

Jeffery and Raff have put together a first-class collection of lectures. A chapter on the theoretical aspects of pattern formation would have been a worthwhile addition.

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Some Other Books of Interest

Current Ornithology. Vol. 1. RICHARD F. JOHNSTON, Ed. Plenum, New York, 1983. xvi, 425 pp., illus. \$39.50.

The series *Current Ornithology* is an outcome of the Workshop on a National Plan for Ornithology initiated in 1975-76 under the sponsorship of the American Ornithologists' Union and the National Science Foundation. The intent is to present, at regular intervals, relatively short "reviews or position statements concerning the active fields of ornithological research" that "often will be done from the viewpoint of a readily-identified group or school." The papers in the first volume include discussions of comparative avian demography by Ricklefs, the determination of clutch size in precocial birds by Winkler and Walters, variation in mate fidelity in monogamous birds by Ford, and the evolution of differential bird migration by Kettersen and Nolan. The remaining eight papers, by Carey, Corbin, Cracraft, Hinchcliffe and Gumpel-Pinot, Martin, Rising, Shields, and Sibley and Ahlquist, deal with other issues of ecology, phylogeny, systematics, genetics, and development.

—K.L.

Planning and Analysis of Observational Studies. WILLIAM G. COCHRAN. Lincoln E. Moses and Frederick Mosteller, Eds. Wiley, New York, 1983. xiv, 145 pp. \$21.95. Wiley Series in Probability and Mathematical Statistics.

This is a posthumous work that has been prepared for publication by two of the author's associates. The class of studies it is concerned with is those in which controlled experimentation is impossible, as in the assessment of a given medical treatment or public health hazard when "the groups of people whom the investigator wishes to compare are already selected by some means not chosen by the investigator." The presentation is "addressed not to statisticians but to subject-matter people who do or may do" such studies. It is arranged accord-

ing to concepts of methodology rather than of "subject matter," with chapters on sources of variation in responses, statistical techniques involved in drawing conclusions from data, the planning of studies, the matching of populations and adjustments in the statistical analysis as ways of dealing with the problem of confounding variables, and studies in which there is no external comparison group. Some examples from actual studies are cited, and short lists of references to other literature dealing with issues of methodology are included.—K.L.

Tree Rings and Telescopes. The Scientific Career of A. E. Douglass. GEORGE ERNEST WEBB. University of Arizona Press, Tucson, 1983. xiv, 242 pp., illus. \$19.50.

Andrew Ellicott Douglass (1867-1962) began his career in astronomy as an assistant to William H. Pickering at Harvard. Moving to Flagstaff, Arizona, in 1894, he was active in the establishment of the Lowell Observatory there and became principal assistant to Percival Lowell. Dismissed by Lowell in 1901 in the wake of his increasing skepticism toward Lowell's theories concerning life on Mars, he eventually found a position at the University of Arizona in Tucson. There he was instrumental in the establishment of the Steward Observatory, of which he served as director until 1937. In addition to his activities in solar and planetary astronomy Douglass pioneered in the science of dendrochronology. Particularly concerned with relating terrestrial weather to solar activity, he developed techniques for using the annual growth rings of trees for dating archeological remains as well as for tracing climatic cycles. The Laboratory of Tree-Ring Research at the University of Arizona is part of his legacy in this field. In the present biography Douglass's two overlapping careers are traced separately. The author, a historian, has drawn heavily on the Douglass papers on deposit at the University of Arizona library.—K.L.

Observers Observed. Essays on Ethnographic Fieldwork. GEORGE W. STOCKING, JR., Ed. University of Wisconsin Press, Madison, 1983. vi, 242 pp., illus. \$19.95. History of Anthropology, vol. 1.

As the editor notes in the introductory chapter, the series this volume inaugurates is an outcome of the development of a more systematic concern on the part of both anthropologists and historians with the history of anthropology. It is

intended that the individual volumes of the series will generally be organized around particular themes "of historical and contemporary anthropological significance," although miscellaneous studies on "non-theme topics" will also be accommodated. The present volume contains seven papers on the theme of "participant-observation" as a style of inquiry: a partial translation by Douglas Cole of Franz Boas's Baffin Island letter-diary of 1883-84; accounts by Curtis Hinsley of the work of Frank Cushing and Jesse Fewkes in the American Southwest, by Stocking of fieldwork in British anthropology in the late 19th and early 20th centuries, and by James Clifford of the development of Marcel Griaule's ethnographic method; a consideration by Joan Larcom of Bernard Deacon's work in the New Hebrides in the light of her own subsequent work there; a retrospective account by Homer Barnett of his own work in Palau; and an "essay review" by Paul Rabinow of Clifford's *Person and Myth: Maurice Leenhardt in the Melanesian World*. There is also one "miscellaneous" paper, a study by Richard Handler of the development of the ideas of Edward Sapir.—K.L.

Books Received

Abstracting and Indexing Services in Perspective. Miles Conrad Memorial Lectures 1969-1983. M. Lynne Neufeld, Martha Cornog, and Inez L. Sperr, Eds. Information Resources Press, Arlington, Va., 1983. xii, 300 pp., illus. \$27.50.

Access to the World. A Travel Guide for the Handicapped. Louise Weiss. 2nd ed. Facts on File, New York, 1983. xviii, 222 pp. \$14.95.

Acid Deposition. Atmospheric Processes in Eastern North America. A Review of Current Scientific Understanding. National Academy Press, Washington, D.C., 1983. xvi, 376 pp., illus. Paper, \$16.50.

The Acoustic Sense of Animals. William C. Stebbins. Harvard University Press, Cambridge, Mass., 1983. xii, 168 pp., illus. \$16.50.

Acute Diarrhea. Its Nutritional Consequences in Children. Joseph A. Bellanti, Ed. Raven, New York, 1983. xvi, 224 pp., illus. \$25. Nestlé Nutrition Workshop Series, vol. 2. From a workshop, Washington, D.C., May 1982.

Advances in Cancer Control. Research and Development. Paul F. Engstrom, Paul N. Anderson, and Lee E. Mortenson, Eds. Liss, New York, 1983. xx, 524 pp., illus. \$62. Progress in Clinical and Biological Research, vol. 120. From a meeting, Washington, D.C., March 1982.

Advances in Solar Energy. An Annual Review of Research and Development. Vol. 1, 1982. Karl W. Böer and John A. Duffie, Eds. American Solar Energy Society, New York, 1983. viii, 312 pp., illus. \$95.

Advances in Two-Phase Flow and Heat Transfer. Fundamentals and Applications. S. Kekac and M. Ishii, Eds. Nijhoff, The Hague, 1983 (U.S. distributor, Kluwer Boston, Hingham, Mass.). Two volumes. xx, 920 pp., illus. \$125. NATO ASI Series E, Nos. 63 and 64. From a workshop, Spitzingsee, Germany, Aug. 1982.

The Ambivalent Mind. The Neuropsychology of Left and Right. Michael C. Corballis and Ivan L. Beale. Nelson-Hall, Chicago, 1983. xii, 312 pp., illus. \$24.95.

Annual Review of Military Research and Development: 1982. Kosta Tsipis and Sheena Phillips. Praeger, New York, 1983. xii, 172 pp., illus. \$24.95.

Annual Review of Plant Physiology. Vol. 34. Winslow R. Briggs, Russell L. Jones, and Virginia Wal-

bot, Eds. Annual Reviews, Palo Alto, Calif., 1983. xii, 492 pp., illus. \$27.

The Application of Laser Light Scattering to the Study of Biological Motion. J. C. Earnshaw and M. W. Steer, Eds. Plenum, New York, 1983. xiv, 706 pp., illus. \$89.50. NATO Advanced Science Institutes Series A, vol. 59. From an institute, Maratea, Italy, June 1982.

Cochlear Prostheses. Charles W. Parkins and Samuel W. Anderson, Eds. New York Academy of Sciences, New York, 1983. x, 532 pp., illus. Cloth or paper, \$100. Annals of the New York Academy of Sciences, vol. 405. From a symposium, New York, April 1982.

Collagen in Health and Disease. Jacqueline B. Weiss and Malcolm I. V. Jayson, Eds. Churchill Livingstone, Edinburgh, 1982 (U.S. distributor, Longman, New York). xii, 572 pp., illus. \$95.

Color Atlas of Life before Birth. Normal Fetal Development. Marjorie A. England. Year Book Medical Publishers, Chicago, 1983. 216 pp. \$39.95.

Computerization of Working Life. E. Fossum, Ed. Horwood, Chichester, England, and Halsted (Wiley), New York, 1983. 148 pp. \$39.95. Ellis Horwood Series in Computers and Their Applications. Translated from the Norwegian edition (1982).

Contact and Photocontact Allergens. A Manual of Predictive Test Methods. Thomas Maurer. Dekker, New York, 1983. xvi, 180 pp., illus. \$29.75. Dermatology, vol. 3.

Contemporary Topics in Molecular Immunology. Vol. 9. F. P. Inman and T. J. Kindt, Eds. Plenum, New York, 1983. xvi, 246 pp., illus. \$39.50.

Copper Coordination Chemistry. Biochemical and Inorganic Perspectives. Kenneth D. Karlin and Jon Zubieta, Eds. Adenine Press, Guilderland, N.Y., 1983. xii, 498 pp., illus. \$69.

The Coronary Circulation in Health and Disease. Melvin L. Marcus. McGraw-Hill, New York, 1983. xii, 466 pp., illus. \$45.

Crevice Fluid Updated. G. Cimasoni. Karger, Basel, 1983. viii, 152 pp., illus. \$69.50. Monographs in Oral Science, vol. 12.

Cross-Cultural Studies in Cognition and Mathematics. David F. Lancy. Academic Press, New York, 1983. xxii, 250 pp., illus. \$24.50. Developmental Psychology Series.

The Data-Factory. Data Center Operations and Systems Development. Edward G. Roeske. Yourdon, New York, 1983. vi, 98 pp., illus. Paper, \$17.

The Dawn of Qumran. The Sectararian Torah and the Teacher of Righteousness. Ben Zion Wacholder. Hebrew Union College Press, Cincinnati, 1983 (distributor, KTAV Publishing House, New York). xviii, 310 pp. \$25. Monographs of the Hebrew Union College, No. 8.

Deciding to Forego Life-Sustaining Treatment. A Report on the Ethical, Medical, and Legal Issues in Treatment Decisions. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, Washington, D.C., 1983 (available from the Superintendent of Documents, Washington, D.C.). xiv, 554 pp., illus. Paper, \$8.

Dentition. Genetic Effects. Ronald J. Jorgenson and Natalie W. Paul, Eds. Liss, New York, 1983. xiv, 186 pp., illus. \$42. Birth Defects: Original Articles Series, vol. 19, No. 1. From a symposium, Birmingham, Ala., June 1982.

