however, and the book is rather well balanced overall. There is a lot of basic ecology here. For such a small volume, it does a very creditable job.

The book concludes with a most distressing chapter on man in the desert. Applied ecology seldom mixes well with basic ecology, and the book ends on a particularly disconcerting note: as the human population burgeons, more and more people are seeking the warm climates and serenity offered by deserts, with the inevitable resulting destruction of these once-beautiful but fragile habitats; Phoenix, Arizona, is proposed (tongue in cheek, one supposes) as a "monument to behavioral thermoregulation."

ERIC R. PIANKA

Department of Zoology, University of Texas, Austin 78712

#### **Books Received**

Advances in Chromatography. Vol. 20. J. Calvin Giddings, Eli Grushka, Jack Cazes, and Phyllis R. Brown, Eds. Dekker, New York, 1982. xvi, 286 pp.,

Advances in Immunology. Vol. 32. Frank J. Dixon and Henry G. Kunkel, Eds. Academic Press, New York, 1982. xiv, 380 pp., illus. \$46.

Advances in Nuclear Science and Technology. Vol.

14, Sensitivity and Uncertainty Analysis of Reactor Performance Parameters. Jeffery Lewins and Martin Becker, Eds. Plenum, New York, 1982. xvi, 372 pp.,

Advances in School Psychology. Vol. 2. Thomas R. Kratochwill, Ed. Erlbaum, Hillsdale, N.J., 1982. xx,

Advances in the Psychology of Human Intelligence. Vol. 1. Robert J. Sternberg, Ed. Erlbaum, Hillsdale, N.J., 1982. xii, 476 pp., illus. \$36.

Affect and Cognition. The Seventeenth Annual Carnegie Symposium on Cognition. Pittsburgh, May 1081. Moreover Studen Cloth and Suprest Figure 1

1981. Margaret Sydnor Clark and Susan T. Fiske, Eds. Erlbaum, Hillsdale, N.J., 1982. x, 358 pp. \$36. Alternative Space Futures and the Human Condi-tion. UNISPACE 82 International Round Table. Proceedings of a meeting, New York, Mar. 1982. Kiran Karnik, Ed. Published for the United Nations

by Pergamon, New York, 1982. viii, 176 pp. \$20.

Anderson Localization. Proceedings of a symposium, Sandashi, Japan, Nov. 1981. Y. Nagaoka and H. Fukuyama, Eds. Springer-Verlag, New York, 1982. xii, 226 pp., illus. \$34. Springer Series in Solid-State Sciences, vol. 39.

Animals in Toxicological Research. Ivan Bartošek, Amalia Guaitani, and Ernesto Pacei, Eds. Raven, New York, 1982. x, 214 pp. \$29. Monographs of the Mario Negri Institute for Pharmacological Research,

Milan.

The Animals' Who's Who. Ruthven Tremain.

Scribner, New York, 1982. xvi, 336 pp., illus.

\$17.95.

\$17.95.

Annual Review of Astronomy and Astrophysics. Vol. 20. Geoffrey Burbidge, David Layzer, and John G. Phillips, Eds. Annual Reviews, Palo Alto, Calif., 1982. xii, 632 pp., illus. \$22.

Les Architectures du Feu. Considérations sur les Modèles. Claude Paul Bruter. Flammarion, Paris, 1982. 236 pp. Paper, 90 F.

Arithmetic on Modular Curves. Glenn Stevens. Birkhäuser, Boston, 1982. xviii, 218 pp. \$15. Progress in Mathematics, vol. 20.

Chemistry of Heterocyclic Compounds in Flavours and Aromas. G. Vernin, Ed. Horwood, Chichester, England, and Halsted (Wiley), New York, 1982. 376 pp., illus. \$89.95.

pp., illus. \$89.95.
Evolution or Extinction. The Choice Before Us. A Evolution or Extinction. The Choice Before Us. A Systems Approach to the Study of the Future. Richard K. Curtis. Pergamon, New York, 1982. xviii, 448 pp. Cloth, \$50; paper, \$25. Systems Science and World Order Library. Evolution Without Evidence. Charles Darwin and The Origin of Species. Barry G. Gale. University of New Mexico Press, Albuquerque, 1982. x, 238 pp. \$21.95

Herbicide Resistance in Plants. Homer M. Le-Baron and Jonathan Gressel, Eds. Wiley-Interscience, New York, 1982. xxx, 402 pp., illus. \$47.50.

Hibernation and Torpor in Mammals and Birds. Charles P. Lyman, John S. Willis, Andrés Malan, and Lawrence C. H. Wang. Academic Press, New York, 1982. xii, 320 pp., illus. \$37.50. Physiological

Ecology.

Historical Change in the Physical Environment. A Guide to Sources and Techniques. J. M. Hooke and R. J. P. Kain. Butterworth, Boston, 1982. xxii, 236

pp., illus, \$49,95. Studies in Physical Geography.

How to Encourage Girls in Math and Science.

Strategies for Parents and Educators. Joan Skolnick,

Carol Langbort, and Lucille Day. Prentice-Hall,

Englewood Cliffs, N.J., 1982. xiv, 192 pp., illus.

Cloth, \$15,95; paper, \$7,95.

Human Adaptability. An Introduction to Ecological Anthropology. Emilio F. Moran. Westview, Boulder, Colo., 1982. xii, 404 pp., illus. Cloth, \$25;

paper, \$13.50.

Human B-Lymphocyte Function. Activation and Immunoregulation. Papers from a meeting, Washington, D.C., Sept. 1980. Anthony S. Fauci and Rudy E. Ballieux, Eds. Raven, New York, 1982. xvi, 336 pp., illus. \$55.

Human Body Temperature. Its Measurement and Regulation. Y. Houdas and E. F. J. Ring. Plenum, New York, 1982. xii, 238 pp., illus. \$32.50.

Human Motor Behavior. An Introduction. J. A. Scott Kelso, Ed. Erlbaum, Hillsdale, N.J., 1982. xii, 308 pp., illus. \$24.95.

Human Motor Behavior. An Introduction. J. A. Scott Kelso, Ed. Erlbaum, Hillsdale, N.J., 1982. xii, 308 pp., illus. \$24.95.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans. International Agency for Research on Cancer, Lyon, 1982 (U.S. distributor, WHO Publications Centre USA, Albany, N.Y.). Vol. 27, Some Aromatic Amines, Anthraquinones and Nitroso Compounds, and Inorganic Fluorides Used in Drinking-water and Dental Preparations. 342 pp., illus. Paper, \$25. Vol. 28, The Rubber Industry. 486 pp., illus. Paper, \$35.

The Illiac IV. The First Supercomputer. R. Michael Hord. Computer Science Press, Rockville, Md., 1982. xii, 350 pp., illus. \$29.95.

Immune Regulation. Evolutionary and Biological Significance. Papers from a symposium, Seattle, Dec. 1980. Laurens N. Ruben and M. Eric Gershwin, Eds. Dekker, New York, 1982. xvi, 332 pp., illus. \$45. Immunology Series, vol. 17.

Locus of Control. Current Trends in Theory and Research. Herbert M. Lefcourt. Erlbaum, Hillsdale, N.J., ed. 2, 1982. xiv, 254 pp. \$24.95.

Magnetic Electron Lenses. P. W. Hawkes, Ed. Springer-Verlag, New York, 1982. xiv, 462 pp., illus. \$44.50. Topics in Current Physics, 18.

Manual of Clinical Pulmonary Medicine. Lawrence G. Miller and Homayoun Kazemi. McGraw-Hill, New York, 1983. x, 366 pp., illus. Spiral bound, \$13.95. PreTest McGraw-Hill Manuals of Clinical Medicine.

Mass Psychogenic Illness. A Social Psychological

Medicine

Mass Psychogenic Illness. A Social Psychological Analysis. Papers from a symposium. Michael J. Colligan, James W. Pennebaker, and Lawrence R. Murphy, Eds. Erlbaum, Hillsdale, N.J., 1982. xvi,

Mathematics and Models in Engineering Science.
Contributions Presented to C. M. Segedin. Papers from a symposium, Auckland, New Zealand, Aug. 1980. A. McNabb, R. A. Wooding, and Mervyn Rosser, Eds. Science Information Division, Department of Scientific and Industrial Research, Wellington, New Zealand, 1982. viii, 184 pp., illus.. Paper,

Mechanisms of Chemical Carcinogenesis. Proceed-

Mechanisms of Chemical Carcinogenesis. Proceedings of a symposium, Keystone, Colo., Feb. 1981. Curtis C. Harris and Peter A. Cerutti, Eds. Liss, New York, 1982. xx, 582 pp., illus. \$98.

Membrane Mimetic Chemistry. Characterizations and Applications of Micelles, Microemulsions, Monolayers, Bilayers, Vesicles, Host-Guest Systems, and Polyions. Janos H. Fendler. Wiley-Interscience, New York, 1982. xiv, 522 pp., illus. \$49.95.

Membranes and Transport. Vol. 2. Anthony N. Martonosi, Ed. Plenum, New York, 1982. xxxvi, 680 pp., illus. \$75.

Methods in Cell Biology Vol. 25. The Cytoskeles

pp., illus. \$75.

Methods in Cell Biology. Vol. 25, The Cytoskele-

Methods in Cell Biology. Vol. 25, The Cytoskeleton: Part B, Biological Systems and in Vitro Models. Leslie Wilson, Ed. Academic Press, New York, 1982. xiv, 426 pp., illus. \$47.

Methods in Enzymology. Sidney P. Colowick and Nathan O. Kaplan, Eds. Vol. 85, Structural and Contractile Proteins, Part B. Dixie W. Frederiksen and Leon W. Cunningham, Eds. Academic Press, New York, 1982. xxiv, 774 pp., illus. \$69.50.

Microtubules in Microorganisms. Piero Cappuccinelli and N. Ronald Morris, Eds. Dekker, New York, 1982. xvi, 410 pp., illus. \$55. Microbiology Series, vol. 8.

The Missing Link. The Transition from Animal Instinct to the Human Mind. The Origin of the Human Mind. Walter J. Garre. Philosophical Library, New York, 1982. 294 pp. \$15.

Modelling with Differential Equations. D. N.

Burghes and M. S. Borrie. Horwood, Chichester, England, and Halsted (Wiley), New York, 1982. 172 pp., illus. Paper, \$24.95. Ellis Horwood Series in

Mathematics and Its Applications.

Modern China. A Chronology from 1842 to the Present. Colin Mackerras with the assistance of Robert Chan. Freeman, San Francisco, 1982. 704

pp. \$30.

Modern Crystallography II. Structure of Crystals. B. K. Vainshtein, V. M. Fridkin, and V. L. Indenbom. Translated from the Russian edition (Moscow, 1979). Springer-Verlag, New York, 1982. xviii, 434 pp., illus. \$49. Springer Series in Solid-State Sciences, vol. 21.

Molecular Biology of Plant Tumors. Günter Kahl

Molecular Biology of Flam Tulinots. Outlier Kam and Josef S. Schell, Eds. Academic Press, New York, 1982. xxvi, 618 pp., illus. \$69.50.

Numerical Treatment of Free Boundary Value Problems. Papers from a workshop, Oberwolfach, Nov. 1980. J. Albrecht, L. Collatz, and K.-H. Hoffmann, Eds. Birkhäuser, Boston, 1982, viii 350 pp. mann, Eds. Birkhäuser, Boston, 1982. viii, \$35. International Series of Numerican Mathemat-

ics, vol. 58.

Politics for Coping with Oil-Supply Disruptions.
Papers from a conference, Washington, D.C., Sept.
1980. George Horwich and Edward J. Mitchell, Eds.
American Enterprise Institute for Public Policy Research, Washington, D.C., 1982. x, 190 pp. Cloth,
\$15.95; paper, \$7.95.

