department offers the B.S., M.S., and Ph.D. degrees. Applicants should send a letter of application, curriculum vitae, transcripts, three letters of recommendation, and a statement of research interests by 15 February 1985 to: **Dr. Lewis Coons, Chairman, Microbiology Search Committee, Department of Biology, Memphis State University, Memphis, Tenn. 38152.** *Memphis State University is an Equal Opportunity University.*

PHARMACOLOGIST/ PHYSIOLOGIST

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We offer a highly competitive compensation and benefits package. Interested candidates should send their resume with salary requirements and references to: **Dr. S.T. Toy, Employee Relations Dept., E.I. du Pont de Nemours & Co., Inc., Room X40925S, Wilmington, DE 19898.**



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VISION SCIENTIST

The Institute for Vision Research of the State College of Optometry, State University of New York, seeks an established vision scientist who has accomplishments in a research area with applicability to clinical problems. Areas of interest include, but are not limited to, infant vision and visual development, clinical psychophysics, low vision, and corneal physiology. This is primarily a research position, and there will also be opportunity for teaching in the PhD Program in Vision Science and the professional optometry program.

Rank, salary, and tenure status will be based on qualifications and experience. Starting date will be no later than September 1985.

Send a letter of application or inquiry by February 15, 1985 along with a curriculum vitae and statement of research interests to one of the co-chairmen of the search committee:

**Dean Yager, Director
Institute for Vision Research
212-420-5141**

**Jerome Sherman, Director of Professional Services
212-420-5004**

**State College of Optometry
State University of New York
100 E. 24 Street
New York, NY 10010**

EOE/AA

KING SAUD UNIVERSITY RIYADH, SAUDI ARABIA COLLEGE OF SCIENCE

The College of Science, King Saud University, has openings on contract basis, for faculty members of Professors, Associate Professors and Assistant Professors who hold Ph.D. and/or academic titles from accredited universities and also for graduate technicians, as of the commencement of the academic year 1985-86, which starts on July 27, 1985.

There are the following departments in the College of Science: CHEMISTRY, BIOCHEMISTRY, PHYSICS, ASTRONOMY, BOTANY, ZOOLOGY, GEOLOGY, MATHEMATICS AND STATISTICS.

Interested candidates are kindly requested to send non-returnable copies of their academic diplomas and specialized experience certificates together with their resumes, including lists of the publications and references, and written application indicating the position applied for and the subjects qualified to teach. Address and telephone number should also be indicated so that contact may be made if selected for interview. Letters of application should be sent to:

**DEAN OF THE COLLEGE OF SCIENCE
KING SAUD UNIVERSITY
P. O. BOX 2455
RIYADH 11451, SAUDI ARABIA**



NOTEWORTHY BENEFITS:

1. Annual prepaid leave of 45 days for technicians and 60 days for faculty members.
2. End of service gratuity at the rate of half of one month's salary for each year on completion of two years' service and at the rate of one month's salary for each year upon completion of five years' service.
3. University provides contractee and family at the end of each year with return air tickets (maximum four full tickets) to country of nationality or country where contractee has been a permanent resident for the last two years immediately preceding University employment.
4. Unless accomodation is provided, the applicable housing allowance (according to salary scales schedules) is paid by the University.
5. Unless furnished accomodation is provided by the University, a new contractee receives an amount equivalent to 50% of the applicable housing allowance as furnishing allowance, payable once only throughout term of employment on the condition that contractee has not previously been employed in Saudi Arabia.
6. A freight allowance equivalent to 50% of one month's salary is paid to the new contractee who has not been previously employed in Saudi Arabia upon appointment (once only).
7. Persons who were previously employed in Saudi Arabia are considered as new contractees in the sense used in items 5 and 6 above if a period of not less than one year has elapsed since they last left the Kingdom, provided that they had not been paid the allowances indicated in these two items during their former employment.
8. University may pay actual educational costs of up to four of contractee's non-Arabic-speaking children of ages between 6 and 18 within the limits of SR10,000 for the first child, SR7,500 for the second, SR5,000 for the third and SR2,500 for the fourth child.
9. Medical care is provided free of charge at University hospitals for contractee and family.

ADDITIONAL COPY OF WRITTEN DOCUMENTS MAY ALSO BE SENT TO: Mrs. Norma Carbonari, King Saud University Office, 2425 W. Loop S., No. 450, Houston, TX 77027 USA.

POSITIONS OPEN

THE UNIVERSITY OF CALGARY POSITION IN MEDICAL PHYSIOLOGY

A position is open in the Department of Medical Physiology in the Faculty of Medicine, the University of Calgary, Calgary, Alberta. The successful applicant will have the major portion of his or her time protected for the establishment of an independent laboratory for biophysical investigation of excitable or epithelial tissue. Applicants with expertise and experience in patch-clamp methodology or black-lipid membrane incorporation techniques will be given preference. Limited opportunities will be available to the successful applicant for the teaching of medical and graduate students.

The level of appointment and salary will be commensurate with experience and qualifications. The successful applicant will be expected to compete for support from the Alberta Heritage Foundation for Medical Research. *All qualified individuals are encouraged to apply, but preference will be given to Canadian citizens and permanent residents.*

Deadline for receipt of applications is 31 January 1985. Interested candidates should send their curriculum vitae, a brief description of field of interest, and the names of three referees to:

Dr. W. L. Veale
Professor and Head
Department of Medical Physiology
Faculty of Medicine
The University of Calgary
3330 Hospital Drive N.W.
Calgary, Alberta, Canada T2N 4N1

Tenure-track position in **MICROBIOLOGY**, South Bend Center for Medical Education, Indiana University School of Medicine. Applicants should have a Ph.D. and be capable of teaching a course in microbiology to first-year medical students. Candidates will be required to show evidence of strong research commitment; postdoctoral experience desirable. The 12-month appointment would begin summer 1985. Send curriculum vitae and letter describing current research activities, future goals, and teaching interests by 25 January 1985 to: **John F. O'Malley, Ph.D., Associate Director, South Bend Center for Medical Education, Haggard Hall, University of Notre Dame, Notre Dame, Ind. 46556.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR AND CELL BIOLOGY/BIOCHEMISTRY/BIPHYSICS Postdoctoral Opportunities

Broad range of membrane research projects: (i) nature of lipid-protein interaction in membranes; membrane dynamics; (ii) membrane reconstitution; (iii) enzyme and protein chemistry; (iv) cloning and site-specific mutagenesis of membrane proteins; (v) muscle physiology— Ca^{2+} release mechanism in excitation-contraction coupling.

Send curriculum vitae, bibliography, three letters of recommendation, and short statement regarding career goals, interest, and experience to: **Professor S. Fleischer, Department of Molecular Biology, Vanderbilt University, Nashville, Tenn. 37235.**

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MOLECULAR GENETICIST

The Department of Biology at the University of Miami seeks to fill a tenure-track appointment at the assistant or associate professor level to begin in August 1985. Candidates must be trained in the techniques of molecular genetics and have an interest in applying them to problems at the organismic level, in such areas as evolutionary and/or plant biology.

Applicants should provide a brief statement of research interests and plans, curriculum vitae, and not more than two reprints of published work or work in press. Three letters of reference, to be received by 15 February 1985, should be sent separately to:

Molecular Biology Search Committee
c/o James S. Clegg, Chair
Department of Biology
University of Miami
P.O. Box 249118
Coral Gables 33124

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POSTDOCTORAL FELLOW to study gene organization and expression in *Drosophila* utilizing molecular, biochemical, and genetic methods. Submit curriculum vitae and references to: **Dr. Arthur Chovnick, Molecular Genetics and Cell Biology Section, Box U-131, UNIVERSITY OF CONNECTICUT, Storrs, Conn. 06268** (Search number 4A250). *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

MOLECULAR GENETICIST

Ph.D. researcher/laboratory manager to join large, active, and exciting research group, carry out research projects within framework of the diverse interests of laboratory, and assume primary responsibility for radiation and biological safety orientation of incoming members of laboratory. Rank and salary appropriate to qualifications. Deadline for application is 1 March 1985. Send curriculum vitae to: **Sherman M. Weissman, M.D., Yale University School of Medicine, Department of Human Genetics, 333 Cedar Street, New Haven, Conn. 06510.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR GENETICS/ MOLECULAR BIOLOGY

Highly qualified molecular geneticists and molecular biologists are invited to apply for **TWO** tenure-track positions. One position will be filled at the level of assistant professor; the other may be filled at a more advanced level.

For one position, preference will be given to molecular geneticists specializing in a lower eukaryote; the second position will be filled by a highly qualified molecular biologist whose research is focused on a fundamental question of interest to geneticists.

All candidates should have demonstrated expertise in modern molecular genetic techniques and should have had at least a year of postdoctoral research experience. Each appointee will be expected to develop a vigorous research program, participate in teaching introductory genetics, and teach an advanced course in her/his area of research expertise.

Applicants should send curriculum vitae, including a summary of future research interests, and arrange to have three letters of recommendation sent to:

Dr. Gary Gussin, Genetics Search Committee, Department of Biology, University of Iowa, Iowa City, Iowa 52242.

Applications will be considered as they are received until the positions are filled. We expect to begin interviewing the best-qualified applicants 1 February 1985. *The University of Iowa is an Affirmative Action/Equal Opportunity Employer.*

PLANT CELL/DEVELOPMENTAL BIOLOGIST

The Department of Botany, University of Minnesota, invites applications for a tenure-track position at the assistant professor level beginning fall 1985. Preference will be given to individuals interested in differentiation in vascular plants and its control at the cellular and tissue levels to complement the present faculty in plant physiology and plant molecular biology. Applicants must have a Ph.D., a minimum of 1 year of postdoctoral experience, and thorough training in plant cell biology and vascular plant development. Responsibilities include implementation of a creative and vigorous research program and participation in undergraduate- and graduate-level teaching, including plant cell biology/morphogenesis. Please submit curriculum vitae, transcripts, reprints of research articles, a statement of professional goals, research interests, and teaching experience, and three letters of recommendation by 15 February 1985 to: **Dr. Willard L. Kouckari, Search Committee Chair, Department of Botany, 220 Biological Sciences Center, University of Minnesota, St. Paul, Minn. 55108.** *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

U.S. ENVIRONMENTAL PROTECTION AGENCY, JOB VACANCIES: ENVIRONMENTAL RESEARCH LABORATORY—CORVALLIS, OREGON Salary Range: \$25,489 to \$47,226

PLANT ECOLOGIST—Applicants must have a Ph.D. or equivalent experience in plant ecology. Independently conducts research on the application of laboratory methods to field situations to determine effects of chemicals on plant populations in the field. Serves as a project leader to direct and coordinate in-house and extramural projects.