Depressive Disorders in Different Cultures. Report of the WHO Collaborative Study on Standardized Assessment of Depressive Disorders. N. Sartorius et al. World Health Organization, Geneva, 1983 (U.S. distributor, WHO Publications Centre USA, Albany, N.Y.), vi, 150 pp. Paper, \$8.50.

Dermatological Formulations. Percutaneous Absorption. Brian W. Barry. Dekker, New York, 1983. x, 480 pp., illus. \$55. Drugs and the Pharmaceutical Sciences, vol. 18.

Development by People. Citizen Construction of a Just World. Guy Gran. Praeger, New York, 1983. xxiv, 480 pp. \$33.95; paper, \$9.95.

A Dictionary of Epidemiology. John M. Last, Ed. Oxford University Press, New York, 1983. xiv, 114 pp., illus. \$21.95; paper, \$10.95. Oxford Medical Publications.

Did the Devil Make Darwin Do It? Modern Perspectives on the Creation-Evolution Controversy. David B. Wilson, Ed. Iowa State University Press, Ames, 1983. xxii, 242 pp., illus. \$25.

The Diversity of Crop Plants. J. G. Hawkes. Harvard University Press, Cambridge, Mass., 1983. viii, 184 pp., illus. \$20.

DNA Repair. A Laboratory Manual of Research Procedures. Vol. 2. Errol C. Friedberg and Philip C. Hanawalt, Eds. Dekker, New York, 1983. xviii, 314 pp., illus. \$49.50.

Drug Fate and Metabolism. Methods and Techniques. Vol. 4. Edward R. Garrett and Jean L. Hirtz, Eds. Dekker, New York, 1983. xvi, 486 pp., illus. \$75.

Educated Guessing. How to Cope in an Uncertain World. Samuel Kotz and Donna K. Stroup. Dekker,

New York, 1983. viii, 188 pp., illus. \$15.95. Popular Statistics, 2.

The Effect of Ultraviolet Radiation on the Immune System. A Scientific Round Table. John A. Parrish, Ed. Johnson and Johnson Baby Products Company, Skillman, N.J., 1983. xviii, 424 pp., illus. Paper, \$31.50.

Efficiency of Manufacturing Systems. B. Wilson, C. C. Berg, and D. French, Eds. Plenum, New York, 1983. x, 336 pp., illus. \$47.50. NATO Conference Series II, vol. 14. From an institute, Amsterdam, Sept. 1982.

El-Asnam, Algeria Earthquake of October 10, 1980. A Reconnaissance and Engineering Report. Arline Leeds, Ed. National Academy of Sciences Committee on Natural Disasters, Washington, D.C., and Earthquake Engineering Research Institute, Berkeley, Calif., 1983. Various pages, illus. Paper.

The Enterprise of Knowledge. An Essay on Knowledge, Credal Probability, and Chance. Isaac Levi. MIT Press, Cambridge, Mass., 1983. xviii, 462 pp. Paper, \$12.50., Reprint, 1980 ed.

Environment and Population. Problems of Adaptation. An Experimental Book Integrating Statements by 162 Contributors. John B. Calhoun, Ed. Praeger, New York, 1983. xx, 486 pp., illus. \$60.

Environmental Adaptation and Evolution. A Theoretical and Empirical Approach. Dietrich Mossakowski and Gerhard Roth, Eds. Fischer, Stuttgart, 1982 (U.S. distributor, Verlag Chemie, Deerfield Beach, Fla.). x, 302 pp., illus. Paper, \$42.50. From a symposium, Bremen, Germany, Sept. 1980.

Environmental Discourse. A Critical Analysis of "Environmentalism" in Architecture, Planning, Design, Ecology, Social Sciences and the Media. Nectdet Teymur. Question Press, London, 1983 (U.S. distributor, Humanities Press, Atlantic Highlands, N.J.). xiv, 220 pp., illus. \$27.95; paper, \$11.95.

Environmental Isotopes in the Hydrosphere. V. I. Ferronsky and V. A. Polyakov. Wiley-Interscience, New York, 1982. viii, 466 pp., illus. \$71. Translated from the Russian edition (1975) by S. V. Ferronsky.

Epilepsy Guide. Diagnosis and Treatment of Epileptic Seizure Disorders. Ernst Niedermeyer. Urban and Schwarzenberg, Baltimore, 1983. x, 262 pp. Paper, \$19.50.

EXAFS and Near Edge Structure. A. Bianconi, L. Inocchia, and S. Stipcich, Eds. Springer-Verlag, New York, 1983. xii, 420 pp., illus. \$35. Series in Chemical Physics, 27. From a conference, Frascati, Italy, Sept. 1982.

Exceptionalities through the Lifespan. An Introduction. Charles C. Cleland and Jon D. Swartz. Macmillan, New York, and Collier Macmillan, London, 1982. xvi, 464 pp., illus. \$24.95.

L'Expérience Adolescente. Michel Claes. Mardaga, Brussels, 1983. 212 pp. Paper, 690 BF. Psychologie et Sciences Humaines, 121.

The Family Secret. Domestic Violence in America. William Stacey and Anson Shupe. Beacon, Boston, 1983. xxiv, 238 pp. \$14.95.

Fertilization of the Human Egg in Vitro. Biological Basis and Clinical Application. Henning M. Beier and Hans R. Lindner, Eds. Springer-Verlag, New York, 1983. xxvi, 426 pp., illus. \$39.50. From a symposium, Murnau, Germany, June 1982.

Freshwater Wilderness. Yellowstone Fishes and Their World. John D. Varley and Paul Schullery. Illustrations by Michael Simon. Yellowstone Library and Museum Association, Yellowstone National Park, Wyo., 1983. iv, 134 pp. \$19.95; paper, \$12.95.

The Fringe of the Unknown. L. Sprague de Camp. Prometheus, Buffalo, N.Y., 1983. 208 pp., illus. \$16.95; paper, \$8.95.

Fundamentals of Digital Switching. John C. McDonald, Ed. Plenum, New York, 1983. xiv, 418 pp., illus. \$49.50. Applications of Communications Theory.

Fundamentals of Microbiology. I. Edward Alcamo. Addison-Wesley, Reading, Mass., 1983. xxviii, 834 pp., illus., + appendices, index, and glossary. \$29.95.

Fundamentals of Transport Phenomena. Ray W. Fahien. McGraw-Hill, New York, 1983. xxvi, 614 pp., illus. \$33.50. Chemical Engineering Series.

The Future of Nonfuel Minerals in the U.S. and World Economy. Input-Output Projections, 1980-2030. Wassily Leontief et al. Lexington (Heath), Lexington, Mass., 1983. xviii, 454 pp. \$39.95.

Genetics. George J. Brewer and Charles F. Sing. Addison-Wesley, Reading, Mass., 1983. xiv, 730 pp., illus., + appendices. \$28.95.

Global Fisheries. Perspectives for the 1980s. Brian J. Rothschild, Ed. Springer-Verlag, New York, 1983. xii, 290 pp. \$34.80. Series on Environmental Management.

Information Science in Action. System Design. Anthony Debons and Arvid G. Larson, Eds. Nijhoff, The Hague, 1983 (U.S. distributor, Kluwer Boston, Hingham, Mass.). Two volumes. xxiv, 864 pp., illus. \$130. NATO ASI Series E, No. 59 and No. 60. From an institute, Crete, Aug. 1978.

Integrated Management of Insect Pests of Pome and Stone Fruits. B. A. Croft and S. C. Hoyt, Eds. Wiley-Interscience, New York, 1983. xviii, 454 pp., illus. \$52.50. Environmental Science and Technology.

L'Intelligence ou les Intelligences? Jean Chateau. Mardaga, Brussels, 1983. 232 pp. Paper, 850 BF. Psychologie et Sciences Humaines, 120.

International Advances in Surgical Oncology. Vol. 6. Gerald P. Murphy, Ed. Liss, New York, 1983. x, 364 pp., illus. \$76.

International Nonproprietary Names (INN) for Pharmaceutical Substances. Cumulative List No. 6. World Health Organization, Geneva, 1982 (U.S. distributor, WHO Publications Centre USA, Albany, N.Y.). xx, 494 pp. Paper, \$27.50.

Introduction to Pathophysiology. Basic Principles of the Disease Process. John H. Emes and Thomas J. Nowak. University Park Press, Baltimore, 1983. xvi, 462 pp., illus. \$24.95.

Introduction to Plasma Theory. Dwight R. Nicholson. Wiley, New York, 1983. xii, 292 pp., illus. \$29.95. Series in Plasma Physics.

Iron Metabolism. Iván Bernát. Plenum, New York, 1983. 416 pp., illus. \$39.50. Translated from the Hungarian by Eva Gosztonyi.

Issues and Reviews in Teratology. Vol. 1. Harold Kalter, Ed. Plenum, New York, 1983. xviii, 354 pp., illus. \$45.

Issues in Acoustic Signal-Image Processing and Recognition. C. H. Chen, Ed. Springer-Verlag, New York, 1983. viii, 334 pp., illus. \$48.80. NATO ASI Series F, No. 1. From a workshop, San Miniato, Italy, Aug. 1982.

Learning in Children. Progress in Cognitive Development Research. Jeffrey Bisanz, Gay L. Bisanz, and Robert Kail, Eds. Springer-Verlag, New York, 1983. xvi, 202 pp., illus. \$23. Series in Cognitive Development.

Leptons and Quarks. L. B. Okun. North-Holland, Amsterdam, 1982 (U.S. distributor, Elsevier, New York). xiv, 362 pp., illus. \$70.25. Translated from the Russian by V. I. Kisin.

Letters of Edward Jenner and Other Documents Concerning the Early History of Vaccination. From the Henry Barton Jacobs Collection in the William H. Welch Medical Library. Genevieve Miller, Ed. Johns Hopkins University Press, Baltimore, 1983. xxx, 146 pp. \$15. Henry E. Sigerist Supplements to the *Bulletin of the History of Medicine*, new series, No. 8.

Methodology for the Human Sciences. Systems of Inquiry. Donald Polkinghorne. State University of New York Press, Albany, 1983. xii, 350 pp. \$33.50; paper, \$9.95. SUNY Series in Transpersonal and Humanistic Psychology.

MHPG: Basic Mechanisms and Psychopathology. James W. Maas, Ed. Academic Press, New York, 1983. xiv, 226 pp., illus. \$26.50. Behavioral Biology.

Microbes in Their Natural Environments. Published for the Society for General Microbiology by Cambridge University Press, New York, 1983. x, 498 pp., illus. \$67.50. Symposia of the Society for General Microbiology, 34. From a symposium, Coventry, England, April 1983.