Predicting Tillage Effects on Soil Physical Properties and Processes. Proceedings of a symposium,
Detroit, Nov. 1980. P. W. Unger and five others,
Eds. American Society of Agronomy/Soil Science
Society of America, Madison, Wis., 1982. viii, 198
pp., illus. Paper, \$10.

Presynaptic Receptors. Mechanism and Function.

Presynaptic Receptors. Mechanism and Function. Presynaptic Receptors. Mechanism and Function. Papers from a meeting. J. de Belleroche, Ed. Published for the Chemical Society Macromolecular Group by Horwood, Chichester, England, 1982 (U.S., distributor, Halsted [Wiley], New York). 224

pp., illus. \$64.95.

Principles of Database Systems. Jeffrey D. Ullman.
Computer Science Press, Rockville, Md., ed. 2,
1982. viii, 484 pp., illus. \$24.95. Computer Software

Engineering Series.

Principles of Pollution Control. Francis Sandbach.

rrincipies of Pollution Control. Francis Sandbach. Longman, New York, 1982. xvi, 174 pp., illus. Paper, \$11.95. Themes in Resource Management. Proceedings of the National Conference on Artificial Intelligence. Pittsburgh, Aug. 1982. Kaufmann, Los Altos, Calif., 1982. xiv, 442 pp., illus. Paper, \$25.

Secure Communications and Asymmetric Cryptosecure Communications and Asymmetric Crypto-systems. Papers from a AAAS symposium, San Francisco, 1980. Gustavus J. Simmons, Ed. Pub-lished for the American Association for the Ad-vancement of Science by Westview, Boulder, Colo., 1982. x, 338 pp. \$30. AAAS Selected Symposia Series, 69. Self-Control and Self-Modification of Emotional Rehavior Virk B. Polyketsia and Long Polivy, Eds.

Behavior, Kirk R. Balnkstein and Janet Polivy, Eds. Plenum, New York, 1982. xii, 204 pp. \$27.50. Advances in the Study of Communication and Affect,

Serotonin in Biological Psychiatry. Papers from a symposium, Houston, Nov. 1981. Beng T. Ho, Joseph C. Schoolar, and Earl Usdin, Eds. Raven, New York, 1982. xiv, 338 pp., illus. \$33. Advances

New York, 1982. xiv, 336 pp., lillus. \$33. Advances in Biochemical Psychopharmacology, vol. 34. Silane Coupling Agents. Edwin P. Plueddemann. Plenum, New York, 1982. x, 236 pp., illus. \$37.50. Soil Erosion and Conservation in the Tropics. Pro-Soil Erosion and Conservation in the Tropics. Proceedings of a symposium, Fort Collins, Colo., Aug. 1979. W. Kussow, S. A. El-Swaify, J. Mannering, David M. Kral, and Sherri Hawkins, Eds. American Society of Agronomy/Soil Science Society of America, Madison, Wis., 1982. viii, 150 pp., illus. Paper, \$8.50. ASA Special Publication No. 43.

Solid State Protonic Conductors I. For Fuel Cells and Sensors. Papers from a workshop, Paris, Dec. 1981. Johs. Jensen and Michel Kleitz, Eds. Odense Denmark, 1982. vii. 340.

1981. Johs. Jensen and Michel Kleitz, Eds. Odense University Press, Odense, Denmark, 1982. xii, 340 pp, illus. Paper, Dan.kr. 160.

Stability of Thermodynamic Systems. Proceedings of a meeting, Barcelona, Sept. 1981. J. Casas-Vázquez and G. Lebon, Eds. Springer-Verlag, New York, 1982. vii, 322 pp., illus. Paper, \$17.50. Lecture Notes in Physics, vol. 164.

Stranger Behind the Engram. Theories of Memory and the Psychology of Science. Daniel L. Schacter. Erlbaum, Hillsdale, N.J., 1982. x, 294 pp., illus. \$24.95.

Winning the Games Scientists Play. Carl J. Sindermann. Plenum, New York, 1982. xii, 290 pp. \$15.95.

Women and the World of Work. Proceedings of a symposium, Lisbon, Aug. 1980. Anne Hoiberg, Ed. Plenum, New York, 1982. xiv, 390 pp. \$45. NATO Conference Series III, vol. 18.

Women's Education in the Third World. Comparative Perspectives. Gail P. Kelly and Carolyn M. Elliott, Eds. State University of New York Press, Albany, 1982. x, 406 pp. Cloth, \$39.50; paper, \$10.95.

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Personnel Research Psychologist, Ph.D. 1970. Seeks employment in industry or academic research center. Has more than 20 years of combined academic and federal experience. Academic experience was obtained in the psychological measurement centers and lederal experience. Academic experience was obtained in the psychological measurement centers of two universities. Federal experience includes the development of a computerized mode of psychological ability testing. This activity subsumed the derivation of statistical (latent trait) models and the mathematical algorithms basic to this mode of testing, as well as the oversight of software development. Is authoring a book of two parts on the theory and practice of this mode of testing: the first part is in press; and the second part is in progress. Utilizing the capabilities of advanced computer technology, this mode of testing is cost-effective, is favorably accepted by test-takers, and provides improved measurement. Far less testing time is required to ensure a precision of test scores equal to that obtained by the more traditional paper-and-pencil mode. Desires to continue this effort in a new setting. Prefers Washington, D.C., metropolitan area but will consider other locations. Box 42, SCIENCE.

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ANATOMIC PATHOLOGIST. The Dartmouth-ANATOMIC PATHOLOGIST. The Dartmouth-Hitchcock Medical Center is seeking to fill a position at the assistant professor level in anatomic pathology. Applicants should be Board-eligible/certified and should have an active interest in teaching and research. Individuals with expertise in hematopathology, immunology, oncology and/or molecular biology are encouraged to apply. Please send curriculum vitae, names of five references, and salary requirements by 18 March 1983 to: Martha E. Stauffer, M.D. Chairman, Search Committee, Department of M.D., Chairman, Search Committee, Department of Pathology, Dartmouth-Hitchcock Medical Center, Hanover, N.H. 03756. Equal Opportunity/Affirmative Action Employer

#### ANATOMY INSTRUCTOR

The Department of Biology, University of Alabama in Birmingham, invites applications for the position of INSTRUCTOR OF ANATOMY, beginning 1 June 1983. Candidates must possess a minimum of a master's degree and have experience in human anatary and the position of the pos omy. The successful applicant will be expected to have excellent oral communicative skills and a comhave excellent oral communicative skills and a commitment to excellence in teaching students in allied health programs. Interested applicants should submit curriculum vitae, three letters of reference, a statement of teaching competencies, and other pertinent information to: Dr. Daniel D. Jones, Chairman, Department of Biology, University of Alabama in Birmingham, University Station, Birmingham, Alabama 35294. An Affirmative Action/Equal Opportunity Employer nity Employer

ANATOMIST: The Department of Cell Biology and Anatomy, Johns Hopkins University School of Medicine, invites applications for a junior faculty position, with teaching responsibility in human gross anatomy and active research in vertebrate functional anatomy and evolution. Ph.D. or M.D. is required and previous teaching experience in human anatomy is desirable. Send curriculum vitae and names of is desirable. Send curriculum vitae and names of references to: Dr. Alan Walker, Professor, Department of Cell Biology and Anatomy, The Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, Maryland 21205. Applications will be considered without regard to race, religion, sex, or national origin. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer

ASSISTANT/ASSOCIATE PROFESSORS: The Hor mel Institute, a Research Unit of the Graduate School of the University of Minnesota, invites applications for two faculty positions to establish FULL-TIME AND INDEPENDENT RESEARCH PRO-GRAMS. Applicants from all areas of basic biomedi-cal sciences will be considered. Preference will be given to candidates whose research will complement ongoing studies on the physical, chemical, and biological functions of lipids and on their role and interactions in biomembranes. Doctorate and additional research experience are required. Please submit, before 15 April 1983, your curriculum vitae, list of publications, summary of research experience, of publications, summary of research experience, brief description of research plans, and the names of three references to: Dr. Wolfgang J. Baumann, Chairman, Search Committee, The Hormel Institute, University of Minnesota, Austin, Minn. 55912. Telephone: 507-433-8804. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages women and minority applicants.

#### **POSITIONS OPEN**

## ANATOMY AND CELL BIOLOGY: TENURE-TRACK POSITIONS

The Department of Anatomy and Cell Biology, University of Pittsburgh School of Medicine, is planning to fill five faculty positions at the assistant professor level between July 1982 and July 1983.

The department is in the process of expansion and The department is in the process of expansion and these positions represent an important part of this new development. Preference will be given to candidates with funded research grants in the areas of development and organization of the visual system. Teaching areas to be covered by these appointments include gross anatomy, embryology, and neurobiology to medical students and participation in graduate processing.

Salaries are dependent on experience and qualifi-cations. The University is an Equal Opportunity Employer.

Applicants should submit curriculum vitae and names of three references to:

Chairman of Search Committee Chairman of Search Committee
Department of Anatomy and Cell Biology
University of Pittsburgh School of Medicine
820 Scaife Hall
3550 Terrace Street
Pittsburgh, Pa. 15261

ANATOMY/ASSISTANT PROFESSOR—Applications are invited for the above position which will be available on 1 July 1983. Applicants must hold an earned doctorate. The primary teaching responsibilities will be in histology and embryology, but some participation in the growth anatomy course is also necessary. Research is expected and encouraged. We offer unique opportunities to work with others in any of the medical basic science disciplines. Kirksville should prove particularly attractive to those who enjoy working with professional level students and prefer a small town/rural environment. Please submit curriculum vitae, statement of research intersubmit curriculum vitae, statement of research interest, and the names of three references to: Frederick John Julyan, Ph.D., Professor and Chairman, Department of Anatomy, Kirksville College of Osteopathic Medicine, Kirksville, Missouri 63501. An Affirmative Action/Equal Opportunity Employer.

The **Biology Department** of Spelman College announces an opening for a full-time faculty position at the rank of **ASSISTANT PROFESSOR** to begin August 1983. The deadline for completed applications is 31 March 1983.

Duties: The successful candidate will be expected to teach vertebrate embryology, genetics, and the science of the environment. Capability of teaching epidemiology and environmental health is desirable. epidemiology and environmental neath is desirable. The person employed for this position will have responsibilities which include, but are not limited to, assisting in registration and advising, serving on committees which pertain to the welfare of the department and College, and in general, adding expertise and strength to the Biology Department. Opportunities are available to conduct research.

Qualifications: All requirements for the Ph.D. must be fulfilled. Previous full-time teaching experience desired.

Salary and rank: Commensurate with education and experience.

Applicant must submit in advance: (i) a written résumé, (ii) at least three references by persons who are in a position to state the applicant's expertise in job requirements, and (iii) transcripts of graduate and undergraduate records.

All credentials should be directed to:

Jacqueline Pollard
Director of Personnel Relations
P.O. Box 36
Spelman College
350 Spelman Lane, SW Atlanta, Georgia 30314

Spelman College is an Equal Opportunity Employer.

ASSISTANT PROFESSOR-ENTOMOLOGY. The Department of Biological and Environmental Sciences, McNeese State University, invites applica-tions for a tenure-track position in the general area of entomology to begin August 1983. Applicants must have a Ph.D.; a strong commitment to research must have a Ph.D.; a strong commitment to research and teaching at both graduate and undergraduate levels is essential. Send résumé and summary of research plans by 21 March 1983 to: Dr. Hugh M. Turner, Chairman, Entomology Search Committee, Department of Biological and Environmental Sciences, McNeese State University, Lake Charles, La. 70609. An Equal Opportunity/Affirmative Action

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The Upjohn Company has an opening for a research assistant with a BS or MS degree in biomedical science and a minimum of 1–2 years experience in lipoprotein research to aid in studies on the mechanism of action of drugs that effect atherosclerosis. This individual should have direct experience in various aspects of lipoprotein metabolism including lipoprotein-receptor interactions, lipid exchange, and plasma enzymes affecting lipoproteins. A working knowledge of the mechanisms of atherogenesis and the relationship of lipoproteins to atherosclerosis also required.