Acceptance date of applications: Until 4 January 1985. To obtain applications, contact: **The U.S. Office of Personnel Management, Seattle Regional Office, Federal Building, 915 Second Avenue, Seattle, Wash. 98174; telephone: (206-442-4365).**

Applicants must be U.S. Citizens. Environmental Protection Agency is an Equal Opportunity Employer.

POSITIONS OPEN

MUSEUM TECHNICIAN (2 years), *Lepidoptera* specialist. Also, **two part-time insect preparation positions.** Deadline: 15 January 1985. **Charles Hogue, Natural History Museum, 900 Exposition Boulevard, Los Angeles, Calif. 90007.** Telephone: 213-744-3363. *Equal Opportunity/Affirmative Action Employer.*

The **DEPARTMENT OF PHARMACOLOGY** invites applications for a tenure-track position. The level of appointment will be commensurate with qualifications, up to professor. Applicants should have teaching experience and expertise in the general area of neurogenetics, immunotoxicology, or molecular biology, with specific interest in the neurosciences and mental health. Candidates should exhibit evidence of an independent research program with independent funding from government or private sources. The successful candidate will have an opportunity to design laboratories in a recently acquired campus facility devoted to neuroscience and mental health. Applicants are requested to submit curriculum vitae and names of three references to: **Dr. Benjamin Weiss, Chairman, Pharmacology Search Committee, Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, Pa. 19129.** *Equal Opportunity Employer, M/F.*

The **DEPARTMENT OF PHARMACOLOGY AND INTERDISCIPLINARY TOXICOLOGY** at the University of Arkansas for Medical Sciences anticipates the availability of one of two positions in fall 1985. Applicants with research interests in CNS or cardiovascular pharmacology or toxicology, with an academic background suitable for appointment at the level of instructor or assistant professor are preferred, although applicants at other levels with other interests will be considered. Applicants should send curriculum vitae which includes the names and addresses of three references to: **D. E. McMillan, Chairman, Department of Pharmacology and Interdisciplinary Toxicology, University of Arkansas for Medical Sciences, 4301 West Markham Street, Little Rock, Arkansas 72205.**

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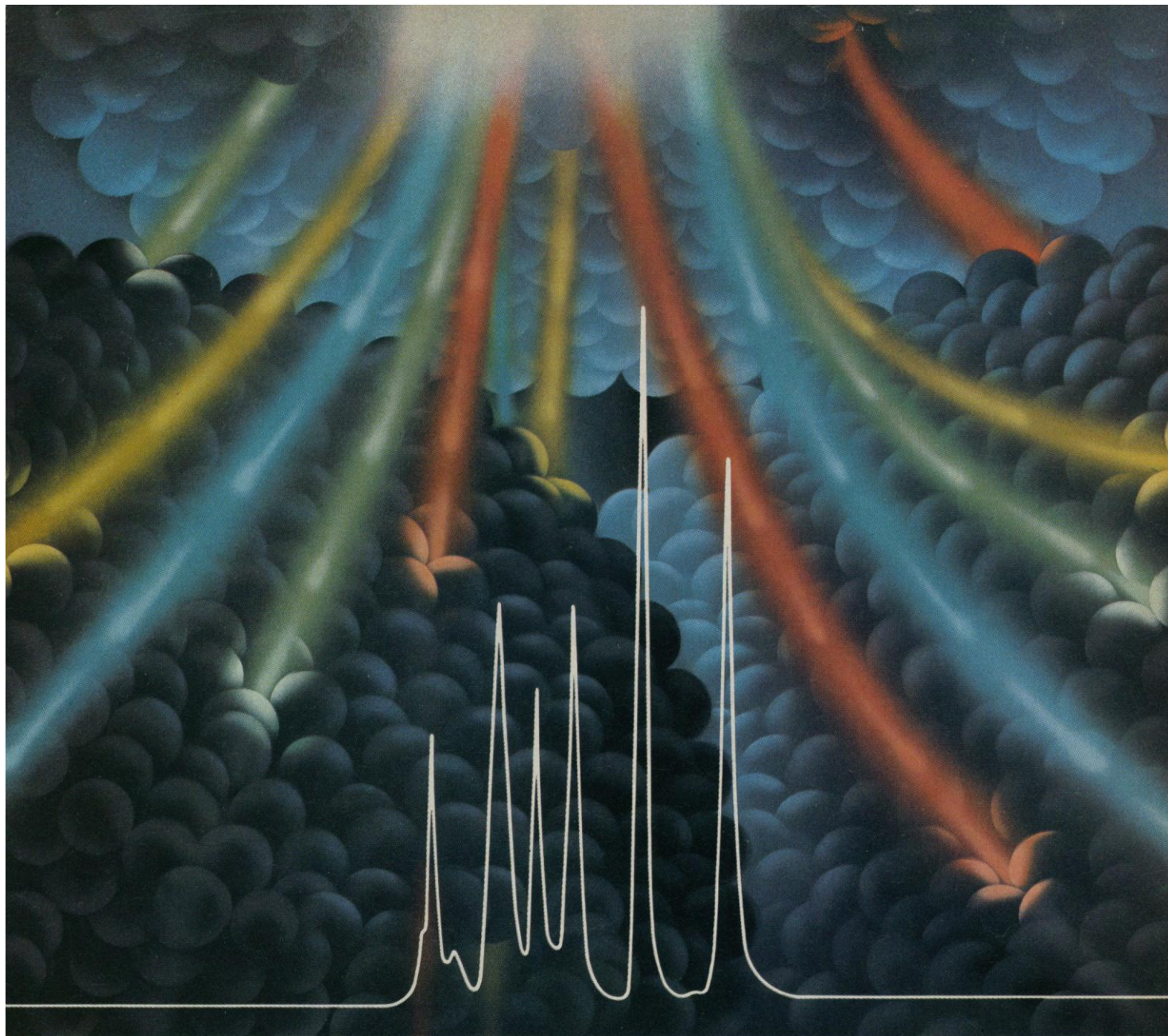
PHYSICAL OCEANOGRAPHER UNIVERSITY OF SOUTH CAROLINA

The Marine Science Program and Department of Geology anticipate a tenure-track faculty position in physical oceanography to begin in the academic year 1985-1986. Salary and rank are dependent upon qualifications; however, preference will be given to applicants at the assistant professor level. The Program seeks an applicant with specialty in either theoretical, numerical, or field oceanography. Active oceanographic research at University of South Carolina includes studies of estuarine and coastal circulation, mixing, and transport processes; thermohaline and deep-ocean mixing; paleoceanography and circulation; and physical-biological coupling in near-shore ecosystems. Applicants must have a Ph.D. degree, substantial qualifications in marine research, and a strong commitment to teaching and research. Submit résumé, a brief statement of research interests and names/addresses/telephone numbers of three references to: **Dr. Björn Kjerfve, Chairman, Search Committee, Marine Science Program, University of South Carolina, Columbia, S.C. 29208,** before 31 January 1985. *The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.*

PLANT ECOLOGIST—Tenure-track position to be filled at rank of assistant professor, available 1 July 1985. Responsibility for undergraduate courses in plant physiology and general biology plus graduate curricula in plant ecology. Research expertise in ecological plant physiology preferred. Ph.D. in biological science required. Please send letter of application, curriculum vitae, and three letters of recommendation by 31 January 1985 to: **Dr. Peter L. Starkweather, Chairman, Department of Biological Sciences, University of Nevada, Las Vegas, Las Vegas Nev. 89154.**

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POSTDOCTORAL FELLOW. Available immediately at \$17,000. Research involves the interactions of hepatotoxins with regulation of cytoplasmic calcium in cultured hepatocytes by ATP-dependent pumps. Recent Ph.D. experienced with ion pumps, phosphoproteins, phospholipids, or cell culture may send résumé with names and telephone numbers of three references to: **Dr. Leon Moore, Ph.D., Department of Pharmacology, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Md. 20814-4799.** *An Equal Opportunity/Affirmative Action Employer.*