Milk Intolerances and Rejection. J. Delmont, Ed. Karger, Basel, 1983. x, 170 pp., illus. \$84. From a symposium, Sophia-Antipolis, Nov. 1981.

Modeling and Identification of Dynamic Systems. N. K. Sinha and B. Kuszta. Van Nostrand Reinhold, New York, 1983. xiv, 334 pp., illus. \$32.50.

A Modern Handbook of Physics. B. M. Yavorsky and A. A. Detlaf. Mir, Moscow, 1982 (U.S. distributor, Imported Publications, Chicago). 712 pp., illus. \$13.95. Translated from the Russian edition (Moscow, 1980) by Nicholas Weinstein.

Multiple Dopamine Receptors. Receptor Binding Studies in Dopamine Pharmacology. Milton Titeler. Dekker, New York, 1983. xiv, 174 pp., illus. \$34.50. Receptors and Ligands in Intercellular Communication, 1.

Multiple Sclerosis East and West. Yoshigoro Kuriwaka and Leonard T. Kurland, Eds. Karger, Basel, 1982. vi, 398 pp., illus. \$118.75. From two meetings, Kyoto, Japan, Sept. 1981.

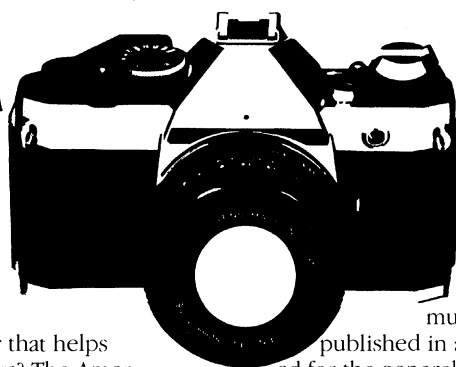
Neural Transmission, Learning, and Memory. R. Caputto and Cosimo Ajmone Marsan, Eds. Raven, New York, 1983. xii, 288 pp., illus. \$62.50. International Brain Research Organization Monograph Series, vol. 10. From a symposium, Cordoba, Argentina, May 1981.

New Frontiers in Technology Application. Integration of Emerging and Traditional Technologies. Ernst U. von Weizsäcker, M. S. Swaminathan, and Akililu Lemma, Eds. Published in cooperation with the United Nations by Tycooly, Dublin, 1983. xiv, 272 pp., illus. \$50; paper, \$25. Science and Technology for Development Series. From a meeting, Laguna, The Philippines, Dec. 1982.

Nonequilibrium Phenomena I: The Boltzmann Equation. J. L. Lebowitz and E. W. Montroll, Eds. North-Holland, Amsterdam, 1983 (U.S. distributor, (Continued on page 304)

The 2nd Annual AAAS Science Photography Contest

DEADLINE EXTENDED



Have you taken a photograph that stimulates curiosity about some aspect of the world we live in, that celebrates its beauty, or that helps explain how it works? The American Association for the Advancement of Science, publisher of *Science*, *Science 83*, and *Science Books and Films*, is looking for those special photographs that compel the eye and excite the mind.

Four First Prizes \$1000

First prizes of \$1000 each will be awarded in four categories: the Physical World; the Living World; the Manmade World; and the Micro World (SEM's & TEM's). Honorable Mention Photographs will receive \$100. All winners will receive a certificate, suitable for framing. A selection of winning photographs will be published in the May issue of *Science 84* and exhibited at the AAAS annual meeting and other sites around the country. Judging criteria will include subject novelty, aesthetic quality, and technical excellence or difficulty.

Separate Student Contest

Student entries are encouraged and will be judged separately (group or class entries are acceptable). Winners will receive certificates and a \$100 prize. Mark the student box on the entry form.

Contest Rules

Eligibility. The contest is open to everyone except employees of AAAS and their relatives. **Entries.** You may submit up to

5 entries (a sequence counts as one.) Photographs must have been taken by you and must be previously un-

published in any medium intended for the general public. Entries may be black and white or color, unmounted prints (no larger than 8 by 10 inches) or transparencies; they must not be mounted in glass. Duplicates may be entered, but originals must be available for publication. Entries must be accompanied by explicit caption information that identifies the content of each photograph and any special technique involved in its creation. Each photograph entered must bear photographer's name and address. There is a \$5 entry fee (one fee per contestant; make check payable to AAAS Science Photography Contest). Please enclose the official entry form or a photocopy. **Rights and responsibilities.** The AAAS has the right to publish, exhibit, and use for promotional purposes any winning photograph. The AAAS assumes no responsibility for photographs entered. A stamped, self-addressed envelope must accompany all entries if you wish them returned. Submission of an entry constitutes acceptance of all rules and conditions. **Deadline.** All entries must be postmarked no later than February 1, 1984. **Send all entries to:** Photography Contest, AAAS, 1101 Vermont Ave., N.W., 10th Floor, Washington, D.C. 20005

OFFICIAL ENTRY FORM

Name	
Address	
Daytime Phone #	Total # Of Entries
# Of Prints	# Of Transparencies
Categories Entered	
<input type="checkbox"/> Student entry	
Don't forget entry fee and caption information	

BOOKS RECEIVED

(Continued from page 278)

Elsevier, New York), viii, 254 pp. \$40. Studies in Statistical Mechanics, vol. 10.

Noninvasive Methods in Atherosclerosis Research. Ruth Johnsson Hegvli, Ed. Raven, New York, 1983. xiv, 200 pp., illus. \$39.50. Atherosclerosis Reviews, vol. 10. From a symposium, Bethesda, Md., Nov. 1981.

Nonlinear Finite Element Analysis and ADINA. K. J. Bathe, Ed. Pergamon, New York, 1983. vi pp. + pp. 625-932, illus. \$104. Originally published as *Computers and Structures*, vol. 17, Nos. 5-6. From a conference, Cambridge, Mass., June 1983.

Nuclear Power. Management of High-Level Radioactive Waste. WHO Regional Office for Europe, Copenhagen, 1982. vi, 64 pp. Paper, \$5. WHO Regional Publications European Series No. 13.

Occupational Mycoses. Arthur F. DiSalvo, Ed. Lea and Febiger, Philadelphia, 1983. xvi, 248 pp., illus. \$24.50.

Osnovy Sovremennoi Genetiki. S. M. Gershenson. 2nd ed. Naukova Dumka, Kiev, 1983. 560 pp., illus. 6 rubles 50 kopeks.

Pain, Analgesia, and Addiction. The Pharmacologic Treatment of Pain. Barry Stimmel. Raven, New York, 1983. xiv, 312 pp., illus. \$45.

Peer Commentary on Peer Review. A Case Study in Scientific Quality Control. Stevan Harnad, Ed. Cambridge University Press, New York, 1983. x, 72 pp. Paper, \$12.95. Reprinted from *The Behavioral and Brain Sciences*, vol. 5, No. 2.

Pesticide Chemistry. Human Welfare and the Environment. J. Miyamoto and P. C. Kearney, Eds. Pergamon, New York, 1983. Four volumes: Vol. 1, Synthesis and Structure-Activity Relationships. x, 384 pp., illus. Vol. 2, Natural Products. x, 372 pp., illus. Vol. 3, Mode of Action, Metabolism and Toxicology. xii, 570 pp., illus. Vol. 4, Pesticide Residues and Formulation Chemistry. xii, 430 pp., illus. The set, \$390. IUPAC Symposium Series. From a congress, Kyoto, Japan, Aug. 1982.

Pyrolysis. Theory and Industrial Practice. Lyle F. Albright, Billy L. Crynes, and William H. Corcoran, Eds. Academic Press, New York, 1983. xviii, 482 pp., illus. \$65.

Quantum Chemistry. Donald A. McQuarrie. University Science Books, Mill Valley, Calif., 1983. x, 518 pp., illus. \$25.

Quantum Chromodynamics. An Introduction to the Theory of Quarks and Gluons. F. J. Yndurain. Springer-Verlag, New York, 1983. xii, 228 pp., illus. \$30. Texts and Monographs in Physics.

Radioactivity in the Canadian Aquatic Environment. Associate Committee on Scientific Criteria for Environmental Quality. Subcommittee on Water. National Research Council Canada, Ottawa, 1983. 292 pp., illus. Paper, \$8. NRCC no. 19250.

Radiologic Quality Control Manual. Triphy C. Barber and Mike Thomas. Reston (Prentice-Hall), Reston, Va., 1983. xvi, 236 pp., illus. Paper, \$39.95.

Radiometry and the Detection of Optical Radiation. Robert W. Boyd. Wiley, New York, 1983. x, 254 pp., illus. \$34.95. Series in Pure and Applied Optics.

Regrowing the American Economy. The American Assembly, Columbia University. Prentice-Hall, Englewood Cliffs, N.J., 1983. x, 180 pp. Paper, \$4.95. A Spectrum Book.

Renal Function. Mechanisms Preserving Fluid and Solute Balance in Health. Heinz Valtin. 2nd ed. Little, Brown, Boston, 1983. xviii, 316 pp., illus. Paper, \$16.95.

Response to Oil and Chemical Marine Pollution. D. Cormack. Applied Science Publishers, London, 1983 (U.S. distributor, Elsevier, New York). xxvi, 532 pp. \$83.25.

The Revolution in Science, 1500-1750. A. Rupert Hall. Longman, New York, 1983. viii, 374 pp. Paper, \$17.95. Revision of *The Scientific Revolution, 1500-1800*, 2nd ed., 1962.

The Role of the Polymeric Matrix in the Processing and Structural Properties of Composite Materials. James C. Seferis and Luigi Nicolais, Eds. Plenum, New York, 1983. xii, 684 pp. \$92.50. From a symposium, Capri, Italy, June 1981.

Science and Public Policy III. Frances S. Sterrett, Ed. New York Academy of Sciences, New York, 1983. viii, 120 pp., illus. Cloth or paper, \$24. Annals of the New York Academy of Sciences, vol. 403. From meetings, Oct. 1980-Nov. 1981.

Science and Technology of Polymer Colloids. Gary W. Poehlin, Ronald H. Ottewill, and James W. Goodwin, Eds. Nijhoff, The Hague, 1983 (U.S. distributor, Kluwer Boston, Hingham, Mass.). 2 vols. xiv, 636 pp., illus. \$85. NATO ASI Series E, Nos. 67 and 68. From an institute, Bristol, England, June 1982.

The Sea Shore Ecology of Hong Kong. Brian Morton and John Morton. Hong Kong University Press, Hong Kong, 1983. xiv, 350 pp., illus. \$145; paper, \$120.

Skin Permeability. H. Schaefer, A. Zesch, and G. Stüttgen, with W. Shalla. Springer-Verlag, New York, 1982. x pp. + pp. 541-896, illus. Paper, \$62. Reprinted from *Handbuch der Haut- und Geschlechtskrankheiten, Ergänzungswerk*, erster Band, vierter Teil B.