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As a member of a multidisciplinary research team, you will be involved with experiments in plant molecular biology. Including the design and construction of vectors for the transformation of cells or plants, cloning genes from plants or other organisms, as well as investigation of gene organization, regulation and function in higher plants.

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OPENING DATE: February 1, 1983 CLOSING DATE: February 28, 1983

The Reproductive Sciences Branch, Center for Population Research, National Institute of Child Health and Human Development, National Institutes of Health, Public Health Service, is seeking qualified applicants for the position of Health Scientist Administrator or Medical Officer. The incumbent will organize. develop and manage a program of grant-supported research and research training projects having major emphases on the biology and endocrinology of reproductive events and processes from fertilization through implantation. Medical Officer candidates must have a medical degree with specialization in obstetrics and gynecology or endocrinology. Health Scientist Administrator candidates should have a doctoral level degree or a lesser degree with major study in an academic field of the health or pertinent sciences which have been applied and utilized by the applicant in health or health related research and, in addition, at least three years of qualifying progressively responsible experience in developmental biology, embryology or a closely related field. Candidates must provide evidence of strong interest in research on fertilization, early embryonic development, and/or implantation in animals. Familiar-

ity with the research techniques and tools of modern molecular biology as they pertain to these areas of investigation is desirable. This position will be filled either through the Civil Service or the Commissioned Corps of the U.S. Public Health Service. The salary range for Health Scientist Administrators is \$34,930-\$53,661 depending upon training and experience. The salary range for Medical Officers is \$42,546-\$57,500 depending upon training and experience. In addition, the Medical Officer may be eligible for a supplemental Physician's Comparability Allowance (\$2,500-\$8,000 per year) as determined by qualifications. If the position is filled under the Commissioned Corps, salary will be set in accordance with the individuals' training and experience under current pay regulations. Applications (Personal Qualifications Statement, SF-171), current curriculum vitae and bibliography are to be sent to Ms. Brenda H. Watts, Personnel Management Specialist, NICHD, Personnel Office, Building 31, Room 2A25, National Institutes of Health, Bethesda, Maryland 20205 by February 28, 1983. For further information, please call Ms. Watts on area code 301, 496-3365.

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## **SENIOR PROJECT** COORDINATOR **AQUATIC BIOMASS**

SERI, a division of Midwest Research Institute and the nation's primary federal lab for basic research in solar energy is currently seeking an individual to coordinate the overall Aquatic Species program planning and to interact with high level SERI and DOE

The successful candidate will help determine R&D priorities, will select proposed projects for funding, will coordinate research projects and will formally rewill coordinate research projects and will formally report progress relative to project objectives, in addition to attending conferences and meetings representing SERI and the Aquatic Species projects. Working mostly independently of day-to-day supervision the candidate will provide both a high level of scientific guidance and a demonstrated ability to influence nontechnical officials. Up to 25% travel time

Technical requirements for this position include an in-depth knowledge of aquatic biology and plant physiology with lab or field experience in the ecology of water environments plus familiarity with computer of water environments plus familiarity with computer applications and systems analysis and technical problem solving. Minimal qualifications must include a Masters Degree in Aquatic Biology, Microbiology, Biochemistry, Biophysics or a related field with at least 2 years' experience in closely related research; a PhD is preferred. Salary and responsibilities depend upon qualifications. Send your resume with salary history to: SERI, 1617 Cole Boulevard, Golden, CO 80401, Attention R. Archuleta E230-457.



#### **POSITIONS OPEN**

#### ASSISTANT PROFESSOR, BIOCHEMISTRY

Department of Chemistry, University of South Florida, to begin August 1983. Ph.D. required and at least 1 year of postdoctoral preferred. Appointee must immediately assume advanced graduate course in enzymology/enzyme kinetics in addition to generin enzymology/enzyme kinetics in addition to general biochemistry at any level. Research and professional activity appropriate to a Ph.D.-granting department will be expected. Tenure-earning position. Assistant professor salary range: \$20,000 to \$23,000. Send résumé and cause three letters of reference to be sent by 31 March 1983 to:

Dr. William E. Swartz, Jr., Chairman Department of Chemistry University of South Florida Tampa, Florida 33620

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

Tenure-track position with emphases in ETHOLO-GY and EVOLUTION. We have an opening for an ASSISTANT PROFESSOR who will develop aca-ASSISTANT PROFESSOR who will develop academic offerings in ethology and evolution at both the graduate and undergraduate level, teach introductory courses, and develop a research program commensurate with his/her background and training. Candidates must hold a Ph.D. and those with experience and/or postdoctoral experience will be given priority. By 15 April 1983 applicants should submit curriculum vitae, undergraduate and graduate transcripts and a statement of research interests and scripts, and a statement of research interests and scripts, and a statement of research interests and should arrange for three letters of recommendation to be sent to: Dr. B. J. Mathis, Chairman, Department of Biology, Bradley University, Peoria, Ill. 61625. Equal Opportunity/Affirmative Action Em-

#### ASSISTANT PROFESSOR OF METEOROLOGY

The Wilkes College Department of Earth and Environmental Sciences seeks applications for a meteorologist for the 1983–1984 academic year. This is a tenure-track appointment. Primary responsibility is undergraduate teaching, including courses in synoptic meteorology, dynamic meteorology, and air quality. Ph.D. is preferred; A.B.D. acceptable. Salary and rank commensurate with credentials and experience. Send résumé and three current letters of reference by 15 March to:

Dr. Mike Case Department of Earth and Environmental Sciences
Wilkes College P.O. Box 111 Wilkes-Barre, Pa. 18766 Telephone: 717-824-4651, extension 245

Equal Opportunity/Affirmative Action Employer

## ASSISTANT PROFESSOR MICROBIOLOGY/MEDICAL TECHNOLOGY

Tenure-track position; research and teaching in pathogenic microbiology, clinical laboratory duties, parnogenic microbiology, clinical laboratory duties, program development; and serve as coordinator of the medical technology program. Ph.D. in microbiology (medical or clinical) and must have or be eligible for certification as a medical technologist (ASCP) or equivalent. Send curriculum vitae, official transcripts, and three letters of recommendation to: F. J. Post, Ph.D., Department of Biology, UMC 55, Utah State University, Logan, Utah 84322, by 20 March 1983. Affirmative Action/Equal Opportunity Em-

**DEVELOPMENTAL BIOLOGIST**, tenure-track, assistant professor, available July 1983, to teach develsistant professor, available July 1983, to teach developmental biology, general biology, and anatomy portion of anatomy/physiology course. Requirements: Ph.D., excellence as a teacher, commitment to undergraduate education and research program with opportunity for undergraduate participation. Write promptly for detailed job description and application procedure before applying. Deadline for completed applications: 25 March 1983. Dr. Richard Nickerson, Search Committee, Riology Department. Nickerson, Search Committee, Biology Department, Simmons College, 300 The Fenway, Boston, Mass. 02115. An Affirmative Action/Equal Opportunity

ELECTRICAL or BIOMEDICAL ENGINEER to serve clinical and research needs of a new Department of Anesthesiology. The City of Faith Medical and Research Center is an ultra-modern, Christian facility offering competitive salaries and excellent benefits. Send résumé to: Betty L. Grundy, M.D., Professor and Chairman, Department of Anesthesiology, Oral Roberts University School of Medicine, Chief of Anesthesiology Services, City of Faith Medical and Research Center, P.O. Box 36000, Tulsa, Oklahoma 74136. Telephone: 918-493-8051.

#### **POSITIONS OPEN**

The Department of Zoology, University of Montana, has a vacancy for an ASSISTANT PROFESSOM (tenure track) to co-teach developmental biology in an interdepartmental biology program and teach in the zoology department. The appointee will also be expected to play an active role in our Ph.D. program, participate in other departmental activities, and conduct an active research program. The specific teaching responsibilities of this position are one course each quarter plus co-teaching developmental biology during one quarter. The appointee would teach a one quarter course in comparative vertebrate embryology, a freshman level course (animal kingdom or human cell function), and an advanced course in the appointee's specialty. Ph.D. in zoology or related field required. Training in developmental biology/embryology and teaching experience required. Send curriculum vitae, statement of professional goals, three letters of recommendation, and official copies of transcripts by 31 March 1983 to: official copies of transcripts by 31 March 1983 to: Developmental Biology-Embryology Search Committee, Department of Zoology, University of Montana, Missoula, Montana 59812. An Equal Opportunity Affirmative Action Employer.

ASSISTANT RESEARCH SCIENTIST. To study mechanisms of neuronal stimulation by extracellular currents. This is a basic research project but has relevance to neural prostheses. Research includes microelectrode recording and capable theory model-ling. Candidate should have recent Ph.D. in neuroscience, biophysics, or bioengineering. Salary: \$18,000 to \$20,000, available immediately. Send curriculum vitae and names of three references to: Dr. C. Nicholson, Department of Physiology and Biophysics, New York University Medical Center, 550 First Avenue, New York, N.Y. 10016.

BIOCHEMISTRY. Assistant professor in expanding department. Postdoctoral experience necessary. Preference given to those using recombinant DNA in plant systems. Send résumé, three letters of reference, and description of research interests to: Search committee, Department of Biochemistry, Louisiana State University (LSU), Baton Rouge, La. 70803. Closing date for applications: 1 April 1983. LSU is an Equal Opportunity/Affirmative Action Employer.

BIOLOGIST. One-year, nontenure-leading, assistant professor to teach introductory biology and human physiology or botany, 15 August 1983 to 15 May 1984. Ph.D. required. Send curriculum vitae with references by 4 March to: Dr. R. E. Ballinger, School of Life Sciences, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-0118. Affirmative Action/Equal Opportunity Employer.

#### **BIOLOGY**

Assistant or associate professor. Ph.D. required, full-time, fall 1983. Person should have ability to teach undergraduate physiology, zoology, genetics, evolution, with a strong commitment to teaching. Person should have an interest in developing a research program for undergraduate research. Preference will be given to person with a minimum of 5 years of college level teaching experience. Applicants should send curriculum vitae, transcripts, and three professional references to: Dr. Andre Cote, Dean of Arts and Sciences, Barry University, Miami Shores, Florida 33161. Closing date: 31 March 1983. Affirmative Action/Equal Opportunity Employer. Affirmative Action/Equal Opportunity Employer.

## FACULTY POSITIONS IN (i) PHYSIOLOGY, (ii) NEUROANATOMY, (iii) HISTOLOGY, (iv) PATHOLOGY, and (v) PHARMACOLOGY

Applications are invited for four faculty positions effective August 1983. A developing Master's Program in Biomedical Sciences requires Ph.D. faculty with a strong commitment toward excellence in teaching. Responsibilities include teaching lecture and laboratory (where appropriate), and advising and counseling students.

Rank and salary open.

Candidates should send detailed curriculum vitae, transcripts, and three letters of reference by 31 March 1983 to: Dr. Andre Cote, Dean of Arts and Sciences, Barry University, Miami Shores, Fla.

## HISTOLOGY, NEUROANATOMY, AND PATHOLOGY LABORATORY INSTRUCTORS

Three full-time laboratory instructors with respon-Three full-time laboratory instructors with responsibilities for laboratory instruction in at least two of the above areas. Requirements: master's degree and demonstrated teaching ability. Candidates should send detailed curriculum vitae, transcripts, and three letters of reference by 31 March 1983 to: Dr. Andre Cote, Dean of Arts and Sciences, Barry University, Miami Shores, Fla. 33161.

## **DIRECTOR, OTOLOGY** RESEARCH LABORATORY

TORONTO, CANADA

Applicant should have research experience in cochlear anatomy, histology and electrophysiology. Qualifications should include capability to direct a large multidiscipline research program and ability to obtain extramural grant support. Applicant must have Ph.D. or M.D. and sufficient post-graduate research experience to be eligible for appointment at level of Assistant or Associate Professor.