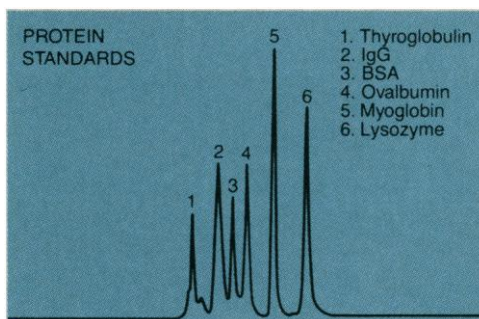
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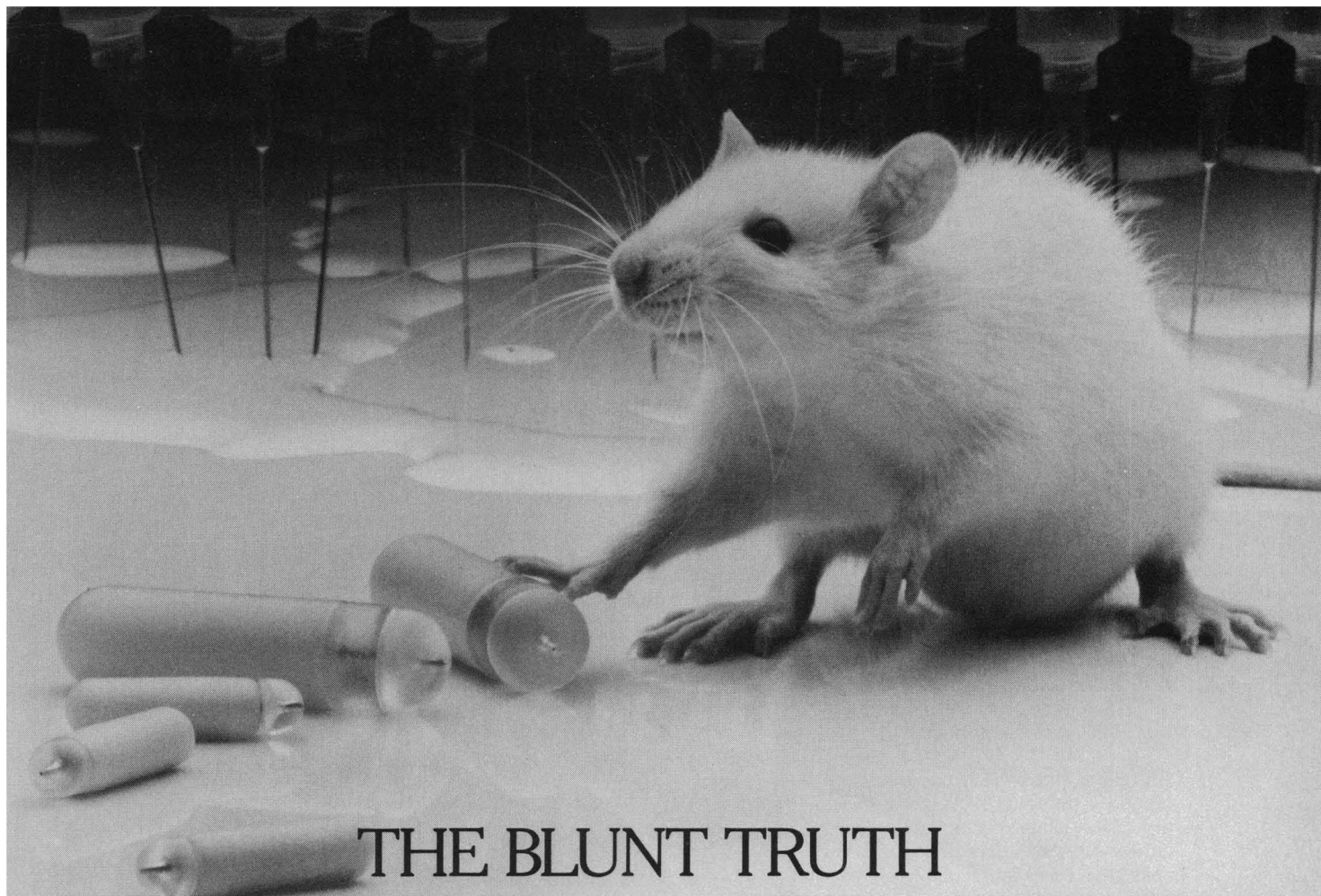
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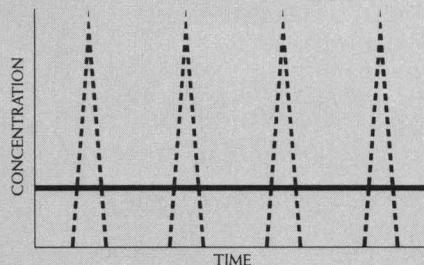
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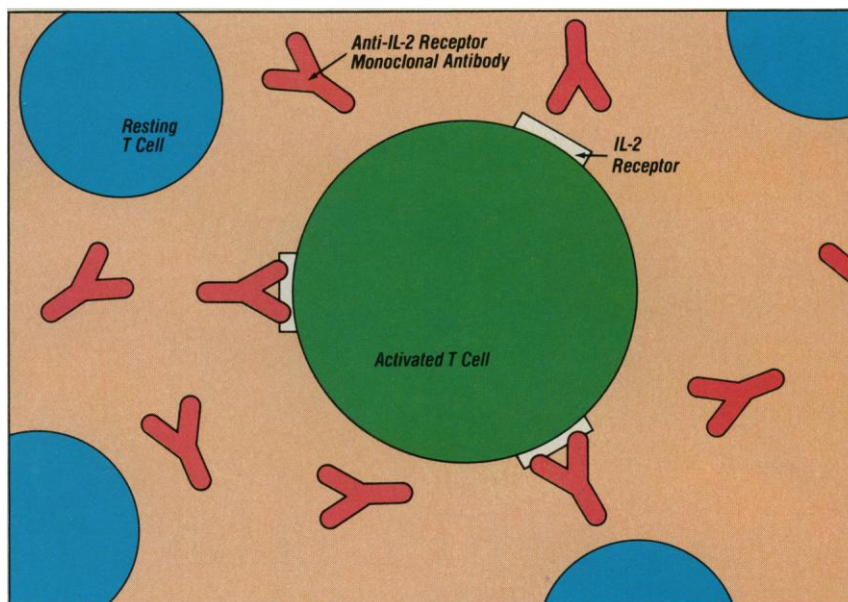
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Becton Dickinson's New Monoclonal ANTI-IL-2 RECEPTOR

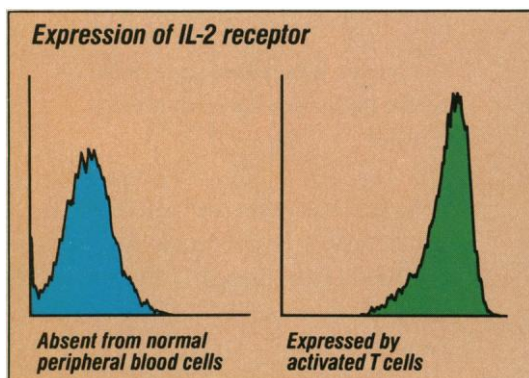
ANTI-IL-2 RECEPTOR specifically recognizes cells bearing the human receptor for interleukin-2 (T cell growth factor). This critical lymphokine receptor is not detected on normal resting peripheral blood cells but is expressed on mitogen and MLR-activated T lymphocytes.

ANTI-IL-2 RECEPTOR offers tremendous potential in clinical studies of T cell mediated response and disorders. Already, IL-2 receptor bearing cells have been found in:

- Infectious diseases
- Rheumatoid and other autoimmune diseases
- Leukemias
- Lymphomas
- Normal immune responses



IL-2 receptor (white) is expressed on "activated" T cells (green) and not on normal resting peripheral blood T cells (blue). ANTI-IL-2 Receptor (pink) specifically recognizes cells bearing the IL-2 receptor.



FACS™ analysis of IL-2 receptor on normal peripheral blood lymphocytes and mitogen-activated T cells.

Becton Dickinson offers ANTI-IL-2 RECEPTOR in purified form as well as FITC and phycoerythrin (PE)* conjugates. These directly conjugated antibodies allow you to perform convenient one-step assays and simultaneous two-color immunofluorescence by FACS™ analysis. ANTI-IL-2 RECEPTOR is the latest addition to Becton Dickinson's line of monoclonal reagents for studies of activated cells. Others include Anti-HLA-DR, Anti-HLA-DC (Leu-10), Anti-BrdU and Anti-Transferrin Receptor.

For more information on Becton Dickinson's ANTI-IL-2 RECEPTOR, including references to studies of IL-2 receptor expression, contact our Technical Service Department at our new Toll Free numbers. Also, ask for your free copy of *The Monoclonal Catalog*. This new catalog contains detailed descriptions of our monoclonal products, accessory reagents, FACS™ Cell Sorters, and the FACS™ Analyzer.

*Patent Pending

For research use only. Not for use in human therapeutic or diagnostic procedures.

BECTON DICKINSON

Superior Quality

Becton Dickinson Immunocytometry Systems

PO Box 7375
Mountain View, CA 94039
Toll Free (800) 223-8226
In CA, call (800) 821-9796

Denderstraat 24
B-9440 Erremodegem
Belgium
Tel 053/787830

Would you like to live in the Boston/Cambridge area and work adjacent to the MIT Campus? American Science and Engineering, Inc., is seeking individuals who enjoy physics and who wish to work in an industrial R&D environment. AS&E has been a world leader in the development of high resolution X-ray and gamma-ray imaging systems for space research, medical diagnostics, security inspection and defense related non-destructive testing for twenty-five years. AS&E scientists have made significant contributions to X-ray astronomy and solar physics including the discovery of the first non-solar celestial X-ray source. Our inventions have included the first practical X-ray telescope, the fourth generation CT scanner and the first film-safe X-ray inspection systems. Openings exist in the areas of diagnostic radiology and industrial computed tomography.

■ Experimental Physicists

There are opportunities to participate in the development of new techniques and applications of computer tomography and digital, diagnostic radiology. Research and development efforts involve new concepts in X-ray detection, X-ray scanning and new biomedical and industrial applications.

Candidates will work with other physicists and our EE, ME and software personnel. We require physicists with strong aptitude in supervising and carrying out an entire experiment involving electronics, mechanics, physics and software.

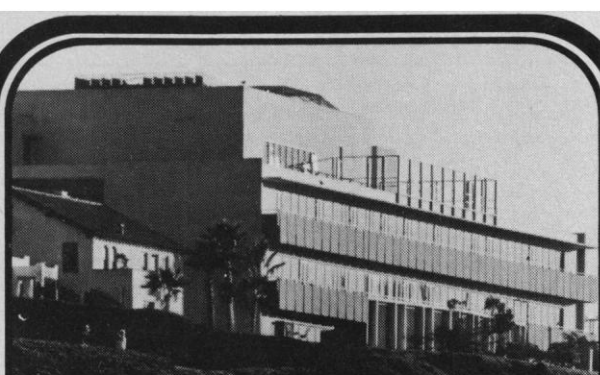
These positions require a Ph.D. in experimental physics, medical physics or observational astronomy and a background in photon detection or particle counting. Familiarity with computer controlled instrumentation or digital image processing would be helpful. Post-doctoral experience is desirable, but not required for these positions. The ability to write coherent scientific papers and technical proposals is mandatory.

Qualified candidates should call or send resume to John Loughlin, 1-800-225-1608.

AS&E is an Affirmative Action/Equal Opportunity Employer located in Cambridge, Massachusetts.

AS&E

**American Science and Engineering, Inc.
Fort Washington
Cambridge, Massachusetts 02139**



SIBIA is an established biotechnology company involved in a wide spectrum of innovative research programs. SIBIA, with a staff comprised of leading scientific members and with close ties to very senior academic consultants, provides an exceptional scientific research environment in which to work plus a modern laboratory located near the ocean on Coast Boulevard in La Jolla. The broad range of research programs encourages multidisciplinary interaction.

Positions open are:

STAFF RESEARCH SCIENTISTS

MOLECULAR CELL BIOLOGY

Ph.D. in Molecular Biology with 2-7 years of research experience in Molecular and Cellular Biology, including recombinant DNA and nucleic acid hybridization techniques as well as familiarity with gene regulation and expression in procaryotic and eucaryotic systems. Positions available for scientists with recombinant DNA and gene expression research experience in:

- Animal Virus Systems
- Yeast Systems
- Mammalian Systems
- Plant Systems

ENZYMOLGY

Ph.D. in Biochemistry with training and experience in enzyme purification, assay and characterization. Postdoctoral experience preferred.

We offer a comprehensive benefits package and competitive salaries. For confidential consideration, please submit your curriculum vitae, a statement of research interests and goals, a list of publications, if applicable, and the names of three professional references to: SIBIA, DEPT. 4043, 505 COAST BOULEVARD SOUTH, LA JOLLA, CALIFORNIA 92037.