Sludge Characteristics and Behavior. Judith B. Carbery and Andrew J. Englands, Jr., Eds. Nijhoff, The Hague, 1983 (U.S. distributor, Kluwer Boston, Hingham, Mass.). viii, 442 pp., illus. \$65.50. NATO ASI Series E, no. 66. From an institute, Newark, Del., July 1979.

Social Cognition and Social Development. A Sociocultural Perspective. E. Tory Higgins, Diane N. Ruble, and Willard W. Hartup, Eds. Cambridge University Press, New York, 1983. x, 416 pp. \$39.50. Cambridge Studies in Social and Emotional Development. From a conference, London, Ontario, Canada, Nov. 1979.

Solid State Protonic Conductors II for Fuel Cells and Sensors. John B. Goodenough, John Jensen, and Michel Kleitz, Eds. Odense University Press, Odense, Denmark, 1983. xii, 420 pp., illus. Paper, Dan.kr. 160. From a workshop, Hindsgravl, Denmark, Sept. 1982.

Sommes-Nous Tous des Psychologues? Approche Psychosociale des Théories Implicites de la Personnalité. Jacques-Philippe Leyens. Mardaga, Brussels, 1983. 288 pp. Paper, 920 BF.

Spatial Organization of Eukaryotic Cells. J. Richard McIntosh, Ed. Liss, New York, 1983. xvi, 582 pp., illus. \$50. Modern Cell Biology, vol. 2. From a symposium, Boulder, Colo., Apr. 1982.

Spectroscopy and Excitation Dynamics of Condensed Molecular Systems. V. M. Agranovich and R. M. Hochstrasser, Eds. North-Holland, Amsterdam, 1983 (U.S. distributor, Elsevier, New York). xii, 702 pp., illus. \$166. Modern Problems in Condensed Matter Sciences, vol. 4.

Springs of Scientific Creativity. Essays on Founders of Modern Science. Rutherford Aris, H. Ted Davis, and Roger H. Stuewer, Eds. University of Minnesota Press, Minneapolis, 1983. x, 344 pp., illus. \$32.50.

Statistical Analysis of DNA Sequence Data. B. S. Weir, Ed. Dekker, New York, 1983. xii, 256 pp., illus. \$45. Statistics, vol. 47.

Street-Level Bureaucracy. Dilemmas of the Individual in Public Services. Michael Lipsky. Russell Sage Foundation, New York, 1983 (distributor, Basic Books, New York). xviii, 244 pp. Paper, \$8.95.

Structural Elements in Particle Physics and Statistical Mechanics. J. Honerkamp, K. Pohlmeier, and H. Römer, Eds. Plenum, New York, 1983. x, 378 pp., illus. \$65. NATO Advanced Study Institutes Series B, vol. 82. From an institute, Freiburg, Germany, Aug. 1981.

Structure and Function of Endothelial Cells. K. Messmer and F. Hammersen, Eds. Karger, Basel, 1983. x, 136 pp., illus. Paper, \$27.75. Progress in Applied Microcirculation, vol. 1. From a symposium, Lindau/Bodensee, Oct. 1982.

Sulfur Amino Acids. Biochemical and Clinical Aspects. Kinya Kuriyama, Ryan J. Huxtable, and Heitaroh Iwata, Eds. Liss, New York, 1983. xxiv, 486 pp., illus. \$86. Progress in Clinical and Biological Research, vol. 125. From a symposium, Tokyo, Aug. 1982.

Survey of Drug Research in Immunologic Disease. Vol. 2. Noncondensed Aromatic Derivatives, Part 1. Vassil St. Georgiev. Karger, Basel, 1983. xii, 654 pp., illus. \$293.50.

Systems Analysis in Urban Policy-Making and Planning. Michael Batty and Bruce Hutchinson, Eds. Plenum, New York, 1983. xii, 620 pp., illus. \$75. NATO Conference Series II, vol. 12. From an institute, Oxford, England, Sept. 1980.

Treatment Interventions in Human Sexuality. Carol C. Nadelson and David B. Marcotte, Eds. Plenum, New York, 1983. xiv, 488 pp. \$42.50. Critical Issues in Psychiatry.

Trechodinae et Trechinae du Monde. Tableau des Sous-Familles, Tribus, Séries Phylétiques, Genres, et Catalogue Général des Espèces. Achille Casale and Robert Laneyrie. Moulis, Saint-Griens, France, 1982. 226 pp., illus. Paper, \$25. Mémoires de Biopéologie, Tome 9.

Tuberculosis and Its Prevention. Stefan Grzybowski. Warren H. Green, St. Louis, 1983. xii, 114 pp., illus. \$19.75.

The Ultimate Fate of the Universe. Jamal N. Islam. Cambridge University Press, New York, 1983. x, 156 pp., illus. \$13.95.

Ultrasensitive Laser Spectroscopy. David S. Kliger, Ed. Academic Press, New York, 1983. x, 440 pp., illus. \$55. Quantum Electronics—Principles and Applications.

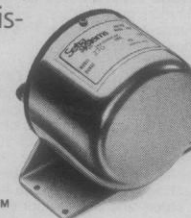
Vacuum Special Issue: Proceedings of the Biennial Conference of the Vacuum Group of the Institute of Physics. (Chester, England, Mar. 1982.) W. A. Grant, D. Balfour, and R. S. Calder, Eds. Pergamon, New York, 1983. xii pp. + pp. 601-708, illus. Paper, \$28. Vacuum, vol. 32, No. 10/11.

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Environmental Chemist. Strong agroanalytical background. Pesticide residue analysis. Adsorption and leachate study of farm wastes. Postdoctoral experience. Ph.D. (agronomy) and M.S. (chemistry). Box 339, SCIENCE. 1/20; 2/3, 17; 3/2

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ANATOMY. A tenure-track position is available 1 September 1984 for teaching functional human anatomy (previous cadaver experience required) and at least one of the following: embryology, histology, neuroanatomy, physiology, or general zoology. Apply by 31 March 1984 with résumé and three letters of recommendation to: **James R. Rastorfer, Department of Biological Sciences, Chicago State University, 95th Street and King Drive, Chicago, Ill. 60628. An Equal Opportunity Employer.**

ANIMAL PHYSIOLOGIST: Tenure-track faculty position (rank open); to begin August 1984. Teach upper-division one-semester lecture/laboratory course in general or comparative animal physiology for majors annually; teach one-semester sophomore-level invertebrate zoology course every other year; participate in a team-taught introductory biology course for majors and teach biology for nonmajors in alternate years. Initiate and maintain a research program involving undergraduates. Ph.D. and commitment to undergraduate teaching. Marine invertebrate physiology training preferred, but other specialties considered. Facilities include: electron microscopy laboratory with SEM and TEM; greenhouse; Museum of Natural History; warm animal room; cold room for working with marine life; and some marine laboratory facilities on Tanglewood Island (approximately 30 minutes from campus). Submit letter of interest, curriculum vitae, transcript, and three letters of reference by 15 February 1984 to: **Physiologist Search, University of Puget Sound, P.O. Box 7297, Tacoma, Wash. 98407. An Equal Opportunity/Affirmative Action Educator/ Employer.**

AQUATIC ECOLOGIST. Assistant professor for fall 1984. One-year temporary appointment. Tenure-track position anticipated in fall 1985. In a comprehensive university of 25,000 on-campus students, in a department of 37 full-time faculty. To teach two courses during year, among ichthyology, general ecology, and aquatic ecology. Ph.D. required, with research expertise in population/community ecology of fishes. Apply by 1 March 1984. Send curriculum vitae and names, addresses, and telephone numbers of at least three references to: **Jerrold H. Zar, Chair, Department of Biological Sciences, Northern Illinois University, DeKalb, Ill. 60115-2854. An Equal Opportunity/Affirmative Action Employer.**

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RESEARCH ASSOCIATE (postdoctoral) opening anticipated by 1 February 1984. Project involves the microbiological and integrated control of Eurasian water milfoil and the impact of these strategies on water quality. Experience in **PLANT PATHOLOGY, MICROBIOLOGY, or AQUATIC BOTANY** desirable. Send résumé, transcripts, and three letters of recommendation to: **Dr. J. H. Andrews, Department of Plant Pathology, 1630 Linden Drive, Madison, Wis. 53706.**

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RESEARCH ASSOCIATE (postdoctoral) position available immediately in population dynamics of phytoplankton microbial antagonists to a foliar plant pathogen. Experience in **PLANT PATHOLOGY, MICROBIAL ECOLOGY, MICROBIOLOGY, or MYCOLOGY** desirable. Send résumé, transcripts, and three letters of recommendation to: **Dr. J. H. Andrews, Department of Plant Pathology, University of Wisconsin-Madison, 1630 Linden Drive, Madison, Wis. 53706.**

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Instructor or assistant professor of biology, Colby College. A temporary 1-year appointment, starting 1 September 1984. Applicants should be broadly educated in the biological sciences and experienced in the ecology of animals. Familiarity with communities typical of north temperate parts of the United States is important. Preference may be given to those whose papers are received by 15 March 1984. Send curriculum vitae and three letters of recommendation to: **Dr. Miriam F. Bennett, Department of Biology, Colby College, Waterville, Maine 04901. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR. The Department of Biology at Rochester Institute of Technology invites applications for a tenure-track position for which funding is tentative. Starting date would be 1 September 1984. Applicants must have a Ph.D. degree with teaching and research experience in genetic engineering/recombinant DNA and genetics. Postdoctoral experience is desirable. The successful candidate will be expected to teach undergraduate courses in her/his area of expertise, assist in the teaching of introductory courses in biology, and conduct applied/basic research. The department, consisting of ten faculty members, offers B.S. degrees in biology and biotechnology. Deadline for receipt of applications is 29 February 1984. Curriculum vitae and the names of three references should be sent to:

Tom Frederick, Head
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Rochester Institute of Technology
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ASSISTANT PROFESSORS: Biochemist/molecular biologist, population biologist/terrestrial ecologist, for the academic year 1984-1985. Principal responsibilities for the biochemist will include introductory cell and molecular biology and biochemistry courses. Major responsibilities for the ecologist will include plant or general ecology course, participation in an introductory evolutionary biology course and a population biology or similar offering. Botanical background preferred for the ecologist. Both positions require a strong commitment to quality undergraduate teaching and scholarship. Completed Ph.D. and some teaching experience are preferred. Salary: \$20,000 or above depending on qualifications. Closing date for applications: 25 February 1984. Send letter of application, résumé, and three letters of reference to: **Dr. David H. Benzing, Chairman, Department of Biology, Oberlin College, Oberlin, Ohio 44074. Oberlin College is an Equal Opportunity Employer.**