Applications including a complete curriculum vitae and names of three referees should be sent no later than 15th March, 1983 to:

Dr. I. Hunter-Duvar, Chairman, Search Committee, Room 6129. **Department of Otolaryngology** 

In accordance with Canadian Immigration requirements, priority will be given to those legally permitted to work in Canada.



## The Hospital for Sick Children

555 University Ave., Toronto, Canada M5G 1X8



## **DEPARTMENT OF BOTANY ECOLOGIST** SENIOR LECTURER

Applications are invited from suitably qualified persons, regardless of sex, race, colour or national origin, for appointment to the above post.

Preference will be given to an applicant with a good general background in theoretical ecology. The successful applicant will be expected to participate in undergraduate teaching, in the teaching of the specialist Honours (ecology) programme and to supervise post-graduate students. There is ample opportunity for research in a wide variety of game reserves, other wildlife, forestry and agricultural research areas. The Centre for Resource Ecology has an active research programme within the

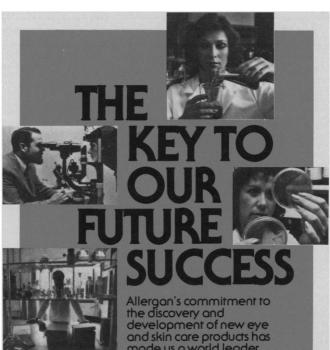
Salary will be within the range R16 557 - R24 045 per annum.

The initial salary notch will be determined according to the qualifications and experience of the successful applicant. In addition an annual bonus is payable in the form of 93% of one month's salary. Benefits include pension and medical aid facilities, as well as a housing subsidy, if the applicant is eligible.

Applicants should obtain the information sheet relating to University of the Witwatersrand, 1 Jan Smuts Avenue, Johannesburg, 2001, South Africa, with whom all applications should be lodged by 31 March 1983.

UNIVERSITY OF THE WITWATERSRAND. **JOHANNESBURG** 

Grey Recruitment 10136



and skin care products has made us a world leader

whose products are distributed in over 65 countries. The discovery of significant new products through research is vital for our continued growth. Talented scientists make these accomplishments possible.

We seek highly productive, innovative scientists and managers at all levels interested in a variety of technologies related to ophthalmic and dermatologic research with expertise in the following specialties:

- Medicinal Chemistry
- Toxicology Microbiology
- Biochemistry Drug Metabolism Pharmacokinetics
- Pharmacology
- Immunology
- Clinical Research Product Development
- OphthalmologyContact Lens

Dermatology

Join our research team in a creative like setting. We offer excellent benefits and a competitive salary package. Send your resume to (please no phone inquiries):

ALLERGAN PHARMACEUTICALS A SrnithKline-Beckman Company Human Resources, Dept. S-2 2525 DuPont Dr. Irvine, CA 92713



**18 FEBRUARY 1983** 

#### **POSITIONS OPEN**

#### LOYOLA UNIVERSITY OF CHICAGO

The Department of Biology invites applications for two anticipated tenure-track faculty positions to begin August 1983 in (i) PLANT PHYSIOLOGY and (ii) DEVELOPMENTAL BIOLOGY. Successful applications of the property of the plicants will be expected to teach at both undergrad-uate and graduate levels, and to develop strong research programs. Ph.D. required; postdoctoral experience desired. Please send curriculum vitae, names and addresses of three references, and brief names and addresses of three references, and brief descriptions of research interests and teaching experiences to: Dr. A. J. Nappi, Chairman, Department of Biology, Loyola University of Chicago, Chicago, Illinois 60626. Deadline for receipt of applications is 31 March 1983.

#### BIOSTATISTICIAN

The Bionetics Corporation has an immediate opening for a biostatistician who would like the opportunity to work with a small active group of biomedical researchers at Kennedy Space Center. biomedical researchers at Kennedy Space Center. Successful applicants must have a Ph.D. or a master's degree with 3 to 5 years of experience. Should be able to design experiments and analyze data for biomedical projects with small sample size, prepare appropriate graphs and charts of results, and participate in writing proposals and results.

Salary commensurate with experience. Excellent company benefits. Qualified applicants contact: Dr. Mary Anne Frey or Rudy Puleo, telephone: 305-867-4187, 9 a.m. to 3 p.m., Monday through Friday.

DEVELOPMENTAL BIOLOGIST—Tenure-track position at the assistant professor level anticipated August 1983. The appointee will be expected to: establish a vigorous, externally funded research program in molecular aspects of development/gene regulation; direct graduate research; and teach undergraduate amplication and graduate appropriate amplications. dergraduate embryology/anatomy and graduate speciality course(s). Postdoctoral experience preferred. Outstanding potential in teaching and research as documented via a current résumé, reprints, research plan, and three letters of recommendation should be sent to: Chair, Department of Biological Sciences, Bowling Green State University, Bowling Green, Ohio 43403, by 15 March 1983. An Equal Opportunity Employer.

## EVOLUTIONARY ECOLOGIST—REED COLLEGE

A FACULTY POSITION at the assistant professor A FACULTY POSITION at the assistant professor level is open for a recent Ph.D. in evolutionary ecology/population biology. Pending approval of funds, the initial appointment will be for 2 years, with possibilities for a longer association. The successful candidate will teach a one-semester upper division course and participate in a team-taught introductory biology course during the other semester. An active research program is required. The commitment of the College to this position is 0.75 faculty teaching equivalent (F.T.E.). The Department can supply funds initially to support the remaining 0.25 F.T.E., and the successful candidate is expected to attract outside funds to maintain the research program. research program.

Curriculum vitae and three letters of recommendation should be sent to: Dr. Peter J. Russell, Biological Laboratories, Reed College, Portland, Oregon 97202. Closing date for applications is 15 March 1983. Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITION

ENGINEERING MATERIALS PROGRAM tenure-track position now open for teaching and research in polymer science/engineering. Background in theory required. Prefer candidates with experience after Ph.D. Send résumé to: Dr. John D. Hoffman, Director, Engineering Materials Program, Department of Chemical and Nuclear Engineering, University of Maryland, College Park, Md. 20742. An Equal Opportunity of firmativa Action. Employer. portunity/Affirmative Action Employer.

FACULTY POSITION IN MOLECULAR BIOLOGY. Applications are invited for a tenured or nontenured level faculty position in the Department of Molecular Biology, University of California, Berkeley. The department is interested in persons with highly productive research programs in eukaryotic molecular biology focusing on chromosome strucmolecular biology focusing on chromosome struc-ture and/or gene expression and regulation. Appli-cants should send curriculum vitae, bibliography, copies of two representative recent publications, copies of two representative recent publications, statement of teaching and research objectives, and names and addresses of three references to: Chairman of the Search Committee, Department of Molecular Biology, University of California, Berkeley, Calif. 94720. Applications should be received before 30 April 1983. The University of California is an Equal Opportunity/Affirmative Action Employer.

#### **POSITIONS OPEN**

**CELL BIOLOGIST.** The Department of Zoology at North Carolina State University invites applications for a tenure-track assistant professorship in an area of cell biology to begin August 1983. Duties will involve teaching of a course in contemporary techniques in cell biology, participation in an additional niques in cell biology, participation in an additional course, independent research, and graduate training. Quality of research is of greater concern than the specific area. Postdoctoral experience is desirable. Screening of applications will begin 10 March 1983. Submit curriculum vitae, three letters of reference, representative publications, and a summary of research objectives to: Dr. D. E. Smith, Chairman, Cascal. Committee. Search Committee, Department of Zoology, North Carolina State University, Raleigh, N.C. 27650.

An Affirmative Action/Equal Opportunity Employer

#### **EDUCATIONAL COORDINATOR**

The Department of Pathology and Laboratory Medicine, University of Pennsylvania School of Medicine, is seeking an individual to coordinate and oversee the teaching efforts of the department, including the general and systemic pathology course and all elective courses. The department is emphasizing its commitment to the education of medical sizing its commitment to the education of medical students by the creation of this position. The individual must be an M.D. with training in anatomic or clinical pathology, or both, and have a demonstrated interest and record in teaching. In addition to the educational responsibilities, the individual is expected to fulfill a service role or carry on a research program. The duties of the educational coordinator will be a direct the motor medical selections. will be to direct the major medical school courses, including planning and evaluation. This individual will also be responsible for coordinating pathology teaching with other elements of our medical school curriculum, which is currently under revision. Send curriculum vitae and bibliography as well as names of three references to: Leonard Jarett, M.D., Chairman, Department of Pathology and Laboratory Medicine, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, Pa. 19104.

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

University of Massachusetts/Boston anticipates making two tenure-track or tenured faculty appointments in the Environmental Science Program, effective 1 September 1983 subject to availability of funds. (i) **Systems** ecologist with expertise in animal/sediment interactions who will devote major research effort to Boston Harbor; (ii) Organic chemist or geochemist to deal with organic pollutants in Boston Harbor. Doctoral degree required. Rank and salary are open, but successful candidates will have a well-developed independent research program as indicated by a record of scholarship/grantsmanship and will be able to teach/direct trainees through the postdoctoral level. They will also be expected to work with others dealing with anthropology, biology, chemistry, management, and public policy. Send résumé and cover letter to: Chairperson, Search Committee, Environmental Science Program, UNIVERSITY OF MASSACHUSETTS/BOSTON, Harbor Campus, Boston, Mass. 02125. An Affirmative Action/Equal Opportunity Employer.

HUMAN NUTRITION. Two tenure-track positions available fall 1983, one assistant professor, one open, in Graduate Program for Human Nutrition. Advanced degree (Ph.D., Dr.P.H., D.Sc., or M.D.) required; postdoctoral experience desirable. Candidates should have teaching experience at graduate level and record of attracting research support level and record of attracting research support. Candidates with backgrounds in biology, biobehavioral sciences, or related areas are urged to apply. Salary commensurate with qualifications and experience. Submit curriculum vitae and names of at least three references to: Dr. Joel Grinker, Human Nutri-tion Search Committee, School of Public Health, University of Michigan, Ann Arbor, Mich. 48109. A nondiscriminatory, Affirmative Action Employer

Ph.D. IMMUNOLOGIST/MICROBIOLOGIST with special interest in host defense against infection. To manage and codirect the Surgical Immunobiology manage and counter the Surgical Immunobiology Laboratory with special interests in infections, nutrition, immunomodulators, and burns. Salary negotiable. Send curriculum vitae to: J. Wesley Alexander, M.D., University of Cincinnati, Department of Surgery, ML Number 588, Cincinnati, Ohio 45267.

#### **POSITIONS OPEN**

GENETICIST/PLANT BIOLOGIST. Tenure-track position. Ph.D. required, teaching experience pre-ferred. Teach general genetics, human genetics; share responsibilities in introductory biology snare responsibilities in introductory biology courses. Rank and salary negotiable. Send letter of application, current curriculum vitae, transcripts, three letters of reference, and any other supporting documents to: Dr. Richard Mortensen, Chairman, Department of Biology, Albion College, Albion, Michigan 49224. Closing date: 18 March 1983.

GENETICIST, Ph.D. Background in recombinant GENETICIST, Ph.D. Background in recombinant DNA technology and restriction fragment length polymorphic studies is desired. To participate in research on development of DNA recombinant assays for genetic diseases involving mental retardation. Salary: \$32,000. Send résumé to: Personnel, attention: Dr. Ted Brown, Position Number 317, New York State Institute for Basic Research, 1050 Forest Hill Poed. Stoten Liend New York 10114. 46 Hill Road, Staten Island, New York 10314. Affirmative Action/Equal Opportunity Employer, M/F/H.