SIBIA

**THE SALK INSTITUTE
BIOTECHNOLOGY/INDUSTRIAL
ASSOCIATES, INC.**

SIBIA is an equal opportunity employer M/F/H/V

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN HUMAN GENETICS

Postdoctoral research positions available in the molecular genetics of cancer. Research to include the molecular dissection, characterization, genetics, and expression of oncogenes, growth factors, and receptors in primary and metastatic tumors; the association of these genes with chromosomal abnormalities; and the human chromosomal mapping of these genes and DNA polymorphisms.

Background must include molecular genetics and recombinant DNA technology. Cytogenetics also preferred.

Send curriculum vitae, a short description of research plans, and names of three references to: Dr. Thomas B. Shows, Department of Human Genetics, Roswell Park Memorial Institute (RPMI), New York State Department of Health, 666 Elm Street, Buffalo, New York 14263. RPMI is a comprehensive cancer center and an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOW/ASSOCIATE. To study the mechanisms of action of selected toxins on the nervous system. Experience in HPLC, 2-D gels, and/or axonal transport is preferred. Contact: Dr. Peter S. Spencer, Director, Institute of Neurotoxicology, ALBERT EINSTEIN COLLEGE OF MEDICINE, 1300 Morris Park Avenue, Bronx, New York 10461. An Equal Opportunity Employer.

POSTDOCTORAL AND PREDOCTORAL POSITIONS in Duke University's Integrated Toxicology Training program will be available July 1985 in general toxicology, ecotoxicology, and specialized toxicology (for example, pulmonary toxicology, neurotoxicology). NIEHS-funded fellowships are for 2 or 3 years. Send curriculum vitae and three letters of reference to: Dr. Philip Pratt, Department of Pathology, Duke University Medical Center, Durham, N.C. 27710, or telephone: 919-286-0411, extension 6272 for information.

POSITIONS OPEN

PHYSIOLOGIST

Full-time research physiologist to work closely with group investigating the biomechanics of the musculoskeletal system. Expertise in two or more of the following areas: exercise physiology, motor control, cardiovascular physiology, biomechanics, computer programming, statistics. Position also requires teaching of general physiology course to first year medical students. Compensation and academic rank commensurate with experience. *We are an Equal Opportunity Employer.* Please send curriculum vitae to: Clifford M. Gross, Ph.D., Chairman, Department of Biomechanics, New York College of Osteopathic Medicine, New York Institute of Technology, Old Westbury, New York 11568. Telephone: 516-626-6926.

POSTDOCTORAL FELLOWS in molecular biology/applies computer science are available at the Dana-Farber Cancer Institute and the Bio-Statistics Department of the Harvard School of Public Health. Candidates must have a recent Ph.D. in molecular biology, molecular genetics, or computer science. The research will center on the problems of comparative analyses and identification of genetic sequence patterns. This will involve collaboration with active experimental molecular biologists and computer software developers. One position is available immediately and two are anticipated for 1 February 1985. Send curriculum vitae and three letters of reference to: Dr. Temple F. Smith, Dana-Farber Cancer Institute, 44 Binney Street, Room 1154, Boston, Mass. 02115. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE POSITIONS to study mechanisms of action of anticancer agents. Strong background in biochemistry and/or biochemical pharmacology with expertise in enzymology and nucleic acid chemistry desirable. Please send curriculum vitae and references to: Dr. Robert B. Diasio, Department of Pharmacology, University of Alabama in Birmingham, Birmingham, Ala. 35294. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW in behavioral neuroscience to study electrical activity (spontaneous slow waves, evoked potentials, units) of hippocampus and neocortex in relation to behavior. Salary: C\$18,000 to C\$20,700, per annum depending on experience. Send curriculum vitae and names of two references to: Dr. C. H. Vanderwolf, Department of Psychology, University of Western Ontario, London, Ontario, Canada N6A 5C2.

POSTDOCTORAL OPENINGS in two well-equipped membrane research laboratories at University of California, Los Angeles (UCLA). Send résumé, statement of interests, and three references to: Professor B. J. Wisnieski, Department of Microbiology and the Molecular Biology Institute, or: Professor John S. Bramhall, Department of Microbiology and Immunology (UCLA Medical Center), both at University of California, Los Angeles, Calif. 90024. Details available on request.

POSTDOCTORAL POSITION available 1 January 1985 or later for work on the biochemistry and molecular biology of blood coagulation. Experience in enzymology, recombinant DNA technology, protein separations, and immunochemistry helpful but not essential. Send curriculum vitae and names of three references to: Dr. William Konigsberg, Department of Molecular Biophysics and Biochemistry, Yale University, P.O. Box 333, New Haven, Conn. 06510.

POSTDOCTORAL POSITION

An NIH grant sponsored position (\$18,000 to \$22,000) is available immediately to study the involvement of T cells and macrophages in controlling syphilitic infection. Applicants must have a strong interest in T cell modulation of macrophage functions and willingness to participate in immunological teaching programs of the department. Medical microbiology has active training and research programs in molecular virology, molecular biology, immunology, and infectious diseases. The candidate will participate in a combined immunology-venereal disease program. Interested candidates should send curriculum vitae and the names of three references to: Drs. Ronald F. Schell (immunology of syphilis) and Donna M. Paulnock (cellular immunology), Department of Medical Microbiology, 1300 University Avenue, University of Wisconsin, Madison, Wisc. 53706. Equal Opportunity/Affirmative Action Employer.



Public Service Commission
of Canada

Commission de la Fonction
publique du Canada

Research Scientist, Marine Mammal Bioacoustics and Behaviour

Fisheries and Oceans
Freshwater Institute
Winnipeg, Manitoba

We require a scientist to plan, develop and direct research on the bioacoustics and biology of Canadian Arctic marine mammals. The emphasis of this research will be on the potential for disturbance and disruption of the established behaviour patterns of the species by the sonic and physical effects of industrial development and transportation.

You require graduation with a doctorate degree from a recognized university or a lesser degree with evidence of research experience and productivity equivalent to that of a doctorate degree in a field of natural science with specialization related to the duties of the position. You also require evidence of authorship of published or unpublished reports or papers concerning research bioacoustics and recognition by the national or international scientific community of achievements in research on bioacoustics. Experience in the conduct of original research on bioacoustics is mandatory. Knowledge of English is essential.

We offer a salary ranging from \$28,176 to \$56,409 commensurate with your qualifications and experience.

Forward your application form and/or résumé, quoting reference number S-84-31-5793-47JG-(G35) to:

Joan Girling (613) 996-8054
Public Service Commission of Canada
Ottawa, Ontario K1A 0M7

Closing date: 25 January 1985

The Public Service of Canada is
an equal opportunity employer

Canada

POSITIONS OPEN

POSTDOCTORAL FELLOW. A position will be available in spring 1985 for research relating to the role of proteinases in cartilage degradation in arthritis. Experience in the areas of tissue culture, protein biochemistry, and histology would be advantageous. Salary will be in accord with M.R.C. rates, which currently commence at \$18,900 per annum. Curriculum vitae and the names of three referees should be sent to: **Dr. P. J. Roughley, Joint Diseases Laboratory, Shriners Hospital for Crippled Children, 1529 Cedar Avenue, Montreal, Quebec, Canada H3G 1A6.**

POSTDOCTORAL POSITION available after 1 January 1985 to study the viruses and genetics of methanogenic Archaeobacteria. Experience in virology, microbial genetics, or microbial physiology is preferred. However, other interested candidates are urged to apply. Please send curriculum vitae and names of three references to: **W. B. Whitman, Department of Microbiology, University of Georgia, Athens, Ga. 30602.**

UNIVERSITY OF GUELPH DEPARTMENT OF CROP SCIENCE ONTARIO AGRICULTURAL COLLEGE

POSTDOCTORAL POSITION available immediately to develop flow cytometric procedures to sort hybrids formed during protoplast fusion. The applicant will be expected to become thoroughly familiar with the operation of a flow cytometer/cell sorter for this and other plant-related applications. Experience with protoplast culture and protoplast fusion is desirable but not essential.

Salary Range: \$20,000 to \$24,000 based on experience.

Send curriculum vitae and two letters of reference to:

**Dr. Peter Pauls
Department of Crop Science
University of Guelph
Guelph, Ontario, Canada N1G 2W1**

POSITIONS OPEN

POSTDOCTORAL POSITION AVAILABLE The Albert Einstein College of Medicine

Position at the postdoctoral level for February 1985. The ongoing active research program concerns the study of the biochemical composition of organotypic nerve cultures under different experimental conditions, principally related to demyelination disorders. The candidates should possess the Ph.D. or M.D. degree and have experience in biochemical quantitative determinations (proteins, lipids, and enzyme activities), membrane purification and immunologic techniques. Tissue culture training preferred but not required.

Please submit curriculum vitae and names of three references to:

**Dr. Murray B. Bornstein
Albert Einstein College of Medicine
Department of Neurology
Rose F. Kennedy Center—401
1410 Pelham Parkway South
Bronx, New York 10461**

Albert Einstein College of Medicine is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE—The Public Health Research Institute is seeking applicants for a position involving the application of molecular genetic techniques to the study of antigenic determinants of the human malaria parasite. Minimal qualifications include a thorough knowledge of molecular cloning technology in yeast, or *B. subtilis*. Appointee will be expected to conduct an active research program in collaboration with parasitologists and molecular geneticists in the institute. An appointment for 2 to 3 years is available immediately. Send curriculum vitae and names of references to:

**Dr. Araxie Kilejian
The Public Health Research Institute
of the City of New York, Inc.
455 First Avenue
New York, N.Y. 10016**

The Public Health Research Institute is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

POSITIONS OPEN

A POSTDOCTORAL POSITION IN MOLECULAR VIROLOGY is available to study viral gene expression in retrovirus diseases of sheep and goats. Research involves functional mapping of viral genes by molecular cloning and hybrid selection procedures and the use of specific genetic probes to study homology between retrovirus genomes and gene expression in cell culture and animals. Familiarity with gene cloning technology is necessary. Funding for this position is from an NIH training grant; applicants must be U.S. citizens or permanent residents. To apply, please submit curriculum vitae and three letters of recommendation to: **Dr. W. P. Cheevers, Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, Washington 99164-7040.** *This university is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION to work on the cloning, expression, and sequencing of bacterial genes coding for the degradation of chlorinated herbicides. Recombinant DNA experience required. Position available immediately. Salary: \$17,000 first year. Possibility of renewal. Send curriculum vitae and names of three references to: **Dr. Paul F. Lurquin, Chair, Search Committee, Program in Genetics and Cell Biology, Washington State University, Pullman, Wash. 99164-4350; telephone: 509-335-5733.** Application deadline: 31 January 1985. *Washington State University is an Equal Opportunity/Affirmative Action Employer. We encourage minority, women, handicapped, Vietnam-era and disabled veterans, and/or aged persons to apply and identify themselves as such in their applications.*

POSTDOCTORAL/RESEARCH ASSOCIATE position available July 1985 to study the role of macrophages in host defenses to intracellular pathogens, mechanisms of macrophage activation, and the physiology of macrophage colony stimulating factor. Background in cellular immunology and immunochimistry necessary. Well-funded laboratory. Salary commensurate with experience. Send curriculum vitae and references to: **Dr. E. J. Wing, Montefiore Hospital, 3459 Fifth Avenue, Pittsburgh, Pa. 15213.** *Montefiore Hospital, University of Pittsburgh, is an Equal Opportunity Employer.*

SENIOR R&D SCIENTISTS

The Corporate Research Biotechnology Group of The BFGoodrich Company has two openings for Senior Scientists. Both positions require a PhD, preferably with post doctoral experience and the ability to work within an interdisciplinary group, and to communicate well.