ASSISTANT PROFESSOR. The Department of Epidemiology and Public Health, Yale University School of Medicine, seeks an individual with research and teaching experience in the immunology of leishmaniasis for a tenure-track position at the assistant professor level. Applicants should have a Ph.D. in immunology or biochemistry and relevant postdoctoral training. Experience in production and use of monoclonal antibodies and in DNA hybridization is highly desirable. The successful candidate will be expected to develop an independent research program, to work with a group involved in field studies on the epidemiology of leishmaniasis, and to participate in teaching programs for medical and graduate students. The position is available 1 July 1984. Applicants should send curriculum vitae to: **Dr. Robert B. Tesh, Department of Epidemiology and Public Health, Yale University School of Medicine, P.O. Box 3333, New Haven, Connecticut 06510. Deadline for applications is 30 March 1984. Yale University is an Affirmative Action/Equal Opportunity Employer.**

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PERSONA 1072

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ASSISTANT PROFESSOR OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

Applications are invited for a faculty position in the Department of Biochemistry and Molecular Biology, Harvard University. Distinction in research and teaching is essential. Send curriculum vitae, three letters of recommendation, and a brief outline of future research plans before the end of April to: **Susan Young, Department of Biochemistry and Molecular Biology, Harvard University, 7 Divinity Avenue, Cambridge, Mass. 02138.**

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ASSISTANT/ASSOCIATE PROFESSOR OF BOTANY (cell or molecular biology), tenure track, to begin 1 August 1984. Develop and teach a large introductory botany course for majors and nonmajors; teach upper-division and graduate course in cell biology; have training and ability to assist students in TEM techniques for plant cell ultrastructure studies; develop an active research program in plant cell or molecular biology; and supervise graduate student research in area of interest. Qualifications: Ph.D. in botany or biology with demonstrated interest and experience in teaching large introductory botany course; demonstrated ability to conduct research in plant cell or molecular biology; biotechnology experience desirable. Send résumé, transcripts, outline of a proposed introductory botany course, three letters of reference, reprints, and so forth, by 15 February 1984 to: **Dr. A. Linn Bogle, Chair, Search Committee, Botany and Plant Pathology, Nesmith Hall, University of New Hampshire, Durham N.H. 03824. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR—IMMUNOLOGY

A tenure-track, 12-month junior faculty position is available 1 July 1984 in the Department/Program of Microbiology and Immunology at Wright State University. Applicants should have a Ph.D., minimum of 2 years of postdoctoral training, and evidence of research productivity. Preference will be given to individuals whose research program involves immunology at the molecular/cellular level. Research interaction is possible with other basic scientists and clinicians including those involved in the development of a major Nuclear Magnetic Resonance Center. Appointment as a faculty member will be in both the School of Medicine and the College of Science & Engineering and individual will teach pathogenic microbiology as well as immunology for undergraduate, graduate, and medical students. Development of an independent and productive research program will also be required. Applicants should send current curriculum vitae, a brief outline of proposed research, and the names and addresses of three references to: **Nancy J. Bigley, Ph.D., Chairman/Program Director, Microbiology and Immunology, 409 Oelmann Hall, Wright State University, Dayton, Ohio 45435.** Closing date for receipt of applications is 1 March 1984.

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

DEPARTMENT OF ZOOLOGY UNIVERSITY OF ALBERTA

The department will make one tenurable appointment at the rank of **ASSISTANT PROFESSOR** (minimum: \$29,720 per annum, 1983-1984 scale) on 1 July 1984. This appointment is subject to the availability of funds. Applications are requested from candidates with a Ph.D. degree or equivalent, preferably with postdoctoral experience. The department is interested in an individual with training and research experience in the field of regulation and/or modelling of freshwater fish populations. The successful candidate will be expected to establish a vigorous research program in this field, in addition to sharing in the teaching program in the areas of vertebrate biology, ecology, and fisheries management. Interested candidates should send curriculum vitae, a brief statement of research objectives, a list of publications and reprints, and the names and addresses of three referees to: **Dr. R. E. Peter, Acting Chairman, Department of Zoology, University of Alberta, Edmonton, Alberta, Canada T6G 2E9.** The deadline for receiving applications is 7 March 1984.

The University of Alberta is an Equal Opportunity Employer but, in accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

ASSOCIATE CHIEF OF STAFF FOR RESEARCH position available at the Portland VA Medical Center, affiliated with the Oregon Health Sciences University. Responsibilities include administration of growing multidisciplinary research program, coordinating move to new hospital under construction, and maintaining liaison with affiliated programs. Candidates should have a record of nationally recognized ongoing research, background in basic and clinical sciences, and previous administrative experience. M.D.'s preferred. Application deadline: 1 March 1984. Send letter of interest, curriculum vitae, and list of three references to: **Daniel E. Casey, M.D., Chairman, ACOS/Research Search Committee, Psychiatry Service (116A), 3710 SW U.S. Veterans Hospital Road, P.O. Box 1034, Portland, Ore. 97207. Equal Opportunity Employer.**

ANATOMY POSITIONS TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

1) *Associate Professor*: For this tenure-track position, we are seeking applications from persons with an established research program in cell biology and experience in teaching anatomy to medical students.

2) *Assistant Professor*: Applications for a tenure-track position are sought from persons with post-doctoral training and a strong commitment to excellence in teaching and research. Interest in developmental, reproductive, or neurobiology desirable, but not necessary.

3) *Electron Microscopist*: Person with Ph.D. or equivalent experience sought to run electron microscopy service laboratory. The position requires managerial skills as well as thorough knowledge of TEM and SEM techniques. Ability to participate in the teaching program of the Anatomy Department is desirable.

All positions are in the Anatomy Department which has active research programs in cell biology, neurosciences and developmental biology. Excellent salary and benefits will be offered to successful candidates.

The Health Sciences Center is located near the Texas Tech University campus which is state supported and has an enrollment of 23,000 students. The Health Sciences Center was founded in 1971 and has 100 medical students enrolled in the freshman year. The university is located in Lubbock which has a population of 180,000. Numerous cultural and sports events are sponsored by the university and the community.

Please send resume, statement of research interests and names of three references by April 1, 1984 to Reid L. Norman, Anatomy Search Committee, Department of Anatomy, Texas Tech University Health Sciences Center, Lubbock, Texas 79430. An Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST

We are seeking applicants for a PhD level position in a new and innovative research program in the area of genetic engineering.

Applicants should have extensive experience and skills in recombinant DNA technology. Training in bacterial, fungal and plant cell genetics, cloning and expression of eukaryotic gene products is desirable.

This is an excellent opportunity with a Fortune 100 Corporation in the midwest. If you can accept the challenge, send your resume in confidence to:

SCI BOX #237

**Applicants Must Be U.S. Citizens
Or Possess A Permanent Visa**

AN EQUAL OPPORTUNITY EMPLOYER M/F/H/V

MYCOLOGIST/ MICROBIOLOGIST Section Head/Inoculum Group

The Bristol-Myers Industrial Division, located in upstate New York, is one of the world's leading manufacturers of antibiotics, anti-cancer compounds and other pharmaceuticals. Our major fermentation products include penicillin, cephalosporin and kanamycin.

The opening of our new fermentation research and development building creates an opportunity for a Section Head to direct the operation of our Inoculum Group. The successful candidate will supervise a team of experienced technicians responsible for providing quality inocula to the pilot plant and production fermentation operations, maintaining culture inventory and stock culture preservation, sterility assessments, the recording and maintaining of compliance data with regulatory requirements.

To qualify, you should have an MS degree in Mycology/Microbiology or a BS degree and several years of industrial experience in the following areas: the sterile manipulation of commercial strains of fungi, streptomycetes and bacteria; microscopic analysis of fermentation broths; knowledge of both short-term and long-term culture preservation methods. Supervisory experience is also desirable.

We offer a salary fully commensurate with your experience and qualifications, a comprehensive benefits package, and a professional environment where high visibility will propel you ahead faster. For prompt, confidential consideration, please forward your resume indicating current compensation to: Manager of Employment



**BRISTOL-MYERS COMPANY
INDUSTRIAL DIVISION**

P.O. Box 4755, Syracuse, New York 13221
An equal opportunity employer M/F

RESEARCH SCIENTIST

**Be part of a team involved with
screening and developing novel
anti-viral therapeutic agents**

Bristol-Myers Company, Pharmaceutical Research & Development Division, has an excellent opportunity for a Research Scientist to join its expanding Virology Department. Selected candidate will be responsible for *in vitro* screening and *in vivo* evaluation of potential anti-viral drugs using relevant animal models and new methodologies.

To qualify you'll need a PhD in virology or related science combined with 3+ years post doctoral experience in animal virology. Knowledge of anti-viral chemotherapy is desirable.

We offer an excellent starting salary, full ranging benefits, and an exceptional opportunity for professional achievement. For prompt, confidential consideration, please forward your resume, including salary history and requirement, to: EMPLOYMENT RECRUITER



**BRISTOL-MYERS COMPANY
RESEARCH AND DEVELOPMENT DIVISION**

P.O. Box 657, Syracuse, New York 13201

An Equal Opportunity Employer M/F

ASSISTANT RESEARCH SCIENTIST

International Minerals & Chemical Corporation, a leading supplier to agriculture, industrial, and chemical markets worldwide is presently seeking an Assistant Research Scientist in the area of Bioanalytical Research.

The successful candidate should have an M.S. in biochemistry or equivalent experience in an academic or industrial setting and should have excellent laboratory skills. The person should also have a familiarity with receptor binding methodology and the kinetic and statistical evaluation of binding data. The candidate should have ability to develop new laboratory procedures and to work independently with minimal supervision. Experience with immunoassay procedures and/or cell culture are desirable but not essential.

This position represents an outstanding opportunity for a scientist with the above qualifications to join an aggressive and dynamic team. In addition to an excellent salary commensurate with your experience, this position includes an outstanding fringe benefit package including relocation assistance, life, health, and dental insurance.

Individuals interested in a challenging position conducting original and applied research should submit in confidence a description of their research experiences, publications and training along with references to:

M. G. Ray
International Minerals &
Chemical Corporation
P.O. Box 207
Terre Haute, IN 47808



An Equal Opportunity/Affirmative Action Employer

CONTROLLED RELEASE TECHNOLOGY

International Minerals & Chemical Corporation, a leading supplier to agriculture, industrial, and chemical markets worldwide is presently seeking a Senior Research Scientist to plan and conduct studies in the area of controlled release technology.

The successful candidate will have a Ph.D. or equivalent in polymer science, biochemistry, or pharmacology and has spent the last several years in an academic or industrial environment developing delivery systems for biologically active compounds. This individual will have knowledge of and direct experience with all facets of controlled release technology with demonstrated project leadership skills.