HUMAN PHYSIOLOGY LECTURESHIPS (two positions). Two-year lectureship appointments to teach lectures and laboratories in an introductory human physiology course; an upper division mammalian physiology course; and possible involvement in a pathophysiology course. Ph.D. required in physiolopaniophysiology course. Ph.D. required in physiology or related subject. Teaching experience at the college level preferred. Appointments are from 29 August 1983 to 30 May 1985, to be renewed annually, dependent upon satisfactory performance, as evaluated by the University, and with concurrence of the appointee. Salary: \$19,044 to \$28,884 (dependent upon qualifications and avarrance). Find filter ing upon qualifications and experience). Final filing date is 1 April 1983. Send letter of application, date is I April 1983. Send letter of application, résumé, transcripts, and three letters of recommendation (one of which must indicate teaching effectiveness) to: Dr. Larry Leamy, Chairman, Department of Biology, California State University, Long Beach, Long Beach, California 90840. An Affirmative Action/Title IX/Equal Opportunity Employer.

## DUKE UNIVERSITY MEDICAL CENTER, IMMUNOLOGIST

The Division of Immunology seeks to fill a vacancy by September 1983. Preference will be given to cy by September 1983. Preference will be given to applicants with postdoctoral experience in cellular immunology and/or molecular biology. Applicants should be capable of teaching in medical and graduate student courses and in supervising research training. Potentials for generating research support and for interacting with other faculty will be considerations. Please send applications, including curriculum vitae, bibliography, names of referees, and an outline of research interests, to: Dr. D. Bernard Amos, Box 3010, Division of Immunology, Department of Microbiology and Immunology, Duke Medical Center, Durham, N.C. 27710.

An Equal Opportunity/Affirmative Action Employer

## University of British Columbia DEPARTMENT OF MICROBIOLOGY

Applications are invited for a postdoctoral position with a team working on the cloning of bacterial cellulase genes and on the characterization of bactecellulase genes and on the characterization of bacterial cellulases. Experience in gene cloning and/or enzymology will be advantageous. Salary: \$16,560 to \$19,500 per annum. The position is available immediately for a period of up to 2 years. Curriculum vitae and the names of three referees should be sent to: Dr. R. A. J. Warren, Department of Microbiology, University of British Columbia, 300-6174 University Boulevard, Vancouver, British Columbia, Canada V6T 1W5.

POSTDOCTORAL OR ASSISTANT RESEARCH PHYSIOLOGIST An NIH-funded position in cellular neurophysiology is available for 4 years for research on regulation of transmitter release at the squid giant synapse. Projects include the measurement of presynaptic calcium during activity, properties of presynaptic calcium channels, and processes underlying synaptic plasticity. Candidate must have a Ph.D. in physioloplasticity. Candidate must have a Ph.D. in physiology, biophysics, neuroscience, or a related field, and training in membrane electrophysiology. Some post-doctoral experience, as well as familiarity with voltage clamp and microspectrophotometry, are preferred. The starting salary will be \$15,936 to \$22,900, depending on experience. Applicants should send, v15 March, a résumé transcripts, and three pames by 15 March, a résumé, transcripts, and three names of references to: Dr. Robert S. Zucker, Department of Physiology-Anatomy, University of California, Berkeley, Calif. 94720.

An Affirmative Action/Equal Opportunity Employer

## TOXICOLOGISTS (2 POSITIONS)

The Toxicology Research and Testing Program of the National Institute of Environmental Health Sciences, Research Triangle Park, NC has two permanent positions for toxicologists with a salary range of \$29,374 to \$39,586 per annum.

The successful candidate will be expected to:

- Formulate and design studies to evaluate toxic and carcinogenic potential of chemicals. These studies will be performed at contract laboratories.
- Develop and validate methods for toxicity testing of chemicals by collaborating with existing research programs or by independent research

Candidates are required to have the following:

- Ph.D. degree or its equivalent in toxicology, pharmacology, physiology or other allied subjects where training was focused to in vivo mammalian toxicology.
- Two to five years of postdoctoral research experience in toxicology, carcinogenesis or pathology.
- A thorough knowledge of animal models used to investigate prechronic and chronic toxic effects of chemicals.
- Excellent written and oral communication skills.
- · Relevant publications in scientific journals.

Applicants must be found to be eligible on a Civil Service Register. If interested, please send a curriculum vitae by 3/25/83 to Personnel Office T-54, NIEHS, P.O. Box 12233, Research Triangle Park, N.C. 27709.

The NIEHS is an Equal Opportunity Employer

# MIT FACULTY POST IN ACOUSTICS

The Department of Ocean Engineering invites applications for a faculty position in acoustics, at either the Assistant or Associate Professor level, effective September 1, 1983. Teaching responsibilities will include graduate education in acoustics and participation in related programs in polar engineering, marine sensing and information systems engineering, or underwater systems dynamics. Research will involve experiments at sea, including work in the Arctic Ocean, laboratory efforts, analysis of computer-based data, analysis and modeling, and/or theory building.

Candidates should have an advanced degree, preferably a doctorate in acoustics or closely related field. Research experience in one or more of the following essential: propagation of sound in the ocean, both theoretical and experimental; acoustic scattering processes in the ocean; ambient noise mechanisms; behavior of sound in ice-covered waters; communication, information, and sensing systems; ship noise radiation and control: flow noise.

Candidates should submit complete resume or curriculum vitae along with list of professional references, and reprints of two papers representing work in acoustics. Closing date for applications is April 1, 1983. Application materials should be sent to: Prof. Ira Dyer, Chairman of Search Committee, Massachusetts Institute of Technology, Rm. 5-212, 77 Massachusetts Avenue, Cambridge, MA 02139. MIT is an equal opportunity/affirmative action employer.





UNIVERSITY OF CAPE TOWN/ CAPE PROVINCIAL ADMINISTRATION

## The D G Murray Trust Chair of Cancer Research

Applications are invited for appointment as soon as possible to this new post.

as possible to this new post.

The Chair has been established by the University with support from the D G Murray Trust to give a leading scientist the opportunity to undertake research in his or her chosen field relevant to malignant disease. The successful applicant will have the opportunity to collaborate with leading researchers in the medical faculty and to use its facilities and those of the associated Groote Schuur Hospital group. Significant funds for cancer research are available to support the work.

work.

The post is permanent and the appointment, which is full-time, will be made in terms of the Joint Agreement between the Cape Provincial Administration and the University. The salary is R33 660 per annum. In addition a service bonus subject to State regulations is payable. If the successful applicant is a medical practitioner he/she may qualify for a non-pensionable allowance payable by the Cape Provincial Administration.

Applicants should submit a full resume and the names and addresses of three referees, whom the University may approach.

Further information may be obtained from the Registrar (Attention: Appointments Office), University of Cape Town, Private Bag, Rondebosch, 7700, South Africa, by whom applications (quoting ref. no. AQ/2122) must be received not later than 30 April 1983.

UCT is an equal opportunity employer.

## Pharmaceutical Research, Neurosciences

The expansion of Pfizer's Central Research Division has created a new research opportunity within our CNS/Neuroscience Group. You will be joining a team of scientists pursuing the discovery and development of drugs useful in the treatment of major psychiatric disorders such as schizophrenia, affective illness and senile dementia. The discovery of new biological mechanisms and publication of significant results will be key goals.

To qualify, you must have a PhD in Pharmacology, Biochemistry or related discipline with emphasis on biochemical neuropharmacology or neurochemistry. Strong research ambition in CNS aging mechanisms is essential. Familiarity with brain lesion techniques and their histologic and neurochemical evaluation; measurement of neurotransmitter metabolism and turnover; or drug interactions will be advantageous.

This is an ideal role for a professional seeking to join a community of highly regarded scientists and offers an excellent opportunity for recognition and career growth. In addition, we offer a competitive compensation and benefit package and the opportunity to live in an attractive Connecticut shore community. Please send resume and brief description of research interests to **Dr. J. K.** Larson, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.



An Equal Opportunity Employer

18 FEBRUARY 1983 889

#### NATIONAL SCIENCE FOUNDATION DIRECTOR, DIVISION OF MATERIALS RESEARCH

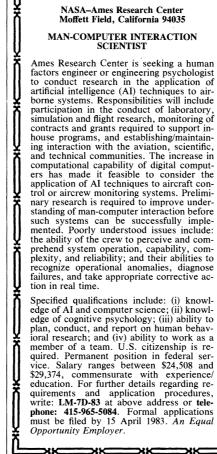
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The National Science Foundation (NSF) is seeking qualified applicants for the position of Director, Division of Materials Research. Duties of the posi-tion involve managing a division responsible for funding research in the areas of materials research Supervises staff, oversees evaluation of proposals and recommendations for awards and declinations, and represents NSF to relevant external groups. The person selected will receive either a permanent or 2year rotational appointment (requiring leave of absence from current employment). This position is part of the Senior Executive Service with a salary ranging from \$59,230 to \$63,800.

Qualification requirements include: (i) supervisory and managerial experience for the achievement of organizational objectives through subordinates; (ii) a Ph.D. or equivalent professional experience or a combination of education and equivalent experience in physics, chemistry, materials science and engineering, metallurgy, ceramics, or polymers; (iii) substantial research experience and strong evidence of scholarship in materials-related areas, including publication in areas such as solid-state physics, solid-state chemistry, low temperature physics, consonid-state chemistry, low temperature physics, condensed matter theory, ceramics, metallurgy, polymers, or materials engineering; (iv) experience in the planning of diverse research programs in the field of materials research; and (v) experience coordinating with representatives of scientific and academic communities munities.

Applicants should contact: Margaret Cademartori, Applicants should contact: Margaret Cauemartor, telephone: 202-357-7857, to request announcement EPS 83-4 for a permanent appointment or EPS 83-14 for a rotational appointment. Announcements contain qualification requirements as well as instructain qualification requirements as well as instruc-tions concerning the preparation of the supplemental narrative required with the SF-171 as application. Send SF-171, narrative, and publication list to: Na-tional Science Foundation, Executive Personnel Sec-tion, Room 212, 1800 G Street, NW, Washington, D.C. 20550 (attention: EPS 83-4/83-14). Applications must be received by 20 April 1983

Equal Opportunity Employer \*\*\*\*\*\*\*\*\*



## **CSIRO**

SENIOR BIOLOGICAL OCEANOGRAPHER A\$35,630 to A\$46,870 DIVISION OF FISHERIES RESEARCH SYDNEY, NSW AUSTRALIA

CSIRO has a broad charter for research into primary and secondary industry areas. The Organization has approximately 7400 employees, 2900 of whom are résearch and professional scientists, located in divisions and sections throughout Australia.

GENERAL: The CSIRO Marine Laboratories, which include the Divisions of Fisheries Research and Oceanography, is Australia's principal marine research institution, employing about 200 scientists and support staff to investigate the physical, chemical, and biological features, including fisheries, of the oceans around Australia. The main laboratory is at Cronulla in Sydney and there are smaller laboratories in Brisbane and Perth. Two well-equipped chartered vessels (53 meters and 43 meters) and on-line access to a Cyber 76 computer are available for research

The Sydney activities will be transferred to new laboratories being constructed in Hobart, Tasmania, and the appointee must be prepared to transfer to Hobart about mid-1984. The Australian Government has also agreed to the acquisition by CSIRO of a modern oceanographic ship to replace the presently chartered

Collaboration between the Division of Fisheries Research and the Division of Oceanography is actively encouraged and facilitated by the sharing of support resources such as ships, library, and computer systems.

The interests of the Division of Fisheries Research encompass marine biology and ecology, ocean productivity and population dynamics of commercial and potentially commercial fish, crustaceans, and molluscs. The Australian Fishing Zone receives special attention.

**DUTIES**: The appointee will be required to co-ordinate and develop the biological oceanographic research programmes in the Division and to reorganize and direct biological oceanographic programmes at the Sydney laboratory. The appointee will be the interface between the Division of Fisheries Research and the Division of Oceanography, to forge collaborative programmes between biological and physical and chemical elements of the two Divisions. The appointee would also be expected to initiate and carry out a personal research programme on a suitable facet of biological oceanography.