MOLECULAR BIOLOGIST

Background/experience in microbial plasmid isolation, characterization, and vector construction required.

MICROBIAL PHYSIOLOGIST/ BIOCHEMIST

Background/experience in bacterial physiology of non-pathogenic organisms, metabolic pathways, and enzyme purification required.

The BFGoodrich Company offers a competitive salary and benefits, in addition to an excellent opportunity for personal and professional growth. We are located in a suburban community between Cleveland and Akron, Ohio. We require U.S. citizenship or permanent resident visa. Qualified applicants are encouraged to forward resume, list of publications, and names of three references in confidence to:

Senior Staffing Representative (CR-2)

BFGoodrich

Research and Development Center
Brecksville, Ohio 44141

An Equal Opportunity Employer M/F



Synergen, Inc., one of the largest privately-held biotechnology firms, seeks exceptional scientists to join its expanding efforts to apply molecular biology, genetics and recombinant DNA techniques to challenging research projects. Synergen incorporates the best features of an academic environment into topics of commercial interest. We offer competitive salaries and benefits, a chance to grow, to learn, and to benefit financially from our success through equity participation.

We are particularly interested in scientists with two or more years of post-doctoral experience and research associate level people:

Mammalian Virologists: To join an expanding effort to understand eukaryotic gene expression and to develop viral vectors for a variety of applications.

Molecular Biologists: To study the expression and regulation of genes in various prokaryotic and eukaryotic organisms.

Biochemists: To join a novel program of protein characterization and enzyme improvements.

Microbial Geneticists: To analyze and manipulate biosynthetic pathways and organisms through a combination of modern genetic selection and recombinant techniques.

Fermentation Engineers: We are interested in individuals with experience in scale-up of fermentative production processes and protein purification.

Scientists with more extensive postgraduate experience are also encouraged to inquire. Please include a list of publications and references addressed to:

Recruitment Director
Synergen, Inc.
1885 33rd Street
Boulder, Colorado 80301

POSITIONS OPEN

THE UNIVERSITY OF ADELAIDE

Invites applications from both men and women for the following position:

POSTDOCTORAL FELLOW IN PATHOLOGY

(Reference: X4196) in the Department of Pathology. The position involves working as a member of an active connective tissue research group investigating the desmoplastic reaction in breast cancers using fluorescent microscopy and high-resolution immunoelectron microscopy.

Applicants must hold the degree of Ph.D. Training and experience in electron microscopy is essential. Previous work with immunoelectron microscopy or with low-temperature embedding media an advantage.

The position is available for up to 2 years, with a possible extension in 1987.

Further information concerning the specific duties of the position can be obtained from: **Dr. E. G. Cleary, Department of Pathology, telephone: 228-5387.**

Further information about the general conditions of all appointments may be obtained from: **The Senior Assistant Registrar (Personnel) at the University. Salary per annum: A\$21,411 × 5 to \$24,528. Applications, in duplicate, quoting reference number and giving full personal particulars (including residential status), details of academic qualifications, and names and addresses of three referees should reach: The Senior Assistant Registrar (Personnel), University of Adelaide, GPO Box 498, Adelaide, South Australia, 5001; Telex UNIVAD AA 89141, not later than 30 January 1985.** Applicants are also requested to ask their referees to forward their reports directly to the senior assistant registrar (personnel) before the closing date.

The University reserves the right not to make an appointment or to appoint by invitation.

POSTDOCTORAL POSITIONS IN MOLECULAR AND/OR MEMBRANE BIOLOGY AT WAYNE STATE UNIVERSITY

Postdoctoral research positions are available for study with members of the Department of Biological Sciences who have active, funded programs conducted in well-equipped facilities. Initial appointments will have a stipend of approximately \$17,000 plus fringe benefits. Applicants should submit curriculum vitae, a statement of research interests, and should arrange to have appraisals sent by three referees.

Applications and requests for information concerning faculty research programs should be addressed to:

Dr. D. Carl Freeman
Department of Biological Sciences
Wayne State University
Detroit, Mich. 48202

PRE- AND POSTDOCTORAL TRAINING IN TOXICOLOGY

M.S. and Ph.D. degrees in toxicology are now offered by Oregon State University (OSU) in a new graduate training program. Special emphasis of the interdisciplinary program is in the areas of analytical, biochemical, comparative, and food toxicology. A limited number of teaching and research assistant positions are available for toxicology program students through participating faculty.

The Environmental Health Sciences Center at OSU has available, as a complement to the toxicology program, a number of NIEHS-supported pre- and postdoctoral fellowships. Trainees will engage in research with an emphasis on basic mechanisms for toxicity of environmental agents. Predoctoral trainees will receive a Ph.D. degree in toxicology. Fellowships are available on a competitive basis to applicants (U.S. citizens and permanent residents only) with recent degrees in chemistry, biochemistry, pharmacology, and so forth.

To apply for either the toxicology program or the NIEHS fellowship, send curriculum vitae, academic records, and three letters of reference to:

Donald R. Buhler, Ph.D.
Chairman, Toxicology Program
437 Weniger Hall
Oregon State University
Corvallis, Ore. 97331
Telephone: 503-754-2363

Application closing date is 15 February 1985.

OSU is an Equal Opportunity/Affirmative Action Employer and complies with Section 504 of the Rehabilitation Act of 1973.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for recent Ph.D. to take part in ongoing study of nucleic acid abnormalities to autoimmune disease using recombinant DNA techniques. Background in biochemistry and/or immunology desirable. Send curriculum vitae and references to: **Dr. Charles R. Steinman, Director, Division of Rheumatology, State University of New York, Downstate Medical Center, 450 Clarkson Avenue, Box 42, Brooklyn, N.Y. 11202.**

THE ATLANTA UNIVERSITY

Postdoctoral Research Associate Position in Stochastic Processes and Numerical Analysis

Contingent upon the continuation of funding, The Atlanta University announces the availability of a **postdoctoral research associateship**. Applications and nominations are invited for this position. The applicants are required to have several years of training, research experience, and publications in the area of random equations. The position, which is expected to be available 1 January 1985, pays an annual salary of \$24,000. A letter of application, curriculum vitae, and a list of three references should be submitted by 4 January 1985 to: **A. T. Bharucha-Reid, The Atlanta University, Atlanta, Georgia 30314. The Atlanta University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATES—IMMEDIATE AND FUTURE POSITIONS. Basic studies on parathyroid gland biosynthesis and secretion. Experience in glycoprotein/protein processing, membrane chemistry/fusion or intracellular packaging/transport desirable; 2- to 3-year initial appointment; salary: \$20,000 plus. Send curriculum vitae to: **D. V. Cohn, Ph.D., Biochemistry, Health Sciences Center, University of Louisville, Louisville, Ky. 40292. Telephone: 502-588-7507.**

POSTDOCTORAL TRAINING (M.D. or Ph.D.) for 2 to 3 years in basic vision research. Preceptors: **Bernard Becker, Joel Brown, Ronald Burde, Adolph Cohen, Nigel Daw, Robert Miller, Alan Pearlman.** NIH supported stipends. July 1985. Details: **A. I. Cohen, Ophthalmology, Box 8096, Washington, University Medical School, 660 South Euclid Avenue, St. Louis, Mo. 63110. An Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE—To work in a strong neuroscience environment studying kindling and the mechanisms involved in the suppression of seizures in the developing nervous system. Requires Ph.D. with a background in neurophysiological techniques and deoxyglucose autoradiography. Position available January 1985. Length of appointment negotiable. Send curriculum vitae and three references to: **Dr. S. Moshe, Department of Neurology, ALBERT EINSTEIN COLLEGE OF MEDICINE, 1300 Morris Park Avenue, F, G-9, Bronx, New York 10461. An Equal Opportunity Employer.**

RESEARCH ASSOCIATE

A full-time position is available immediately for a Ph.D. **cell physiologist/biologist** with experience in tissue culture, histochemistry, biochemical techniques, flow cytometry, and computer programming. Project will involve study of hormone-drug interactions, intracellular pH, and breast cancer. Salary negotiable. Send curriculum vitae and the names of two referees to: **Dr. Oliver Alabaster, The George Washington University Medical Center, Department of Cancer Research, Ross Hall, Room 705, Washington, D.C. 20037.**

RESEARCH ASSOCIATE/POSTDOCTORAL—Available 1 February 1985 to develop and apply HPLC methods for the quantitation of opioid peptides. Experience and facility with instrumentation and peptides essential. Salary \$19,000 per annum plus benefits. Send curriculum vitae and references to: **Dr. Charles E. Inturrisi, Department of Pharmacology, CORNELL UNIVERSITY MEDICAL COLLEGE, 1300 York Avenue, New York, N.Y. 10021. Equal Opportunity Employer.**

RESEARCH FELLOW in Orthopedic Surgery, Harvard Medical School and The Children's Hospital, to work on biochemistry, physical chemistry, and biosynthesis of bone matrix phosphoproteins. Ph.D. required. At least 1 year of postdoctoral training desirable. Apply in writing, enclosing curriculum vitae and names of three references, to: **Melvin J. Glimcher, M.D., Director, Laboratory for the Study of Skeletal Disorders, The Children's Hospital, 300 Longwood Avenue, Boston, Mass. 02115. Applications from women and minority candidates are encouraged. An Equal Opportunity Employer.**

POSITIONS OPEN

REPRODUCTIVE BIOLOGISTS

The Department of Biological Sciences at Kent State University announces the opening of a **senior level tenure-track position (I)** and an anticipated **tenure-track position (II)** at the assistant professor level to support its expanding program to mammalian reproductive biology. Research training and expertise should be at the cellular and/or molecular level. The successful candidates will be expected to pursue strong research programs, collaborate in joint research projects, advise M.S. and Ph.D. students, and seek extramural funding. Effective date is August 1985.