This position represents an outstanding opportunity for a scientist with the above qualifications to join an aggressive and dynamic team. In addition to an excellent salary commensurate with your experience, this position includes an outstanding fringe benefit package including relocation assistance, life, health, and dental insurance.

Individuals interested in a challenging position conducting original and applied research should submit in confidence a description of their research experiences, publications and training along with references to:

M. G. Ray
International Minerals &
Chemical Corporation
P.O. Box 207
Terre Haute, IN 47808



An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

ASSISTANT PROFESSOR OF MICROBIOLOGY. Applications are invited for a tenure-track position in the Department of Microbiology, effective September 1984. The department is interested in individuals with postdoctoral experience in the area of molecular immunology or molecular virology. Submit curriculum vitae, a résumé of past and present research, and four letters of reference to: **Chairman, Search Committee, Department of Microbiology, University of Georgia, Athens, Ga. 30602**, by 20 March 1984.

The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

ASSISTANT PROFESSOR OF PHYSICS The University of Akron

Applications are invited for a physics faculty position at the level of assistant professor, to begin fall 1984 or, optionally, spring 1985. The Ph.D. is required; salary is commensurate with background and experience. All qualified theorists and experimentalists will be considered, but there is particular interest in persons with the following areas of experience and inclination: Research involving polymers, NMR, or inelastic electron tunneling spectroscopy; interest in the application of computers to physics instruction or research; or interest in instruction in electronics and instrumentation. A second physics faculty position, with part-time teaching duties in computer science, may also become available; preferred physics teaching and research interests would again be as indicated above. Please send a letter of application and a current résumé, plus names and addresses of four references, by 1 March to: **Dr. Ernst von Meerwall, Chairman of Search Committee, Department of Physics, The University of Akron, Akron, Ohio 44325.** *The University of Akron is an Equal Education and Employment Institution.*

BIOLOGISTS: One trained in microbiology and one in vertebrate physiology. **Northeastern Illinois University, Chicago, Illinois 60625.**

To start 1 September 1984. Both are assistant professor, tenure-track, Ph.D. positions. Added interest in molecular biology. To teach in specialty and in general biology. Research possible. Send curriculum vitae and complete transcripts, including three letters of recommendation, by 1 March 1984 to: **Dr. Wilma H. Lehmann, Chairperson, Biology Department. Affirmative Action/Equal Opportunity Employer.**

BIOLOGIST. The Biology Department, University of Wisconsin-Eau Claire, invites applications for a faculty position beginning August 1984. We seek a person with Ph.D. degree who enjoys teaching, has knowledge of and experience in recombinant DNA techniques, and desires a career combining teaching and research. Teaching duties will include general zoology, plus advanced course in specialty. To apply, send letter, résumé, transcripts, and three letters of reference by 15 February 1983 to: **Dr. M. J. Fay, Chairman, Department of Biology, University of Wisconsin-Eau Claire, Eau Claire, Wis. 54701.** *An Equal Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF ALBERTA BONE HISTOMORPHOMETRIST Assistant/Associate Professor (\$29,720 to \$41,820; \$37,420 to \$53,658)

Applications are invited for a position in a Bone Research Group as bone histomorphometrist. The successful candidate must have M.D., D.D.S., and/or Ph.D. degree, and postdoctoral research experience in the area of quantitative bone histomorphometry. *Preference will be given to established investigators who are Canadian citizens or landed immigrants.* This position will be funded in the long term through an external agency but the incumbent will enjoy all the privileges of the university academic rank at which the appointment is made. Candidates should forward their curriculum vitae, an outline of their research interests, and names of three references to: **Dr. T. R. Overton, Department of Applied Sciences in Medicine, 10-102 Clinical Sciences, University of Alberta, Edmonton, Alberta, Canada T6G 2H3**, before 31 March 1984.

CHAIRPERSON, CHEMISTRY DEPARTMENT: Nominations or applications by 29 February deadline. Person with outstanding record. Applications should include applicant's résumé, transcripts, and names, addresses, and telephone numbers of three references. Send nominations or applications to: **A. G. Pinkus, Department of Chemistry, Baylor University, Waco, Texas 76798.** *Equal Opportunity Employer*

POSITIONS OPEN

ASSISTANT PROFESSOR OF WOOD PHYSICS

Forest Products Laboratory and Department of Forestry and Resource Management. Conduct research and academic instruction for undergraduate and graduate students in the area of wood physics and physical processing. Knowledge in wood science and technology, and/or physics or related field; Ph.D. or near completion. Position available 1 July 1984. Send résumé, university transcripts, and names of three references by 1 March 1984 to: **Chair, Wood Physics Search Committee, University of California-Berkeley, Forest Products Laboratory, 47th and Hoffman Boulevard, Richmond, Calif. 94804.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF PITTSBURGH BIOCHEMIST—MOLECULAR BIOLOGIST

The Department of Biological Sciences at the University of Pittsburgh is seeking to fill a position at the assistant professor level. Although no specific research areas will be excluded a priori, applicants should have a strong background in biochemistry, biophysics, or molecular biology with special emphasis in protein and/or nucleic acid chemistry. At least 2 years of postdoctoral training is essential. The successful candidate will be expected to develop an independent research program, to train graduate students and postdoctoral fellows, and to participate in the undergraduate teaching program.

Applicants should submit curriculum vitae, reprints, summary of future research plans, and the names of three references to: **Dr. Albert Chung, Chairman, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, Pa. 15260.** Deadline: 15 March 1984.

The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority group members are encouraged to apply.

THE UNIVERSITY OF HOUSTON CLEAR LAKE DEAN SCHOOL OF SCIENCES AND TECHNOLOGIES

The University of Houston-Clear Lake invites applications and nominations for the position of dean of its School of Sciences and Technologies. The University is a state-supported, upper-level and graduate institution located adjacent to the LBJ/NASA Space Center, 25 miles south of Houston, Texas. Its Sciences and Technologies programs will enroll approximately 1500 students in 1984-1985. The dean will assume administrative and curricular leadership of the school, maintain liaison with local industry, and be responsible for faculty evaluation and development. Opportunity for teaching one course each semester will be provided.

Candidates will be expected to provide evidence of: qualifications for senior rank including appropriate scholarly achievement, relevant administrative experience, and skills in budgeting and resource procurement.

Placement credentials and transcripts should not be sent until requested. A current résumé and three letters of reference should be forwarded before 1 March 1984.

**Charles S. Hardwick, Chairperson
Provost and Vice Chancellor
University of Houston-Clear Lake
2700 Bay Area Boulevard
Houston, Texas 77058**

ELECTROPHYSIOLOGY RESEARCH

McMaster University, Faculty of Health Sciences, has a research position available at assistant professor level for a smooth muscle electrophysiologist with competence and experience in conducting studies using microelectrodes, single and double sucrose gap procedures, and other techniques for analysis of control over human bowel motor functions in health and disease. Must be prepared to work in interdisciplinary, multiple-collaborator environment with ability to develop new electrophysiological techniques for application to smooth muscle and immune cells. Minimum salary: \$24,720. *In accord with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.* Apply with curriculum vitae and names of three referees to: **Dr. R. H. Hunt, Professor, Department of Medicine, McMaster University Health Sciences Centre, 1200 Main Street West, Hamilton, Ontario, Canada L8N 3Z5.**

**DIRECTOR, SEXUALLY TRANSMITTED DISEASES
LABORATORY PROGRAM
CENTER FOR INFECTIOUS DISEASES
CENTERS FOR DISEASE CONTROL
PUBLIC HEALTH SERVICE**

DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Center for Infectious Diseases (CID) is seeking a qualified scientist (Microbiologist or Medical Officer) to fill the position of Director, Sexually Transmitted Diseases (STD) Laboratory Program. This position involves responsibilities for managing and directing a comprehensive laboratory program of research, development, and service on sexually transmitted diseases.

This is a Civil Service position at the GM-15 level with a salary range of \$48,553 to \$63,115 per annum depending on the qualifications of the applicant. Physicians may be eligible for Comparability Allowance of up to \$10,000 per year. Alternatively, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.

Candidates must possess an M.D. degree or doctoral degree in the biological sciences field or equivalent experience with a demonstrated record of productive STD research.

Interested individuals are invited to submit a curriculum vitae, list of publications and names of 3 references to **Mr. William R. Hudson, Personnel Management Specialist, Centers for Disease Control, Atlanta, Georgia 30333** no later than February 17, 1984.

CDC is an equal opportunity employer.

HOFFMANN-LA ROCHE

**Information
Scientist**

Hoffmann-La Roche, one of the world's leaders in the research and development of pharmaceutical products, is seeking an Information Scientist to search, evaluate, index, abstract and summarize biomedical literature.

Qualifications include a MS degree in a Biomedical Science, research experience and a background in the utilization of computer-based information resources. An excellent command of scientific and medical German and French is also essential.

Only responses indicating language facility and present salary will be acknowledged. **Please send resume to Mrs. Eleanor M. Malone, Professional Employment & Staffing Specialist.**



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*Products that matter
from people who care*

An Equal Opportunity Employer

**KING SAUD UNIVERSITY
RIYADH, SAUDI ARABIA**

COLLEGE OF PHARMACY

King Saud University, College of Pharmacy has vacant faculty positions (Professors, Associate Professors, Assistant Professors) for Ph.D. holders and/or holders of academic titles earned at accredited universities who would be employed on contract basis as of the beginning of the academic year 1984/85 which starts on August 11, 1984. The language of instruction at the college is ENGLISH.

The college has the following departments:

**PHARMACEUTICAL CHEMISTRY
PHARMACOGNOSY**

PHARMACOLOGY

**PHARMACEUTICS
CLINICAL PHARMACY**

BENEFITS:

Free round trip annually for faculty member and family (airline tickets)

Furnished accommodation or housing and furnishing allowances

Monthly transport allowance

Relocation allowance

End-of-service gratuity

Free medical and dental care covering family

Contribution by the University to cover tuition fees of non-Arabic-speaking children

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

**KING SAUD UNIVERSITY
ATTENTION TO THE DEAN
P. O. BOX 2457
RIYADH, SAUDI ARABIA**

A second copy of the above information should also be mailed to:

**KING SAUD UNIVERSITY OFFICE
2425 WEST LOOP SOUTH
HOUSTON, TEXAS 77027
ATTENTION: MS. NIKKY AMIN**



Qualified candidates should furnish their correct addresses and telephone numbers where they can be reached for notification of place and date of scheduled interviews. Applications will be held in strict confidence.