QUALIFICATIONS: For this senior appointment a marine scientist of outstanding achievement in biological oceanography, with specialist knowledge of biochemistry and microbiology, is required. He or she must be capable of research leadership of a high order, must have a Ph.D. degree, or equivalent qualifications, in a relevant science with training in biology and have at least 12 years of postdoctoral experience. A substantial record of significant research publications is essential.

TENURE: Indefinite with Australian Government superannuation (pension) benefits available

**APPLICATIONS:** In writing, quoting reference number A0177 and giving full personal particulars, including details of qualifications and experience, copy of academic transcripts, and the names of at least three professional references should reach:

The Acting Chief
Division of Fisheries Research
CSIRO
P.O. Box 21
Cronulla, NSW 2230, Australia

By 25 March 1983.

#### **POSITIONS OPEN**

INSTRUCTOR: Applications are being invited for a RESEARCH ASSOCIATE position in the Radiation Biology Laboratory at the University of Minnesota. Responsibilities include a major role in the ongoing research in radiation biology of tumors and leukemic cell culture. Some participation in teaching radiobiology courses is also expected. We are looking for an individual with a Ph.D. in radiation biology or related field with experience in microelectrode technique. niques and tissue culture. Curriculum vitae and names of three referees must be received by 31 March 1983, and should be addressed to: P. Evans, Search Committee, Department of Therapeutic Radiology, Box 494 Mayo, University of Minnesota Medical School, Minneapolis, Minn. 55455.

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

#### MICROBIOLOGIST

An established biotechnology company is looking for a **project leader** in the Corporate Research Division. The project leader will be responsible for developing immunological reagents for the diagnosis of bacterial and mycotic infections in man. Candidates must have a Ph.D. in microbiology, biochemisdates must have a Ph.D. in microbiology, biochemistry, or immunology with two or more years of postdoctoral experience with clinically relevant microorganisms. Applicants should send a statement of career goals, curriculum vitae, and three references to: Dennis Murray, Director, Corporate Research Division, Kallestad Laboratories, Inc., 2101 East Ben White Boulevard, Austin, Texas 78741.

#### NEUROBIOLOGY

A faculty position is open at the Worcester Foundation for Experimental Biology for an individual working on molecular or cellular aspects of neurobiology. This appointment will be made at either staff scientist or senior scientist rank. Send curriculum vitae and research synopsis to: Dr. Thoru Pederson, Molecular-Cellular Neurobiology Position, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545. Deadline for receipt of application materials is 15 April 1983. is 15 April 1983.

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#### **PATHOLOGIST**

PATHOLOGIST

The University of New Mexico and the Veterans Administration Medical Center, Albuquerque, invite applications for pathologist to serve as Director of Pathology at VA Medical Center and Vice Chairman of Department of Pathology, School of Medicine. These institutions are completely integrated with respect to patient care and academic activities. Applicants should enjoy challenge of high quality patient care, resident education, and interaction with excellent faculty that includes five pathologists based at VA Medical Center. Construction of new patient care facility to include clinical laboratories will commence within next several months. Applicants should be certified by American Board of Pathology and have active interest in teaching and clinical investigation. Salary'academic rank based Pathology and nave active interest in teaching and clinical investigation. Salary/academic rank based upon experience. Proficiency in anatomic pathology preferred. Starting date: 1 May 1983. Curriculum vitae and names of three references by 15 April 1983 to: Robert E. Anderson, M.D., Professor and Chairman, Department of Pathology, School of Medicine, University of New Mexico, Albuquerque, N.M. 87131. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW. Background in human genetics and biochemistry involving glycosamino-glycans or recombinant DNA technology is desired. To participate in studies of progeria and premature aging syndromes. Salary: \$17,000 per year. Send résumé and names of three references to: Personnel, attention: Dr. Ted Brown, Position Number 316, New York State Institute for Basic Research, 1050 Forest Hill Road, Staten Island, New York 10314. Affirmative Action/Equal Opportunity Employer, M/F/H.

POSTDOCTORAL POSITION available. Seeking person to initiate studies in cellular toxicology and metabolism of cardiovascular tissues. Experience in cell culture techniques, especially of smooth muscle and endothelial cells, and an interest in basic bio-chemistry and metabolism required. Send curricu-lum vitae and three references to: **Dr. Paul J. Boor**, Department of Pathology, University of Texas Medical Branch, Galveston, Texas 77550. Affirmative Action/Equal Opportunity Employer.

## MYRON A. BANTRELL POSTDOCTORAL FELLOWSHIPS FOR SCIENTIFIC AND ENGINEERING RESEARCH

The California Institute of Technology, Massachusetts Institute of Technology, and The Weizmann Institute of Science (Israel) will award a number of Bantrell Fellowships for postdoctoral study for the academic year 1983–1984, beginning 1 September 1983.

The fellowship will be granted for 1 year and will be extended for an additional year upon recommendation of the host institution. In recognition of sutstanding goademic achievements, the fellowship may be extended to those

outstanding academic achievements, the fellowship may be extended, to those fellows who have been abroad, for a third year of study in the fellow's home country (Israeli citizens shall be eligible for such a third year fellowship only at The Weizmann Institute), thus enabling the fellow to select a position in research or industry.

According to the local practice at the host institution, this fellowship may

according to the local practice at the nost institution, this fellowship may include a generous stipend for the fellow, a travel allowance (one round trip for the fellow) to the host institution, travel to scientific conferences, and health and life insurance. The program is restricted to citizens of Israel and the United States. U.S. citizens must be less than 30 years of age, and preference will be given to Israeli citizens.

The Bantrell Fellowship Program has been established to offer scientists the best possible opportunity to develop their talents. Fellowships will be granted in the following fields:

California Institute of Technology: Biology, chemical catalysis, earthquake seismology, microscience of materials (applied physics), and theoretical physics, astrophysics, and optical astronomy.

Massachusetts Institute of Technology: Computer logic, energy conversion, mechanics of fluids, molecular biology of higher organisms, neurosciences, and surface science.

surface science.

The Weizmann Institute of Science: Chemistry, life sciences, physics, and the

The Weizmann Institute of Science: Chemistry, life sciences, physics, and the study and development of the national resources of Israel.

Application and materials in support of any nomination should include curriculum vitae, bibliography of publications, preprints of manuscripts not yet published, a letter of nomination from the dean or chair in the candidate's university, and two letters of recommendation from faculty who are familiar with the candidate's research. Notification will be mailed by 30 June 1983.

Applications should be sent to the appropriate institution and should arrive by 1 May 1983. Mail to:

Lea C. Sterrett Assistant Provost California Institute of Technology Pasadena, California 91125

Kenneth A. Smith Associate Provost and Vice President for Research Massachusetts Institute of Technology Cambridge, Massachusetts 02139

**Professor Shmuel Shaltiel** Dean, Feinberg Graduate School The Weizmann Institute of Science Rehovot, Israel 76100

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## **IMMUNOPHARMACOLOGIST**

Sterling-Winthrop Research Institute announces an opening for a cellular immunologist to work in the Rheumatology Drug Development Program. The position will involve the study of leukocyte adherence and chemotaxis in relation to various biologically active plasma proteins.

Candidates should have a PhD or equivalent with a minimum of 1-2 years of related experience.

We offer an attractive salary and benefit package with the opportunity for career growth.

The Institute is located near Albany, New York which is the center of major, summer and winter recreational activities. Please send your curriculum vitae including salary requirements in confidence to:

Mr. John Barry, Employment Administrator



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#### **AAAS CRS-RESIDENT** CONGRESSIONAL FELLOWSHIP IN TELECOMMUNICATIONS AND INFORMATION TECHNOLOGY

#### APPLICATIONS INVITED

The American Association for the Advancement of Science (AAAS), in collaboration with the Congressional Research Service (CRS) of the Library of Congress, invites applications for a 1-year Congressional Science and Engineering Fellowship it will offer for the period beginning 1 September 1983. The Fellowship, part of the overall AAAS Program, provides an opportunity for accomplished and societally aware postdoctoral to mid-career scientists and engineers to participate in and toral to mid-career scientists and engineers to participate in and contribute to the public policy-making processes within the U.S. Congress. This year the AAAS CRS-Resident Fellowship is for qualified persons in the area of advanced telecommunications and information technologies. The individual selected will work within the Congression-

Persons may apply from any appropriate science or engineering field. Applications from both younger postdoctoral people and those with greater professional experience, particularly individuals who may also have sabbatical or similar augmenting fund arrangements, are welcome. In addition to this fellowship awarded by the AAAS and CRS, about 30 others are given by more than 20 participating organizations. The AAAS provides an extensive orientation and runs a year-long education program for the set of Congressional Science and Engineering Fellows.

The 1983-1984 AAAS CRS Fellow will receive a stipend of \$23,000; an additional \$1500 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:

AAAS CRS-Resident Congressional Fellowship American Association for the Advancement of Science 1776 Massachusetts Avenue, NW Washington, D.C. 20036

The deadline for application is 15 March 1983. The award will be announced on or around 15 May 1983.

#### **POSITIONS OPEN**

#### PHYSIOLOGIST

Full-time position available in May 1983, teaching general physiology with laboratory. Ph.D. required. Applicants with additional experience in anatomy and/or biochemistry are preferred. Development of an independent research project in an interest area of the applicant as it relates to health science is encouraged. Interested persons are invited to submit a letter discussing teaching and research experience Enclose curriculum vitae with names and addresses of three references to: Search Committee, Basic Science Division, Northwestern College of Chiropractic, 1834 South Mississippi River Boulevard, St. Paul, Minnesota 55116. An Equal Opportunity Employer.

## POSTDOCTORAL POSITION Fluorescence Studies of Protein Dynamics

Position available early spring for a Ph.D. experienced in modern luminescence spectroscopy as applied to biomolecules to investigate rapid structural plied to blomolecules to investigate rapid structural fluctuations of globular proteins. Experience in protein chemistry desirable. Much of the work to be carried out at Bell Laboratories, Murray Hill, New Jersey. Send résumé to: Dr. A. A. Lamola, Department of Dermatology, College of Physicians & Surgeons, Columbia University, 630 West 168 Street, New York, N.Y. 10032.

POSTDOCTORAL POSITION available to work on the roles of lymphokines in the development of cytotoxic T lymphocytes. Work will focus on the cytotoxic I symphocytes. Work will locus on the further definition of macrophage factors responsible for lymphocyte differentiation and proliferation. Experience in cellular immunology and purification of proteins desired. Contact: Arthur Flynn, Ph.D., or James H. Finke, Ph.D., Department of Molecular and Cellular Biology, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio 44106.

POSTDOCTORAL POSITION. Electrophysiology, neuropharmacology. Anticipated to start April 1983. The fellow will join an established group of ethanol researchers headed by Dr. Boris Tabakoff. The project involves the action of ethanol, BDZ GABA on locus coeruleus neurons using intracellular re-cording in a brain slice preparation. Experience with cording in a oran slice preparation. Experience with intracellular recording and/or brain slices and micropressure ejection techniques desirable. Salary commensurate with experience. Please send curriculum vitae, research interests, and three reference letters to: Dr. S. A. Shefner, Department of Physiology and Biophysics, University of Illinois at Chicago, Health Sciences Center, P.O. Box 6998, Chicago, Ill. 60680. An Affirmative Action/Equal Opportunity Employer.

#### NATIONAL SCIENCE FOUNDATION

National Science Foundation (NSF), Division of International Programs (U.S.-Latin America Cooperative Science Programs), is seeking applicants for PROGRAM ASSOCIATE with the Latin America and Pacific Section. The assignment is for 1 or 2 years under the Intergovernmental Personnel Act (from state and local government agencies or institutions of higher education) starting August 1983. A p. D. or its equivalent in science or engineering is Ph.D. or its equivalent in science or engineering is required. Latin America area and language knowledge highly desirable. The individual selected will remain an employee of his/her institution which may be reimbursed by NSF for a portion of his/her salary and other costs related to the assignment. Institutions should forward nominations by 15 March 1983 to: Dr. J. Elbert O'Connell, Latin America and Pacific Section, Division of International Programs, National Science Foundation, Washington, D.C. 20550. Telephone: 202-357-9558.