POSITION I: The appointee will have primary teaching responsibilities in an undergraduate course in human physiology and a specialty course in reproductive physiology. A proven grant and publication record is required. Rank and salary will be commensurate with qualifications and experience.

POSITION II: (anticipated) This appointee will be responsible for undergraduate teaching in the area of developmental biology and in the graduate area of his or her specialty. Postdoctoral experience is required.

Send résumé, statement of research aims, copies of transcripts, and three letters of recommendation by 1 February 1985 to: **Dr. Brent C. Bruot, Box 29, Department of Biological Sciences, Kent State University, Kent, Ohio 44242. An Affirmative Action/Equal Opportunity Employer.**

REPRODUCTIVE BIOLOGIST—Assistant professor, tenure track. Must have Ph.D. or guarantee of completion by January 1986. Initial responsibility to teach undergraduate courses in human sexuality with the possibility of developing courses in the applicant's area of expertise, and supervising undergraduate/graduate research. Expected starting date: fall 1985. Send a letter of application, curriculum vitae, transcripts of all undergraduate and graduate work, and three letters of recommendation to: **James E. Parsons, Ph.D., Chairman, Search and Screen Committee, Department of Biological and Allied Health Sciences, Bloomsburg University, 102 Hartline Science Center, Bloomsburg, Pennsylvania 17815-1301.** All materials must reach the committee by 28 January 1985. Our department emphasizes excellence in teaching. *An Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.*

RESEARCH: PROJECT ASSOCIATE. Full time (40 hour minimum week) to design and develop immunochemical methods for the detection of several selected mycotoxins in foods, feeds, and biological fluids and develop a prophylactic method against mycotoxicoses. Job requires a Ph.D. in biochemistry, minimum 5 years of experience in microbial chemistry and toxicology, and biotransformation of toxins. Publications required. It includes working with and guiding graduate and undergraduate students research in isolation, characterization, and analysis of toxins. Full-time salary: \$19,980 per year, starting as soon as possible. Qualified candidates should contact: **Eileen Breitweiser, Wisconsin Job Service, 206 North Broom Street, Madison, Wisc. 53703. An Equal Opportunity Employer.** The ad is not paid for by job service funds.

RESEARCH ASSOCIATE MATERIALS SCIENCE

Perform basic research on the deformation characteristics and fracture of ceramics including: (i) evaluation of high-temperature deformation mechanisms; (ii) characterization of the microstructure and failure of ceramics; (iii) supervision of graduate students' research; and (iv) writing research proposals. Demonstrated experience with analytical electron microscopy and high-temperature mechanical properties as well as a sound knowledge of the literature on high-temperature creep is essential. Ph.D. in materials science or ceramics required. \$18,000 per year. Send résumé to: **Dr. John Porter, Department of Materials Science, University of Southern California, University Park, Los Angeles, Calif. 90089-0101.**

RESEARCH ASSOCIATE MATERIALS SCIENCE

Perform detailed studies relating to near-threshold corrosion fatigue crack propagation using servo hydraulic fatigue, and potential drop equipment. Strong background in fracture mechanics, HSLA steels and transmission electron microscopy required. Ph.D. in materials science plus two years of experience required, \$1750 per month. Send résumé and publishing record to: **Dr. J. Todd, Department of Materials Science, University of Southern California, University Park, Calif. 90089-0241.**

CONGRESSIONAL SCIENCE AND ENGINEERING FELLOWSHIPS

Applications Invited

The American Association for the Advancement of Science (AAAS) invites applications for two 1-year Congressional Science and Engineering Fellowships it will offer for the period beginning 1 September 1985. The fellowship program provides an opportunity for accomplished and societally aware postdoctoral to mid-career scientists and engineers to participate in and contribute to the public policy-making processes within the Congress for approximately 1 year. Fellows work as special legislative assistants within the congressional staff system.

Persons may apply from any physical, biological, or behavioral science or any field of engineering. The term "science" is used broadly to include the system sciences, public health, and other technical professions. In addition to the fellowships awarded by the AAAS, about 25 others are given by other participating professional societies. The AAAS runs a year-long educational program for the set of Congressional Science and Engineering Fellows. Addresses of all participating societies are available from the address listed below.

The 1985-1986 AAAS Congressional Science and Engineering Fellows will receive a stipend of \$25,200; an additional \$1,500 is available for relocation expenses and travel in connection with the program.

In order to obtain detailed information on the program and specific application requirements write:

Congressional Science and Engineering Fellow Program
American Association for the Advancement of Science
1776 Massachusetts Avenue, NW
Washington, D.C. 20036

The deadline for application is 1 February 1985. The award will be announced around 1 May 1985.

HEALTH SCIENTISTS AND TOXICOLOGISTS

ENVIRON is a fast-growing, multi-disciplinary health and environmental science consulting firm with its headquarters in Washington, D.C. and an office in Princeton, N.J. We are seeking qualified candidates to serve our expanding base of private and public sector clients. We have immediate openings for:

HEALTH SCIENTISTS/TOXICOLOGISTS with experience in risk and safety chemical assessments and preferably experience with scientific regulatory issues.

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SCIENCE, ENGINEERING, AND DIPLOMACY FELLOWSHIP

Applications Invited

The American Association for the Advancement of Science (AAAS), in cooperation with the Agency for International Development (AID) and the Department of State (STATE), is seeking applicants for two or more Science, Engineering, and Diplomacy Fellowships. Fellows will spend 1 year, beginning 1 September 1985, working either in the Bureau of Oceans and International Environmental and Scientific Affairs of the Department of State or in one of the bureaus of the Agency for International Development. Other assignments may also be possible.

Prospective fellows must demonstrate exceptional competence in some area of science or engineering, be flexible, have some experience and/or a strong interest in applying knowledge toward the solution of problems in the area of foreign affairs, and have a Ph.D. or equivalent in years of experience. Awardees will work on scientific and technical subjects in international affairs: foreign policy for STATE and international development for AID. In general, individuals are urged to apply from any area of physical, biological, behavioral, and social science and engineering and whose experience and training is applicable to any one of the following areas: Food and agriculture; health and population; nuclear nonproliferation; scientific exchange; forestry, natural resources, and ecology; oceans and fisheries; communications; national security; and nutrition among others.

The fellows will serve a 1-year appointment at a salary consistent with education level and experience, if possible, but not exceeding, in the case of STATE, the GS-12 level (beginning at \$31,600). A security clearance process will be initiated after selection. The clearance must be obtained before a selectee can begin work in the State Department or AID.

Deadline for receipt of application is 15 February 1985. For more information and application details write:

Science, Engineering and Diplomacy Fellows Program
American Association for the Advancement of Science
1776 Massachusetts Avenue, NW
Washington, D.C. 20036



An der Philosophischen Fakultät II (mathematisch-naturwissenschaftliche Richtung) der Universität Zürich ist eine

ordentliche Professur in Anthropologie

zu besetzen.

Zum Aufgabenbereich des Stelleninhabers gehören die Leitung des Anthropologischen Instituts und Museums, die Lehre auf allen Ebenen der akademischen Ausbildung, die Betreuung von Studienarbeiten auf allen Stufen sowie die Forschung im Bereich Paläoanthropologie und Anthropologie morphologischer Richtung.

Schriftliche Bewerbungen mit den üblichen Unterlagen sind bis **4. Januar 1985** an das Dekanat der Philosophischen Fakultät II der Universität Zürich, Rämistr. 71, CH-8006 Zürich, zu richten.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE positions available. One position is available immediately to investigate the excitatory actions of amino acids in the hippocampal slice. Experience with electrophysiological techniques is required. Second position will be available in May 1985 to study animal models of limbic epilepsy. Experience with in vivo electrophysiological recording techniques and/or autoradiographic methods is desirable. Send curriculum vitae and at least two references to: **Dr. J. Victor Nadler, Department of Pharmacology, Duke University Medical Center, Box 3813, Durham, N.C. 27710. Duke University is an Affirmative Action/Equal Opportunity Employer.**

Position in the nontenured-track at the level of **RESEARCH ASSISTANT PROFESSOR** in the Department of Pathology and Laboratory Medicine. Candidate should have an M.D. or Ph.D. degree with documented postdoctoral training in the area of diabetes research with specific interests in the mechanism of insulin action. Special emphasis is placed on understanding of the role of insulin in controlling membrane reactions, such as phospholipid methylation, that may be involved in the mechanism of insulin action. Candidates must be able to support their own research. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

Applicants should write to:

Leonard Jarett, M.D.
Department of Pathology and Laboratory Medicine
Hospital of the University of Pennsylvania
3400 Spruce Street/G2
Philadelphia, Pa. 19104

RESEARCH SCIENTIST III. Immediate opening for a position as director of a laboratory to conduct genetic analysis using linked DNA polymorphisms and to carry out basic research into the nature of mutation underlying X-linked forms of mental retardation with emphasis on the Fragile X syndrome. A challenging opportunity to join a department with active clinical, cytogenetic, and biochemical studies under way. A strong general background in recombinant DNA techniques and experience in analysis of human genetic diseases is sought. A Ph.D. with several years of postdoctoral experience in a molecular genetic area is required. Beginning salary: \$34,784. Respond to: **Dr. W. Ted Brown, Chief, Department of Human Genetics, c/o Personnel, New York State Institute for Basic Research in Developmental Disabilities, 1050 Forest Hill Road, Staten Island, New York 10314.**

SCIENTIFIC ASSISTANT—Under supervision of the curators in the Department of Entomology, you will mount, label, sort, identify, and curate insects. You will also provide assistance with various research projects and handle related duties. To be considered for this opportunity, you must have a B.A./B.S. in biology or the natural sciences, with specialization in the field of entomology, and you must be willing and able to work with large insect collections. Experience with scientific illustration helpful.

The starting salary is \$16,037 per annum. Benefits include major medical/dental, 4 weeks of vacation, and tuition assistance.