POSITIONS OPEN

DEPARTMENT CHAIRMAN IN MECHANICAL ENGINEERING

The Department of Mechanical Engineering at the University of Rochester invites applications for the position of department chairman, available 1 July 1984. The department offers the B.S. degree in mechanical engineering, and the M.S. and Ph.D. degrees in mechanical and aerospace sciences, and in materials science. The chairman is responsible for the academic and financial administration of these degree programs. Other responsibilities include the teaching of one course per semester and the pursuit of an active research program, including the supervision of graduate students. Present research programs in the department are concentrated in the areas of fluid mechanics, fusion energy, materials science, and solid mechanics. Applicants should send curriculum vitae to: **Professor Alfred Clark, Jr., Chairman of Search Committee, Department of Mechanical Engineering, University of Rochester, Rochester, New York 14627.**

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

CHAIRMAN DEPARTMENT OF VETERINARY MICROBIOLOGY AND IMMUNOLOGY ONTARIO VETERINARY COLLEGE UNIVERSITY OF GUELPH

Applications and nominations are invited for the above position which will become vacant on 1 July 1984.

The department embraces the disciplines of veterinary microbiology, immunology, epidemiology, and public health.

Candidates should possess the D.V.M. degree or equivalent and advanced training to the Ph.D. level in one of the above disciplines.

The ability to administer and lead a dynamic department is essential.

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

Applicants should submit curriculum vitae, a list of their publications, and the names of three referees.

Applications will be accepted until 15 March 1984 or until the position is filled, and should be submitted to:

**Dean
Ontario Veterinary College
University of Guelph
Guelph, Ontario, Canada N1G 2W1**

Position subject to final budgetary approval.

CENTER FOR EARTH AND ENVIRONMENTAL SCIENCE, STATE UNIVERSITY OF NEW YORK, PLATTSBURGH, N.Y. 12901. One-year faculty position in **ECOLOGY**. Assistant/associate professor. Ph.D. required. To start 1 September 1984. To teach population ecology, systems and community ecology, and other courses on main and satellite campus. Teaching excellence required. Scholarly record an advantage. Closing date for receipt of application, résumé, and three recommendation letters is 24 February 1984 or until qualified candidate is found. Send materials to: **Dr. Malcolm Fairweather, Director, Center for Earth and Environmental Science, Box 246, State University of New York, Plattsburgh, N.Y. 12901.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR VIROLOGIST

The Division of Molecular Virology of the Christ Hospital Institute of Medical Research invites applications for the position of **assistant member**. A Ph.D. and extensive postdoctoral experience in recombinant DNA technology are required. The main thrust of the work involves the cloning of negative-strand RNA respiratory viruses; however, the development of an independent program of research will be encouraged. Teaching opportunities are available at the University of Cincinnati College of Medicine which is located nearby. Send curriculum vitae, names of three references, and summary of research goals to:

**Marcel W. Pons, Ph.D.
Director
Division of Molecular Virology
The Christ Hospital Institute of Medical Research
2141 Auburn Avenue
Cincinnati, Ohio 45219**
Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

CHAIRPERSON DEPARTMENT OF ANATOMY CLEVELAND CHIROPRACTIC COLLEGE

Applications and nominations are invited for the position of chairperson of the Department of Anatomy at Cleveland Chiropractic College-Kansas City. The College serves 400 students who are seeking their doctor of chiropractic degree.

Qualifications for the position include: (i) an earned doctorate in anatomy or a related area, (ii) previous teaching experience, (iii) leadership ability, and (iv) ability to teach neuroanatomy. Previous experience in research would be preferred.

Responsibilities include: (i) instruction of neuroanatomy and other courses, (ii) curricular and faculty development, (iii) supervision of anatomy laboratories, (iv) research activities, (v) representation of the department to the College administration, and (vi) implementation of College policies.

This position is available 1 May 1984. Salary and rank will be commensurate with experience. A letter of application and credentials should be submitted by 24 February 1984 to:

**Dr. Theodore J. Kalthoff
Dean of Academic Affairs
Cleveland Chiropractic College
6401 Rockhill Road
Kansas City, Missouri 64131
Telephone: 816-333-8230**

FACULTY POSITION. Ph.D. clinical cytogeneticist. BC/BE American Board of Medical Genetics. Experience in cytogenetic/antenatal diagnostic laboratory required. Salary and level of appointment commensurate with experience. Please reply with curriculum vitae to: **Harold Chen, M.D., Chief, Birth Defects Center, Department of Pediatrics, Louisiana State University Medical Center, School of Medicine in Shreveport, P.O. Box 33932, Shreveport, La. 71130.** *Equal Opportunity Employer.*

FACULTY POSITION UNIVERSITY OF LOUISVILLE ASSISTANT PROFESSOR DEPARTMENT OF BIOLOGY MICROBIAL GENETICS

Tenure-track position to be filled for the 1984-1985 academic year at the assistant professor level in the Department of Biology, University of Louisville. Teaching responsibilities will include participation in an undergraduate course in bacteriology, and development of graduate-level courses in the field of specialty; research should be in the area of molecular genetics. Candidates must have Ph.D. degree and have demonstrated the ability to carry on an active research program. Salary level commensurate with experience. Submit curriculum vitae, list of publications, and names, addresses, and telephone numbers of six persons from whom letters of references may be obtained to: **Dr. Ronald M. Atlas, Chairperson, Search Committee—Microbial Geneticist, Department of Biology, University of Louisville, Louisville, Ky. 40292.** Applications must be received prior to 15 March 1984. *Affirmative Action/Equal Opportunity Employer.*

University of Pennsylvania School of Medicine DEPARTMENT OF MICROBIOLOGY FACULTY POSITION

Applications are invited for a tenure-track position at the level of assistant professor to commence as early as January 1985. Consideration will also be given to individuals at the associate professor level. Applicants should have an established research interest in bacterial molecular biology specializing in prokaryotic cell biology, genetics, or basic aspects of pathogenesis. Potential to obtain funding as an independent investigator is important, together with an active commitment to teaching medical and graduate students.

The successful integration of all components of the University of Pennsylvania on a single urban campus offers a rich intellectual environment and many opportunities for collaborative and interdisciplinary research. Applicants should have a doctoral degree, and at least 2 years of postdoctoral experience. Please send: (i) curriculum vitae, (ii) names of at least three references, (iii) reprints of three papers, and (iv) a short account of professional background and future plans to: **Microbiology Search Committee, Department of Microbiology, School of Medicine, University of Pennsylvania, Philadelphia, Pa. 19104.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS—WILLIAMS COLLEGE has two openings (3-year and 1-year appointments) for assistant professor positions for fall 1984 in physical or inorganic chemistry (Ph.D. required; postdoctoral experience preferred). Applicants should have a strong commitment to both teaching and research. Teaching duties each semester normally include complete responsibility for one course with laboratory and supervision of senior research projects. Williams College is a highly selective, coeducational, liberal arts institution of approximately 155 faculty, 1900 undergraduates, and 30 to 40 chemistry majors each year, located in northwestern Massachusetts. The Chemistry Department is accredited by the ACS and has excellent facilities for teaching and research. Send résumé, undergraduate and graduate transcripts, description of research interests for undergraduates, and names of three references to: **Dr. James F. Skinner, Chairman, Department of Chemistry, Williams College, Williamstown, Mass. 01267,** by 20 February 1984. *Affirmative Action/Equal Opportunity Employer. We are especially interested in identifying minority and women candidates.*

IMMUNOLOGIST

The Department of Biology invites applications for a tenure-track faculty position at the assistant professor level starting August 1984. The appointee is expected to develop a strong independent research program and contribute to teaching at the undergraduate and graduate level. With a view toward the establishment of an instructional program in biotechnology, competence in some combination of any of the following areas is desirable: hybridoma and monoclonal antibody production, immune delivery of drugs and cytotoxins, genetic manipulation, immunogenetics. Applicants should have a Ph.D. or equivalent. Send curriculum vitae, an outline of research plans, and names, addresses, and telephone numbers of three referees before 17 February 1984 to:

**Dr. Ralph Ockerse
Department of Biology
Indiana University—Purdue University at Indianapolis
P.O. Box 647
Indianapolis, Indiana 46223**
An Affirmative Action/Equal Opportunity Employer

JUNIOR FACULTY POSITION

The Psychology Section in the Department of Psychiatry at the University of Michigan has a junior level faculty opening in the Child Psychiatry Service. This position requires that applicants must have a Ph.D. from an APA approved clinical program and be eligible to be fully licensable in the state of Michigan. The applicant must be qualified to carry out and supervise psychodynamically oriented treatment and diagnostic assessment as well as have a demonstrated commitment to programmatic research in a relevant area of child psychiatry. A background in the in-patient treatment of children is necessary for this position. A neuropsychology background is highly desirable. Experience in family therapy is also desirable. Ongoing programmatic research may be actively supported with research assistant help. There is a broad range of research interests and efforts actively represented in the Psychiatry Department and more broadly in the University community with abundant opportunities for collaborative work. This position is available as of 1 September 1984 with a base salary of \$29,500 commensurate with level of appointment. Submit curriculum vitae, several recent reprints, preprints and/or manuscripts, and three letters of reference to: **James Plunkett, Ph.D., Chairperson, Search Committee, Psychology Section, Box 52, University of Michigan Medical Center, Ann Arbor, Mich. 48109.** *The University of Michigan is an Equal Opportunity/Affirmative Action Employer.*

The Department of Physical Medicine and Rehabilitation, University of Michigan Medical School, invites applications for a **PHYSIATRIC POSITION** from Board-certified or -eligible physiatrists. This position includes case management, outpatient clinics, resident and medical student teaching, EMG and consultation programs. Research opportunities are also available. Previous work experience in an academic institution desirable. Salary and academic appointment appropriate to experience and training. Position available July 1984. Send curriculum vitae to: **Theodore M. Cole, M.D., Chairman, Department of Physical Medicine and Rehabilitation, E3118 University Hospitals, 1405 East Ann Street, Ann Arbor, Mich. 48109-0010.** *The University of Michigan is a nondiscriminatory, Affirmative Action Employer. Code 34.*

DIRECTOR OF THE MATERIALS TECHNOLOGY CENTER

Southern Illinois University at Carbondale

Southern Illinois University invites applications and nominations for the position of director, Materials Technology Center. The director's primary responsibilities are to stimulate, develop, and coordinate materials research across the University. The Center is state-supported and carrying out research in coal-derived chemicals, coal-based carbon materials, catalysis, and composite materials. Industrial interactions are being sought and effective liaison with industry is an important aspect of the position.

Southern Illinois University-Carbondale is a comprehensive state university enrolling over 23,000 students in undergraduate, graduate, and professional schools. The Graduate School offers master's degrees through 65 programs and doctoral degrees through 21 programs, with an enrollment of approximately 3500 graduate students.

The position carries faculty status and is a 12-month appointment. Candidates should hold a doctorate or have demonstrated equivalent preparation and/or experience with an academic discipline. Faculty rank to be held in an appropriate academic discipline; salary, rank, and tenure status will be commensurate with professional qualifications.