#### RADIOLOGICAL NMR SCIENTIST

University of Michigan Medical School, Department of Radiology, invites applications for a faculty posi-tion as radiological NMR scientist. This individual will help develop the clinical utility of NMR imaging, conduct more basic biomedical NMR research, supconduct more basic biomedical NMR research, support selected patient care activities, and participate in related educational programs. A Ph.D. in physics, chemistry, or a related field and significant experience in NMR research in NMR imaging or other radiological imaging is desired. Applicants should submit curriculum vitae, a statement of interests and goals, copies of relevant transcripts, and names of three references to: William Martel, M.D., Professor and Chairman, Department of Radiology, University of Michigan Hospitals, Box 013, Ann Arbor, Michigan 48109. A nondiscriminatory, Affirmative Action Employer. Code 105.

#### **POSITIONS OPEN**

POSTDOCTORAL POSITION-NEUROHOR-MONE SECRETION. Available immediately to study cholinergic receptor regulation of catechol-amine secretion in the adrenal chromaffin system. Experience in any of the following methods desir-able: cell culture, plasma membrane isolation, memable: cell culture, plasma memorane isolation, membrane biophysics, calcium uptake/efflux, assays for cyclic nucleotides, phosphorylation, and membrane marker enzymes. Send curriculum vitae, bibliography, and the names of three references to: Dr. Allan Schneider, Sloan-Kettering Institute, Cornell University Graduate School of Medical Science, 1275 York Avenue, New York, N.Y. 10021.

## MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) POSTDOCTORAL POSITION

The Massachusetts Institute of Technology announces an opening for a postdoctoral position in the Harvard-MIT Division of Health Sciences and Technology. Applicants should have a background in biophysics, biomedical engineering, chemical engineering, chemistry, pharmaceutics, or pharmacology. Work will be in transdermal drug delivery, emphasizing the study of basic mechanisms of transport across the skin.

For further information, contact: Dr. James C. Weaver, Building 20A, Room 128, or Dr. Robert S. Langer, Building E25, Room 342, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, Mass. 02139.

MIT is an Equal Opportunity/Affirmative Action

POSTDOCTORAL POSITION available immediately for studies of actions of insulin and somatomedins on endothelium. Experience in cell culture, receptor physiology, and biochemical procedures is desirable. Send curriculum vitae and names and telephone numbers of three references to: Dr. Robert S. Bar, Department of Medicine, The University of Iowa, Iowa City, Iowa 52242. An Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITION in CELL BIOLOGY available 1 April 1983 to study the development and maintenance of epithelial cell surface polarity and the expression of renal nephron segment-specific membrane proteins with monoclonal antibodies. Research experience with hybridoma technology, mammalian cell culture impunofluorescence, and search experience with hybridoma technology, mammalian cell culture; immunofluorescence, and immunoelectron microscopy is desirable but not essential. Please send curriculum vitae, references, and a statement of research interests to: Dr. George Ojakian, Department of Anatomy and Cell Biology, State University of New York, Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, N.Y. 11203.

POSTDOCTORAL VISION RESEARCH. A position is available in a research program on perceptual problems in aeronautics. Currently the program is concerned with computational models of human spatial, color, and motion sensitivity, with fidelity in advanced visual displays, and with visual cues in guided flight. Applicants should have knowledge of human vision and psychophysical methods. Experience with computer driven visual displays and digital image processing is also desirable. Research will be conducted at NASA Ames Research Center and be conducted at NASA Ames Research Center and in the Departments of Psychology and Aeronautics and Astronautics at Stanford University. Send curriculum vitae, description of research experience and interest, and names, addresses, and telephon numbers of three references to: Andrew B. Watson, Department of Psychology, Building 420, Jordan Hall, Stanford University, Stanford, Calif. 94305.

VISION RESEARCH. A research associate position is available in a continuing program of research on perceptual problems in aeronautics. Currently the program is concerned with computational models of human spatial, color, and motion sensitivity, with fidelity in advanced visual displays, and with visual cues in guided flight. Applicants should have extensive knowledge of human vision and psychophysical sive knowledge of human vision and psychophysical methods. Experience with computer driven visual displays and digital image processing is also desirable. The candidate should have postdoctoral experience in a related area, and be capable of initiating independent research projects. Research will be conducted at NASA Ames Research Center and in the Departments of Psychology and Aeronautics and Astronautics at Stanford University. Send curriculum vitae, description of research experience and interest; and names addresses and telephone numerical services. num vitae, description of research experience and interest, and names, addresses, and telephone numbers of three references to: Andrew B. Watson, Department of Psychology, Building 420, Jordan Hall, Stanford University, Stanford, Calif. 94305.

#### **POSITIONS OPEN**

POSTDOCTORAL POSITION in biochemistry is available beginning 1 June 1983 for a 1- to 2-year appointment. Our laboratory is interested in the regulation of lipid metabolism in cell lines from ocular tissues. Techniques in enzymology, immuno-chemistry, and lipoprotein chemistry will be uti-lized. A background in tissue culture is essential and experience or interest in lipid metabolism is imporexperience or interest in lipid metabolism is important. The position offers training in lipid biochemistry. Please send résumé, curriculum vitae, a brief description of your research background, and the names of three references to: Richard J. Cenedella, Ph.D., Chairman, Department of Biochemistry, Kirksville College of Osteopathic Medicine, Kirksville, Missouri 63501. An Equal Opportunity/Affirmative Action Fundament mative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATES positions available July 1983 or sooner. (i) Studies designed to determine the molecular basis of carcinogen and tumor promoter enhancement of viral transformation; experience in molecular and cellular biology desired; (ii) studies on the mechanism of antitumor activity of various crude and bacterially cloned human interferons; experience in biochemiscloned human interferons; experience in biochemistry, cell biology and/or membrane physiology desired. Send curriculum vitae, with description of research background, interests, and names and addresses of three references to: Gilda Chirafisi (Search Committee), Department of Microbiology, Cancer Center/Institute of Cancer Research, Columbia University, College of Physicians and Surgeons, 701 West 168 Street, New York, N.Y. 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer. Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE to join a research group studying the development of neuromuscular relationships in normal and/or dystrophic mice using LM, EM, computer assisted morphometric analysis, HRP, and histochemistry. Position available immediately or summer 1983. Submit curriculum vitae and two letters of reference to: Dr. Marcia Ontell, Department of Anatomy and Cell Biology, University of Pittsburgh School of Medicine, 3550 Terrace Street, Pittsburgh, Pennsylvania 15261.

POSTDOCTORAL SCIENTIST. Position available for participation in studies of the effect of a specific participation in studies of the effect of a specific protein-DNA interaction at the initiating end of transcribed genes on gene regulation and/or chroma-tin structure. Recombinant techniques will be em-ployed with the cloned rat albumin, alpha-fetoprotein, or the S-adenosyl-L-methionine decarboxylase tem, or the 3-adenosyl-t-methionine decarboxylase gene system. The project is under the supervision of Dr. J. Sanders Sevall in a Genetic Biology Program in the Department of Cellular and Molecular Biology. The initial appointment is for 1 year with possible extention for an additional 1 or 2 years. Salary is commensurate with experience. Interested condicommensurate with experience. Interested candidates should respond to: The Personnel Manager, Southwest Foundation for Research and Education, P.O. Box 28147, San Antonio, Texas 78284. Include curriculum vitae, description of research interests, and names of three references, including major professor, in initial correspondence.

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#### NATIONAL SCIENCE FOUNDATION (NSF)

NSF, Division of Physiology, Cellular and Molecular Biology, is seeking qualified applicants for **PRO-GRAM DIRECTOR POSITIONS** which periodically become available. These positions are filled on a 1-or 2-year rotational basis. The programs with rotational prostructions of the programs with rotational energy training and the programs with rotational energy training and the programs. tional opportunities are:

- Cell BiologyCellular PhysiologyDevelopmental Biology
- BiochemistryBiological Instrumentation

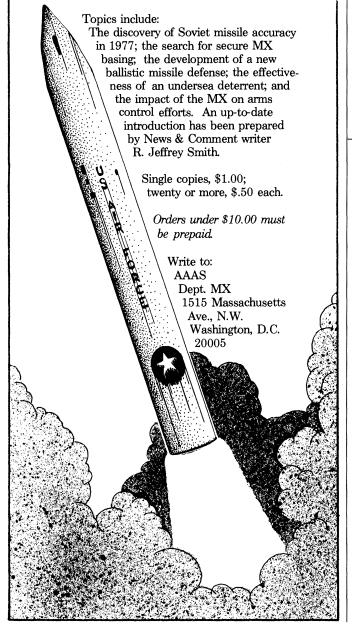
Applicants should have a Ph.D. or equivalent experience plus 6 to 8 years of independent research experience and a broad understanding of current experience and a broad understanding of current research on plant, animal, or microorganism in the appropriate disciplinary areas. Some administrative experience is also desirable. The positions are excepted from the competitive civil service at GG-14/15 (equivalent to GS-14/15), \$41,277 to \$63,115 per annum. Send résumés, indicating current salary, to: National Science Foundation, Personnel Administration Branch, 1800 G Street, NW, Room 212, Washington, D.C. 20550, attention: E. Paul Broglio. For technical information about these positions, contact: technical information about these positions, contact:
Dr. James H. Brown, Acting Division Director, PCM, telephone: 202-357-9400. NSF is an Equal Opportunity Employer.

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## NEW YORK STATE DEPARTMENT OF HEALTH POWER LINES PROJECT

Request for Research Contract Pre-Proposals

Pre-proposals are solicited for epidemiologic studies of the relationships of 60 Hz electromagnetic fields in the domestic environment to cancer in children and/or adults. Emphasis should be placed on alternating magnetic fields and nearby electrical wiring configurations. A program of exposure measurements is required. Preference will be given to studies including both central and suburban portions of the metropolitan area, and to studies which obtain cases from a population-based tumor registry.

Pre-proposals will also be accepted for other epidemiologic studies relating to potential health effects from exposure to 60 Hz electrical and/or magnetic fields. Occupational cohort mortality studies are not desired.

Send a pre-proposal containing a 2 to 5 page description of the proposed study, an approximate budget and c.v.'s of all investigators by *March 22, 1983* to D.O. Carpenter, M.D., Center for Laboratories and Research, New York State Department of Health, Albany, N.Y. 12201. For further information call (518) 474-4170.

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#### **POSITIONS OPEN**

#### RESEARCH ASSOCIATE

Postdoctoral position available immediately for 2 years. Salary: \$16,000 to \$19,000 per year. Individuals with interest and experience in mammalian nerve regeneration and working knowledge of light and electron microscopic techniques. Send résumé to: Dr. Ernest N. Albert, Department of Anatomy, The George Washington University Medical Center, 2300 I Street, NW, Washington, D.C. 20037.

RESEARCH ASSOCIATE. Conduct research in the area of apolipoprotein human genetics as related to atherosclerosis. Requirements include Ph.D. in biochemistry or molecular biology, 1 year of research experience, and thorough knowledge of the construction and screening of mammalian genomic li-braries, plasmid and M13 cloning and sequencing techniques, and southern and northern blotting techniques, and southern and northern blotting techniques, 40 hours per week, \$22,000 per year. Send résumé to: W. Healey, Job Order Number 3164, Division of Employment Security, C. F. Hurley Building, Government Center, Boston, Mass. 02201.