To apply, send résumé to: **Jerome Williams, Personnel Department, The American Museum of Natural History, Central Park West at 79th Street, New York, N.Y. 10024. An Equal Opportunity/Affirmative Action Employer, M/F/H.**

STABLE ISOTOPE ECOLOGY OR TERRESTRIAL ECOSYSTEM BIOLOGY

The Ecosystems Center of the Marine Biological Laboratory seeks a **staff scientist** at the assistant scientist level in one of two areas of expertise: (i) the use of stable isotopes in ecology; or (ii) terrestrial ecosystem studies. The stable isotope ecologist would be expected to help the Center build a facility for stable isotope research. The terrestrial ecosystem biologist would be expected to work in the areas of ecosystem productivity and/or element cycling. Applicants should have demonstrated research potential and should be interested in multidisciplinary, collaborative research. Postdoctoral experience is required. Interested applicants should send curriculum vitae, a statement of current and future research interests and names and addresses of three referees to: **Jerry M. Melillo, Chair of the Search Committee, Ecosystems Center, Marine Biological Laboratory, Woods Hole, Mass. 02543. Application deadline is 1 February 1985.**

POSITIONS OPEN

RESEARCH ASSOCIATE POSITION: Biochemist to study the enzymology of pesticide degradation by soil microorganisms. Knowledge of enzyme purification and kinetics essential. Will collaborate on this project with scientists at the Pesticide Degradation Laboratory, U.S. Department of Agriculture, Beltsville. Starting salary: \$18,000 to \$20,000 depending upon qualifications. Send curriculum vitae and names of three references to: **Dr. Judd O. Nelson, Department of Entomology, University of Maryland, College Park, Md. 20742. An Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE—ORGANIC CHEMISTRY. Research in organic synthesis using hypervalent chemicals and intermediates. Study prepared compounds in relation to chemical carcinogenesis and the development of anticancer drugs. Prepare synthesis of various nitroxyl radicals attached to amino acids, fatty acids, and complexed with metal as NMR contrast agents. Perform research on anticholinesterase reactivators. Research in the development projection against organophosphorus nerve agents; 35 to 40 hours per week; \$22,000 per year. Must have Ph.D. in organic chemistry and 1 year's experience in the offered position. Experience and/or education required above must have included the operation of the following equipment: electron spin resonance, nuclear magnetic resonance, ultraviolet and mass spectroscopy, and use of NMR contrast agents in the synthesis of fatty acids and amino acids derivatives. Send résumé to: **Illinois Job Service, 910 South Michigan Avenue, Room 333, Chicago, Ill. 60605, Attention: M. Jaskowiak, Reference Number 4040-J. An employer paid ad.**

RESEARCH STAFF SCIENTIST. Department of Applied Physics. To investigate the fundamental properties of solid surfaces relevant to catalysis. Candidates must have Ph.D. or equivalent degree in physics as well as proven experience in the following surface spectroscopies: UPS, ELS, AES, XPS, LEED, and TCS. Full-time position with annual salary of \$20,000. Interested applicants should apply at or send their résumés to: **Connecticut State Job Service, 353 Crown Street, New Haven, Conn. 06511, and refer to Job Order Number 0388064.**

THE CLEVELAND CLINIC FOUNDATION DEPARTMENT OF MUSCULOSKELETAL RESEARCH

Applications are invited for the position of **STAFF SCIENTIST** in the newly established Department of Musculoskeletal Research from Electronic Engineers with an interest in the fields of rehabilitation engineering and human performance monitoring. Candidates must have a Ph.D. degree in electronics or electrical engineering and be familiar with microprocessor system based design technology. Experience in the health professions is desirable although not essential. The appointee will be expected to develop a strong research program in microprocessor-based rehabilitation devices and patient monitoring systems. Salary is negotiable and expected to be more than comparable to University scales. Please send, by 4 January 1985, complete curriculum vitae and the names of three referees to: **Dr. M. T. Manley, Chairman, Department of Musculoskeletal Research, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio 44106. An Equal Opportunity Employer.**

VESTIBULAR PHYSIOLOGIST—The Department of Otolaryngology, University of Pittsburgh School of Medicine, has a position available for an experienced scientist interested in pursuing research in the area of vestibulo-ocular and/or vestibulo-spinal mechanisms. The salaried position will be at the assistant or associate professor level. Candidates are desired who have a background in animal research and have attained grant funding at the national level. The successful applicant will be expected to establish an externally funded basic science research effort and collaborate with other scientists in the department who conduct research on human subjects. Curriculum vitae, a statement of future research plans, and the names of three references should be sent to:

Eugene N. Myers, M.D., F.A.C.S.
Professor and Chairman
University of Pittsburgh
School of Medicine
Department of Otolaryngology
Eye and Ear Hospital
230 Lothrop Street
Pittsburgh, Pa. 15213

FELLOWSHIPS

NIH POSTDOCTORAL FELLOWSHIP involves development and use of radioreceptor assay of endogenous peptides in gradient HPLC fractions (brain, tooth, CSF extracts), animal surgery, subcellular fractionation, and receptor type characterization. Send résumé to: **D. M. Desiderio, University of Tennessee Center for the Health Sciences, 956 Court Avenue, Room 2A09, Memphis, Tennessee 38163.**

NIH POSTDOCTORAL FELLOWSHIP involves use of commercial radioimmunoassay kits for measurement of endogenous neuropeptides in HPLC fractions of biological extracts (brain, CSF, tooth). Send résumé to: **D. M. Desiderio, University of Tennessee Center for the Health Sciences, 956 Court Avenue, Room 2A09, Memphis, Tennessee 38163.**

NIH POSTDOCTORAL FELLOWSHIP involves state of the art mass spectrometric methods for measurement of peptides and prostaglandins. Techniques include FAB, collision activated dissociation, linked-field scanning, selected ion monitoring, computer methodology, LC-MS (off-line, on-line), and stable isotope derivatives. Send résumé to: **D. M. Desiderio, University of Tennessee Center for the Health Sciences, 956 Court Avenue, Room 2A09, Memphis, Tennessee 38163.**

NIH POSTDOCTORAL FELLOWSHIP in immunology to study the role of macrophages in the pathogenesis of nononcogenic retrovirus infections. Prefer strong background in analysis of macrophage functions, including IL 1 production, and/or cellular consequences of retrovirus infection. Opportunities to work with an interdisciplinary group on retrovirus-induced animal models of human disease. Since funding is an NIH fellowship, applicants must be U.S. citizens or permanent residents. To apply, please submit curriculum vitae and three letters of recommendation to: **Dr. Keith L. Banks, Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, Washington 99164-7040. This university is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP IN INSULIN ACTION. M.D. or Ph.D. with background in biochemical or cell biological research interested in working on the mechanism of insulin action. Four major areas of investigation include membrane reactions sensitive to insulin, characterization of the insulin mediator, understanding the mechanism by which the insulin mediators control enzymes, and ultrastructural analysis of ligand-receptor interactions and metabolism. Send curriculum vitae, bibliography, and names of three references to: **Leonard Jarett, M.D., Department of Pathology and Laboratory Medicine, Hospital of the University of Pennsylvania, 3400 Spruce Street/G2, Philadelphia, Pa. 19104. Openings available after 1 July 1985.**

The University of Pennsylvania is an Equal Opportunity Employer.

THE WEIZMANN INSTITUTE OF SCIENCE REHOVOT, ISRAEL

The Feinberg Graduate School of the Weizmann Institute of Science offers **POSTDOCTORAL FELLOWSHIPS** in the life sciences, chemistry, mathematical sciences, physics, and science teaching.

The fellowship provides a 12-month stipend (which is adjusted to the cost-of-living index), a relocation allowance, and one-way airfare. Fellowships which are renewed for a second year provide round-trip airfare.

Application forms and additional information may be obtained from: **THE FEINBERG GRADUATE SCHOOL, WEIZMANN INSTITUTE OF SCIENCE, Rehovot 76-100, Israel.**

The applications should reach the above address not later than 15 April 1985. The next review of applicants will be in November 1985.

PRE- AND POSTDOCTORAL FELLOWSHIPS IN REPRODUCTIVE SCIENCES

Fellowships are available through a training program in reproductive biology, biochemistry, and endocrinology. Numerous faculty participate in the program, and research interests include testicular biochemistry and physiology, epididymal physiology, endometrial and luteal function, fertilization, peptide and steroid hormone receptors, steroid chemistry, and male reproductive behavior. This is a NRSA and only U.S. citizens and permanent residents are eligible for appointment. For further information, please write: **Dr. Frank Chytil, Program Director, Department of Biochemistry, Vanderbilt University, Nashville, Tennessee 37232. An Equal Opportunity Employer.**

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Candidates should have a Ph. D. or equivalent degree, at least 2 years post-doctoral research experience dealing with complement, and relevant publications in recognized journals.

Qualified applicants should forward a resume — quoting ref. no. 35 — to:

IMMUNO AG Mr. R. Lukschanderl, Recruiting Officer
Industriestraße 72
A-1220 Vienna, Austria



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Candidates must have a Ph. D. degree from a recognized university, two years postdoctoral experience, and an appropriate record of research productivity.

Interested persons should send a resume — quoting ref. no. 45 — to:

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Industriestraße 72
A-1220 Vienna, Austria



Reproductive Toxicologist

The Pharmaceuticals Division of CIBA-GEIGY Corporation enjoys a position at the forefront of research in Biotechnology. We have an immediate need for an accomplished scientist for our Reproductive Toxicology Subunit at our Summit, New Jersey facility. Responsibilities will be primarily scientific and will require the selected candidate to conduct all reproductive and teratological safety evaluation studies required by the Pharmaceuticals, Agricultural Chemicals and Plastics & Additives Divisions for evaluation of developmental compounds and existing compounds.

Additionally, this individual must be capable of establishing a research program providing expert assistance in dealings with appropriate regulatory agencies, as well as design appropriate studies, draft protocols, interpret and report study findings in accordance with agency requirements, and act as Study Director.

A PhD and experience in reproductive toxicology are required, and formal training or experience in the following would be advantageous: laboratory computer systems, pharmacology, drug metabolism and statistics.

At CIBA-GEIGY we offer a competitive salary, excellent benefits and the opportunity to work with some of the best scientists in the field. For consideration, forward a resume with salary history and requirements in confidence to: Margaret E. Saul, The Pharmaceuticals Division of CIBA-GEIGY Corporation, 556 Morris Avenue, Summit, New Jersey 07901. We are an equal opportunity employer m/f/h/v.

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FELLOWSHIPS

POSTDOCTORAL RESEARCH FELLOWSHIP IN HUMAN BEHAVIORAL PHARMACOLOGY, JOHNS HOPKINS MEDICAL SCHOOL. Two-year fellowship available starting January through June 1985. Research involves investigating the clinical pharmacology and basic biological/behavioral mechanisms of action of benzodiazepines, caffeine, and tobacco in laboratory and in clinic. Send letter of interest, curriculum vitae, and names, addresses, and telephone numbers of references to: **Roland R. Griffiths, Ph.D., D-5-West, Psychiatry, Francis Scott Key Medical Center/Johns Hopkins, 4940 Eastern Avenue, Baltimore, Md. 21224.**

FELLOWSHIP POSITION available in summer 1985 in area of blood research at Boston University School of Medicine. The fellowship with appointment in the Department of Biochemistry is supported by an NIH training grant and requires U.S. citizenship and permanent residence. The project is focused on protein chemistry isolation, immunologic methods including monoclonal hybridoma studies, and post-translational processing. Inquiries should be directed to: **Dr. Rita Blanchard, Boston City Hospital, Boston, Mass. 02118. An Equal Opportunity Employer, M/F.**

MASSEY UNIVERSITY PALMERSTON NORTH NEW ZEALAND POSTDOCTORAL FELLOWSHIP

Applications are invited for a postdoctoral fellowship in 1985, tenable within Massey University. The award may be made for 1 year and is available in the following area:

Parasitology

A fellowship is offered in the Department of Veterinary Pathology and Public Health to investigate factors determining the host specificity of certain *Sarcocystis* species. Applicants should have experience in cell culture, electron microscopy, immunology, or other disciplines appropriate for studying parasite-host cell interactions.

The emolument payable will be at a rate to be determined but not exceeding the lowest step on the university scale for lecturers (currently NZ\$22,077 per annum).

Applicants should have completed the requirements for the award of the degree of doctor of philosophy.

Application forms together with further details and general conditions of appointment may be obtained from: **A. J. Weir, Registrar, with whom applications close on 25 January 1985.**

POSTDOCTORAL FELLOWSHIPS—The Lineberger Cancer Research Center of the University of North Carolina (UNC) at Chapel Hill will have openings in 1985 for persons completing graduate studies to train with excellent investigators in basic cancer-related research in tumor virology, chemical carcinogenesis, drug development, cancer cell biology, and tumor immunology. Training is available in recombinant DNA technology, gene expression, DNA replication, mutagenesis, molecular enzymology, regulation of cellular proliferation, growth factors, immunogenetics, protein phosphorylation, and combined programs. Unique training resources and core facilities housed in the new Lineberger Center. Candidates must be U.S. citizens or permanent residents. Send for brochure and apply with curriculum vitae, three letters of recommendations, a statement of research interests, and graduate school records to: **Director, Cancer Research Center, Box 30, MacNider Building, Chapel Hill, N.C. 27514. UNC's Cancer Research Center is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH FELLOWSHIP IN THE NEURAL BASIS OF LEARNING DISABILITIES

Opportunity to participate in ongoing and new interdisciplinary research in learning disabilities combining clinical investigations and neurophysiological measures of brain activity. Applicant must have clinical experience with learning disabled children, as well as training in neuropsychology and cognitive psychology. Experience with electrophysiological techniques, statistical methods, and computers is highly desirable. Stipend from \$16,500 depending on experience. Initial appointment for 12 months with renewal of up to two additional years anticipated. Submit curriculum vitae and have three letters of recommendation sent to: **Dr. Ruth L. Gottesman, Rose F. Kennedy Center, Albert Einstein College of Medicine, Bronx, New York 10461.**

FELLOWSHIPS

GRADUATE FELLOWSHIPS AND ASSISTANT-SHIPS. The Department of Biology at George Mason University offers a Ph.D. in Environmental Biology—Public Policy. This program trains environmental biologists for involvement in public policy issues. In fall 1985 assistantships and fellowships from \$4,300 to \$10,000 will be awarded to outstanding applicants. Write for brochure and application materials. Closing date for applications is 1 March 1985. Contact: **Doctoral Coordinator, Program of Environmental Biology—Public Policy, Department of Biology, George Mason University, Fairfax, Va. 22030. George Mason University is an Affirmative Action/Equal Opportunity Employer.**

IMMRRI GRADUATE FELLOWSHIPS IMMRRI POSTDOCTORAL FELLOWSHIP SOUTHERN ILLINOIS UNIVERSITY

Outstanding college graduates in the broad fields of mining and mineral resources are invited to compete for IMMRRI (Illinois Mining and Mineral Resources Research Institute) Fellowships. Twelve-month stipends of \$650 per month, plus tuition, are available to support high calibre students entering graduate programs at Southern Illinois University at Carbondale (SIUC). Areas of interest include mineral and coal extraction; new alternatives in reclamation including revegetation studies; coal mining efficiency; safety; social, political, legal, and economic aspects of mining; subsidence; and hydrologic impact of mining.

Also available is a postdoctoral fellowship in reclamation research in any of three Departments: Mining engineering, botany, or plant and soil sciences. Salary will be competitive.

Application deadline is 1 March 1985. For information and application materials, write:

**IMMRRI Graduate Fellowships
or IMMRRI Postdoctoral Fellowship
Graduate School, Southern Illinois University
Carbondale, Illinois 62901**

Southern Illinois University, Carbondale, is an Equal Opportunity/Affirmative Action Institution.

SYMPOSIUM

IMMUNOBIOLOGY AND IMMUNOPHARMACOLOGY OF BACTERIAL ENDOTOXINS, a 3-day symposium will be sponsored by the University of South Florida (USF), College of Medicine, 14 to 16 January 1985, at the Bay Harbor Inn, Tampa, Florida. The symposium will feature six plenary sessions on the interaction of endotoxins with host immunity, as well as pharmacologic and physiologic effects of these bacterial substances, presented by internationally renowned scientists. In addition, there will be a contributed paper session. Interested persons should contact: **Dr. Steven Specter, Department of Medical Microbiology and Immunology, USF College of Medicine, 12901 North 30 Street, Tampa, Fla. 33612, or telephone: 813-974-2178.**

CALL FOR POSTERS

**SYMPOSIUM: EFFECTS OF AIR
POLLUTANTS ON FOREST ECOSYSTEMS**
8 to 9 May 1985, University of
Minnesota, St. Paul, Minnesota

Topics include:

- Methods for detecting effects of airborne chemicals in forest ecosystems.
- Factors contributing to decline of forests.
- Evidence for effects on ecosystems in North America.
- Evidence for effects on ecosystems in Europe.
- Effects of airborne chemicals on components on forest ecosystems: soils, vegetation, micro-organisms, surface water, wildlife populations.
- Forest industry/forest management perspectives.

Sponsors to date include: National Acid Precipitation Assessment Program; United States Department of Agriculture—Forest Service; Department of Energy, Environmental Protection Agency; Department of the Interior, National Oceanic and Atmospheric Administration; with participation of Minnesota Department of Natural Resources, Minnesota Pollution Control Agency; and the University of Minnesota.

Please submit three copies of a 200-word abstract by 22 January to: **THE ACID RAIN FOUNDATION, 1630 Blackhawk Hills, St. Paul, Minn. 55122. Telephone: 612-455-7719.**

GRADUATE STUDY

GRADUATE TRAINING IN MOLECULAR AND TUMOR VIROLOGY

Openings for qualified graduate students are available for 1 September 1985. Faculty emphasis on genetic engineering approaches to problems in eukaryotic gene expression and regulation, virus integration, molecular mechanisms of cell transformation and function, and membrane assembly. Tuition payment, individual health insurance, and stipend (\$7000) are provided. Degree granted under the St. Louis University Cell and Molecular Biology Graduate Training Program. Apply to: **Dr. Maurice Green, Chairman, Institute for Molecular Virology, St. Louis University Medical Center, 3681 Park Avenue, St. Louis, Missouri 63110. St. Louis University is an Equal Opportunity/Affirmative Action Employer.**

COURSES

MOLECULAR ENDOCRINOLOGY AND TECHNIQUES FOR HORMONE ACTION 17 to 22 February 1985

This course will consist of lectures in methodology with comprehensive syllabus covering receptors, gene transcription, mRNA and protein synthesis, recombinant DNA, protein hormones, and cyclic nucleotides.

Co-directors: **W. T. Schrader and B. W. O'Malley.**
Fee: \$365 (\$245, fellows).

For further information contact:


**Bonnie Cuthbert
Department of Cell Biology
Baylor College of Medicine
Houston, Texas 77030
Telephone: 713-799-6200
Deadline: 18 January 1985**

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The Experimental Teratogenesis Section is seeking an individual to participate in studies on normal and abnormal embryonic development. These investigations are designed primarily to elucidate the mechanisms of normal and abnormal embryonic development using classical teratology techniques in addition to those of modern cell biology including cell, organ, and embryo culture along with biochemical and molecular characterization of growth and differentiation. Special emphasis is placed on the role that various growth factors and hormones play in normal and abnormal embryonic and fetal development.

The candidate must have a record of demonstrated research productivity and the ability to carry out independent as well as collaborative research. The initial appointment is for two years, with additional extension possible for talented researcher. Salary commensurate with candidate's qualifications and experience. Send curriculum vitae, bibliography, and three recommendation letters to:

Mr. Bruch Wiggins
Code: HN-V23

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P.O. Box 12233 (MD 1-01)
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Responsibilities include engineering aspects of u-wave technology as applied to medicine in an interdisciplinary research environment.

Requires postgraduate degree or equivalent experience. Research and development history is especially pertinent.

Interested applicants should send a Personal Qualifications Statement, SF-171 to:

Walter Reed Army Medical Center
Civilian Personnel Office
ATTN: Kathryn E. Lewis
Bldg. 11, Room 2-88
Washington, DC 20307

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**Research Opportunities in
Cell Biology**

Pioneer Hi-Bred International, Inc., a world leader in plant breeding research, is seeking a cell biologist for its biotechnology research group. This is a permanent staff position which requires skills in manipulation of cultured cells and use of selectable markers in eucaryotic cells. Research areas include the exploitation of available maize cell cultures toward basic research in DNA delivery methodology, evaluation of vectors and targeting of specific biochemical pathways.

The ideal candidate will be an imaginative and productive scientist who is seeking an open, stable and supportive research environment. A Ph.D. in biochemistry, developmental biology, enzymology or physiology is desired with postdoctoral experience in cell biology or molecular genetics preferred.

Excellent laboratory facilities, technical and operating support are available for this position. Collaborative research with other members of the department in the areas of molecular biology, tissue and cell culture, plant pathology and genetics is encouraged. Salary and benefits are highly competitive and commensurate with education and experience.

Individuals interested in this challenging position should forward resumes including research interests and the names of three references to:



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**Dr. Dwight T. Tomes
Department of Biotechnology Research
Pioneer Hi-Bred International, Inc.
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Johnston, Iowa 50131-0038**

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