#### RESEARCH ASSOCIATE

Contingent upon receipt of funding, the Astronomy Department at the University of Washington may have an opening for a research associate specializing in analytical electron microscopy, for a program of research on extraterrestrial materials. The candidate should have a Ph.D. in physics, chemistry, or related fields, and experience in lattice fringe imaging, electron diffraction, energy loss spectroscopy, and quantitative x-ray microanalysis of particulates. Salary commensurate with experience. Candidates should send curriculum vitae and publication list, together with names of three referees, before 15 March 1983, to: Professor Bruce Margon, Chairman, Astronomy Department, FM-20, University of Washington, Seattle, Wash. 98195. An Affirmative Actionl Equal Opportunity Employer. in analytical electron microscopy, for a program of

#### RESEARCH POSITION—AUDITORY NEUROPHYSIOLOGY

A position is available at the Electrophysiology Laboratory of the Siegel Institute, Michael Reese Hospital, for an electrophysiologist or neurophysiolo-gist with computer science background to pursue human and animal research in auditory evoked po-tentials. Candidates should have training or experience in collaborative neurophysiologic studies of the auditory system. Staff of the Electrophysiology Laboratory currently hold research/teaching appointments in the Department of Surgery (Otolaryngology), University of Chicago

Interested applicants should submit curriculum vitae, a brief statement of research training, experience, and interests, and the names of three individuals who can supply letters of recommendation to:

Laszlo Stein, Ph.D., Director Laszio Stein, Fn.D., Director Siegel Institute Michael Reese Hospital and Medical Center Lake Shore Drive at 31st Street Chicago, Ill. 60616 Telephone: 312-791-2910

## UNIVERSITY OF ALBERTA Department of Biochemistry

The Department of Biochemistry invites applications for a position as RESEARCH SCHOLAR at tions for a position as RESEARCH SCHOLAR at assistant/associate professor rank (\$27,720 to \$39,820; \$35,420 to \$51,658). The successful candidate must have Ph.D. and/or M.D. degree(s) and at least 2 years of postdoctoral experience and have demonstrated outstanding ability for independent research. While preference will be given to investigate the production appears of cell resultance of the production and the production appears of the production and the production and the production and the production and the production are producted as the production and the production are producted as the producted as t gators interested in molecular aspects of cell regula-tion by either hormones or cell surface carbohy-drates, highly qualified candidates in other areas will be considered. This position will be long-term and will be funded through an external agency such as will be funded through an external agency such as The Alberta Heritage Foundation for Medical Research, but the incumbent will enjoy the privileges of the University academic rank at which the appointment is made. The granting of these awards is by competition and is made on the basis of excellence. Candidates should forward their curriculum vitae, a Canadates should forward their curriculum viae, a two- to three-page outline of their proposed research, and names of three references to: Professor J. S. Colter, Department of Biochemistry, The University of Alberta, Edmonton, Alberta, Canada T6G 2H7. The closing date for this competition is 31 March 1983. The University of Alberta is an Equal Constitution of the Opportunity Employer but, in accordance with Canada Employment and Immigration Regulations, priority will be given to Canadian citizens and permanent residents of Canada.

#### **POSITIONS OPEN**

RESEARCH ASSOCIATE. A position is available for an advanced postdoctoral fellow to work on DNA transformation in marine embryos, in the Division of Biology at the California Institute of Technology. The applicant should have experience in recombinant DNA technology and vector construction, in maintenance and rearing of marine embryos, in microinjection and other transfection methods, and in molecular technology useful for analyzing gene expression at the RNA level. Applicants must have a Ph.D. and, if possible, several years of postdoctoral experience. Duties will include supervision of technicians and less experienced research personnel, but primarily will be to carry out research. Applicants should send curriculum vitae and names of three references to: Dr. Eric H. Davidson, Division of Biology 156-29, California Institute of Technology, Pasadena, Calif. 91125. The California Institute of Technology is an Affirmative Action/Equal Opportunity Institution.

RESEARCH SCIENTIST: Malaysia. Under general direction, plans, develops, and manages broadly outlined biotechnological research projects of the joint venture established by International Plant Research Institute (IPRI) and Sime Darby; advises on importance of technological developments in agri-business. Requires: Ph.D. in relevant field; experience in plant physiology; knowledge of genetic engineering developments; experience in plant tissue culture preferred. M.S. and relevant experience may be substituted for Ph.D. Must be willing to relocate. Salary: \$30,000 per year, plus relocation expenses Closing date: 31 March 1983. Equal Opportunity Employer. Send curriculum vitae and publications list to: Kristina Combs, IPRI, 853A Industrial Road, San Carlos, Calif. 94070.

#### TOXICOLOGIST BUSHY RUN RESEARCH CENTER

Bushy Run Research Center (BRRC), operated by the Union Carbide Corporation (UCC) and Carnegie-Mellon University (CMU), is seeking a Ph.D. toxicologist with 3 to 5 years of experience at conducting subchronic and chronic toxicity/oncogenicity studies by oral/dermal exposure. Candidate should have relevant publications and a strong back-ground in biostatistics. Primary responsibilities will include the design, implementation, analysis, inter-pretation, and technical supervision of toxicology studies done with multiple species. Study cost-estimating experience is desired.

BRRC is located 25 miles east of Pittsburgh in beautiful rolling countryside. The Laboratory has recently undergone a multi-million dollar renovation and has some of the most modern, state-of-the-art facilities available. BRRC is accredited by AALAS and by the Toxicology Laboratory Accreditation Board. Send résumé and references to: R. J. Jack-man, Bushy Run Research Center, R.D. Number 4, Mellon Road, Export, Pa. 15632.

BRRC is an Equal Opportunity/Affirmative Action Employer.

VERTEBRATE ZOOLOGIST. Ph.D. preferable. Tenure-track position. Assistant or associate professor, beginning September 1983. Primary responsibilsoi, beginning september 1983. Filmary responsibilities include teaching comparative chordate anatomy, vertebrate embryology, histology, and introductory classes for majors and nonmajors. A strong commitment to teaching is required. Potential exists for limited funded research. Send résumé, transcripts for all college work, and three letters of reference to: Biology Search Committee, Western State College, Gunnison, Colo. 81230. Application deadline: 18 March 1983 or until position is filled. Equal Opportunity/Affirmative Action Employer.

#### **TRAINEESHIPS**

PREDOCTORAL AND POSTDOCTORAL TRAIN-EESHIPS IN DEVELOPMENTAL BIOLOGY. This EESHIPS IN DEVELOPMENTAL BIOLOGY. This program is interdisciplinary, with faculty from ten campus departments including Anatomy, Biochemistry, Botany, Entomology, Medicine, Obstetrics and Gynecology, Oncology, Pediatrics, Psychology, and Zoology. Developmental biology is the central focus. Apply by 15 March. Contact: Barbara Houser, Administrator, Developmental Biology Program, Zoology Research Building, University of Wisconsin, Madison, Wis. 53706. Telephone: 608-262-1171. An Equal Opportunity/Affirmative Action Employer.

#### **TRAINEESHIPS**

#### POSTDOCTORAL TRAINEESHIPS

The Developmental Biology Center has available postdoctoral traineeships in developmental biology and genetics. Broad areas of research in a variety of and genetics. Broad areas of research in a variety of experimental systems are available utilizing techniques of molecular biology, biochemistry, and cell biology. Opportunities for utilizing recombinant DNA, hybridoma, and genetic approaches to problems of development are available. Interested persons should send complete curriculum vitae, letters of reference, career goals, and area of interest to: Anthony P. Mahowald, Director of Developmental Biology Center, School of Medicine, Case Western Reserve University, Cleveland, Ohio 44106.

#### **PROGRAM**

ENVIRONMENTAL AND EVOLUTIONARY BIOL-ENVIRONMENTAL AND EVOLUTIONARY BIOLOGY Ph.D. PROGRAM. The Department of Biology, University of Southwestern Louisiana, announces a new Ph.D. program to begin fall 1983. Teaching assistantships available; stipends: \$5500 for 10 months; tuition waived. For criteria for eligibility, applications, and other information, write or call: Graduate Coordinator, Department of Biology, University of Southwestern Louisiana, P.O. Box 42451, Lafayette, La. 70504; telephone: 318-231-5235.

#### **ASSISTANTSHIPS**

#### GRADUATE ASSISTANTSHIPS

Assistantships in Ph.D. program available for a limited number of qualified graduate students. All students supported by teaching or research assistantships carrying 12-month stipends of \$6250 (plus tuition and dependency allowances). Active re-search programs include behavior, biochemistry, biophysics, cell biology, development, genetics, mi-crobiology, molecular biology, neurophysiology, and physiology. For further information, write: Di-rector of Graduate Admissions, Department of Biolo-gy, Wesleyan University, Middletown, Conn. 06457.

#### **GRADUATE STUDY**

GRADUATE STUDIES IN ANATOMY. Fellowships leading to the Ph.D. in anatomy available fall 1983 at University of Kentucky Medical Center. Programs offer training in modern research techniques and general courses covering all aspects of anatomy. Major research interests include neurobiology, neuroendocrinology, reproductive biology, biology of aging, respiratory biology, ultrastructure, and others. A strong background in science and a sincere interest in an academic green is required. Stippeds ers. A strong background in science and a sincere interest in an academic career is required. Stipends begin at \$5000 per year. Applications should be complete by 30 April. For more details regarding curriculum, research programs, and application materials, write: Dr. M. Nikitovitch-Winer, Director of Graduate Studies, Anatomy, University of Kentucky Medical Center, Lexington, Ky. 40536.

An Affirmative Action/Equal Opportunity Institution

The Department of Biology, New Mexico State University, announces opportunities for broadly based **GRADUATE TRAINING** in the areas of botany, microbiology, zoology, ecology, and toxicology. Teaching and research assistantships available. For information: Chairman, Department of Biology, Box 3AF, New Mexico State University, Las Cruces, N.M. 88003. Telephone: 505-646-3611.

#### **FELLOWSHIPS**

POSTDOCTORAL FELLOWSHIP. Will assist with research studying immunological mechanisms of BCG induced tumor regression in bovine squamous cell carcinoma. Requires Ph.D. and experience with cell carcinoma. Requires Ph.D. and experience with in vitro assays of immunity or desire to learn this technology. Salary negotiable for 12-month appointment, with 1-year extension possible. Send resume and names of three references to: Dr. Reed P. Warren, UMC 68, Utah State University, Logan, Utah 84322. Closes: 1 March 1983 or when suitable candidate is found. Affirmative Action/Equal Opporative Technology. tunity Employer.

## Research Scientist/Marine Geophysicist

Salary: \$25,315 to \$47,088

Ref. No.: 82-NCRSO-EMR-19 (4030)

Energy, Mines and Resources Canada Geological Survey of Canada Dartmouth, Nova Scotia

#### **Duties**

The Geological Survey of Canada is seeking a creative geophysicist to carry out original and cooperative research programs. These programs relate to geophysical studies of the earth and its tectonic processes, particularly by the development and testing of theoretical models where such programs have specific applications to the practical consequences of continental margin development, such as its resource potential. Some research programs may be totally independent, but others must provide theoretical geophysical input to programs already underway at the Atlantic Geoscience Centre. These programs are directed towards the investigation of the structure and origin of continental margins off Eastern Canada and the Arctic, basin analysis and hydrocarbon inventory of Eastern Canada, and quaternary marine geological processes. The scientist must exhibit originality, creativity, initiative and cooperativeness in carrying out such work and must communicate its results effectively.

#### Qualifications

Graduation from a recognized university with a doctorate degree in geophysics, geology, physics,

mathematics or a related field; or a lesser degree with research experience and scientific productivity equivalent to that of a doctorate degree.

Clearance number: 112-299-012

#### Language requirements

Knowledge of English is essential.

Additional job information is available by writing to the address below.

Tout renseignement relatif à ce concours est disponible en français et peut être obtenu en écrivant à l'adresse suivante:

#### How to apply

Send your application and/or résumé to:
Joan Girling
National Capital Region Staffing Office
Public Service Commission of Canada
300 Laurier Avenue West
Ottawa, Ontario K1A 0M7
Tel.: (613) 593-5331, Ext. 403
Closing Date: March 18, 1983

Please quote the applicable reference number at all times.

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