The search will remain open until the position is filled. Screening of the candidates will begin on 20 March 1984. The date of the appointment will be on or about 1 July 1984. Send inquiries or applications (must include letter of intent, current and complete curriculum vitae, and at least three references) to:

Dr. Harry G. Miller
Chairperson, Search Committee
c/o Materials Technology Center
College of Engineering and Technology
Southern Illinois University
Carbondale, Ill. 62901

Southern Illinois University at Carbondale is an Affirmative Action/Equal Opportunity Employer.

South Australia THE UNIVERSITY OF ADELAIDE

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

LECTURER IN ANIMAL SCIENCES (E1073) (Tenurable)

WAITE AGRICULTURAL RESEARCH INSTITUTE

In the area of animal nutrition or nutritional physiology. Applicants should currently be actively engaged in studies on some aspect of nutrition or physiology of ruminant farm animals, with particular reference to the grazing animal. The appointee will be required to set up a research laboratory and initiate research programmes with farm and experimental laboratory animals and there are opportunities for collaboration with other members of the department in the fields of endocrinology and biochemistry. The appointee will also participate in teaching in the animal sciences course at undergraduate level to agricultural science students and will be required to supervise postgraduate students.

The position is available from early 1984.

Further information on research and teaching facilities in the Department of Animal Sciences may be obtained from the chairman, Professor B. P. Setchell.

It is University policy to encourage women to apply for consideration for appointment to, in particular, tenurable academic positions.

Holders of full-time tenured or tenurable academic appointments have the opportunity to take leave without pay on a half-time basis for a specific period of up to 10 years where this is necessary for the care of children.

FURTHER INFORMATION about the general conditions of all appointments may be obtained from the Personnel Manager of the University.

SALARY per annum: lecturer: A\$23,394 × 7 to A\$30,734.

APPLICATIONS, IN DUPLICATE, quoting reference numbers and giving full personal particulars (including citizenship), details of academic qualifications, and names and addresses of three referees should reach: the Personnel Manager of the University of Adelaide, GPO Box 498, Adelaide, South Australia, 5001, Australia (Telex UNIVAD AA 89141), not later than 17 February 1984.

THE UNIVERSITY RESERVES THE RIGHT NOT TO MAKE AN APPOINTMENT OR TO APPOINT BY INVITATION.

DRUG METABOLISM UNUSUAL OPPORTUNITY FOR A SCIENTIST AT BRISTOL-MYERS

OPPORTUNITY

You'll be part of the cardiovascular support group of our Metabolism and Pharmacokinetics Department designing, carrying out, and interpreting data from pre-clinical drug metabolism studies. This will include development of analytical methods, development of protocols to determine bioavailability and pharmacokinetics, and investigation of drug biotransformation. You should have a Ph.D. with research in a field related to Drug Metabolism, experience with HPLC and experience in the use of animal models. Post Doctoral experience is desirable, but not required.

INNOVATION

Bristol-Myers, a worldwide leader in research and development, has a strong heritage of accomplishments and a strong future. Our uninterrupted growth is the direct result of our innovation. Our operating style encourages personal creativity and contribution and we're thoroughly professional.

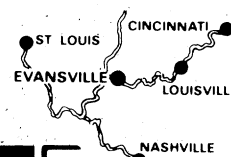
LOCATION

This unit of Bristol-Myers is located at Mead Johnson in Evansville, Indiana, a community of beautiful residential areas, outstanding recreational opportunities, exceptional education and cultural facilities, and more. Best of all, Evansville couples the advantages of southern economy with the changing beauty of four-season living.

To investigate these reasons for joining Bristol-Myers Research is to discover a wealth of others: Excellent salaries, superb benefits, including paid relocation, and real growth, both personal and professional. Discover us! When it comes to your career, no one can offer more!

Send resume in confidence to: Employment Dept. L-28, Bristol-Myers Research Recruitment, Mead Johnson & Company, Evansville, IN 47721.

An Equal Opportunity Employer M/F/H/V



Applied bioTechnology Inc.

A MOLECULAR BIOLOGIST AND A VIRAL IMMUNOLOGIST

sought for young firm in Cambridge, Massachusetts concerned with exploitation of recombinant DNA techniques for creation of immunogenic proteins for use as viral vaccines. Research involves development and use of a range of techniques in molecular biology, protein chemistry, virology and immunology. Located near several excellent academic research departments. Two years of post-doctoral experience in related areas desired.

**Applied Biotechnology
Attention: Personnel
80 Rogers St.
Cambridge, MA 02142**

HEAD

DEPARTMENT OF BIOMEDICAL SCIENCES

The University of Illinois College of Medicine at Rockford invites applications and nominations for the position of **Professor and Head** of the Department of Biomedical Sciences. A pharmacologist or related-discipline scientist (Ph.D. and/or M.D.) with a vigorous research program and with proven ability as a scholar, teacher and administrator, is being sought to assume this position by September 1, 1984. The candidate must be experienced in medical pharmacology curriculum. This multi-disciplinary department currently possesses ten FTE faculty and a support staff of thirty with a number of extramural research programs, international collaborative arrangements, and a unique series of service laboratories that underpin clinical and veterinary medicine in a nine-county region. In addition, an AAALAC accredited biological resource unit reports to the Head. Facilities are excellent, with a wide array of instrumentation; 1-2 new tenure-track appointments at Assistant Professor level are possible.

The school is located within a residential setting in a city of approximately 150,000 population, and is a one and one-half hour drive from Chicago, Milwaukee, or Madison. The salary is highly competitive. Applications including curriculum vitae, and names of three or more references and a letter detailing qualifications should be sent by March 1, 1984 to:

**Chairman
Department of Biomedical Sciences Search
Committee
University of Illinois College of Medicine
at Rockford
1601 Parkview Avenue
Rockford, IL 61107**

UNIVERSITY OF ILLINOIS IS AN AFFIRMATIVE ACTION EMPLOYER. HANDICAPPED AND MINORITIES ARE URGED TO APPLY.

POSITIONS OPEN

FACULTY POSITION IN ENDOCRINOLOGY

The Department of Physiology and Biophysics of the University of Nebraska College of Medicine seeks candidates for a tenure-track position in endocrinology at the assistant or associate professor level. Preference will be given to candidates with research interests in neuroendocrinology or reproductive physiology. Applicants must have a Ph.D. or M.D. degree with at least 2 years of postdoctoral experience and demonstrated ability to do independent research. Strengths of the department include a vigorous research program with strong extramural grant support and teaching of graduate, medical, nursing, and allied health students. The successful candidate will be expected to contribute to these strengths. Applicants should submit curriculum vitae, summary of current research interests, and names of three references by 3 February 1984 to: **Michael D. Mann, Ph.D., Chairman—Search Committee, Department of Physiology and Biophysics, University of Nebraska College of Medicine, Omaha, Nebraska 68105.**

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

HEAD DEPARTMENT OF BIOLOGY TEXAS A&M UNIVERSITY

Applications and nominations are invited for the position of head of the Department of Biology at Texas A&M University.

The Department of Biology, with a faculty of 38, is an administrative unit of the College of Science offering B.S., M.S., and Ph.D. degrees in biology, botany, microbiology, and zoology.

Candidates for the position must have an earned doctorate, a distinguished record in research and teaching, and other professional accomplishments. Candidates are sought who have demonstrated leadership abilities and a commitment to developing strong academic and research programs in biology.

Candidates should be available to assume the position by 1 September 1984. Nominations and applications, with résumés and names and telephone numbers of references, will be accepted until 15 February 1984 or until a suitable candidate is identified. Materials should be sent to: **Dr. C. J. Maxson, Associate Dean, College of Science, Texas A&M University, College Station, Texas 77843. Telephone: 409-845-7361.**

Texas A&M is an Equal Opportunity/Affirmative Action Employer.

HEALTH SCIENCES EDITOR

To provide editorial assistance and instruction to the Faculties of Medicine and Pharmacy and Pharmaceutical Sciences. Requirement: experience in editing health science research papers, articles, abstract and grant applications. The successful applicant would be expected to develop a medical publications program within an established Biomedical Communications Unit. Salary range: \$28,000 to \$35,000, depending on experience. This is a full-time temporary position. *In accordance with Canada Immigration requirements, this advertisement is directed to Canadian citizens and landed immigrants.* Apply with curriculum vitae and names of three referees to:

**Dr. H. T. G. Williams, Chairman
Editorial Services Advisory Committee
to the Faculty of Medicine
University of Alberta
11-105C Clinical Sciences Building
Edmonton, Alberta, Canada, T6G 2G3**

Closing date for receipt of applications is 30 April 1984.

MOLECULAR GENETICIST. Assistant professor. Department of Animal Science, University of Minnesota, St. Paul, to develop a gene transfer system in farm animal species; 15 percent undergraduate and graduate teaching and advising; 85 percent research; 12-month tenure-track appointment. Ph.D. in a biological science. Research in molecular genetics and recombinant DNA technology. Technical competence in microscopy, microinjection, cytogenetics, and cell culture desirable. Submit résumé, transcripts, reprints, three reference letters, and research goals by 8 February 1984 to: **Dr. Alan G. Hunter, 495 AnSc/VM, University of Minnesota, St. Paul, Minn. 55108. Telephone: 612-376-5676.** *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

POSITIONS OPEN

DEPARTMENT HEAD UNIVERSITY OF ARIZONA

The University of Arizona invites applications for the post of head of the Department of Physics. A distinguished physicist and outstanding administrator is sought to lead this research and teaching department through an anticipated period of intellectual growth over the next decade. Presently the Physics Department consists of about 40 faculty members, and it anticipates regular and frequent opportunities to recruit new members during the next several years. A substantial expansion of the physical facilities is currently under way. The University of Arizona is situated in a vital and expanding economic and social environment. The past decade has seen major growth in scientific activities at the University which is presently ranked 21st among the nation's universities in the amount of external support received. The Department of Physics is expected to participate in this continuing growth in the years ahead.

Applications, nominations, and inquiries should be directed to: **Professor Henry A. Hill, Chairman of the Search Committee, Department of Physics, University of Arizona, Tucson, Arizona 85721.** Informal inquiries are welcome and may be directed to: **Henry Hill, telephone: 602-621-6782.** Applications should be accompanied by a complete curriculum vitae and bibliography, as well as the names of at least three references who can assess the applicant's scientific accomplishments and leadership skills. Letters of recommendation will not be sought until authorized. *The University of Arizona is an Equal Opportunity Affirmative Action Employer.*

IMMUNOLOGIST Department of Microbiology and Immunology and the Regional Primate Research Center UNIVERSITY OF WASHINGTON

Candidates sought for junior faculty position in basic immunology or immunogenetics. The appointee's research activities would include, but not be limited to, identification and exploitation of research opportunities provided by a very large, long-established colony of nonhuman primates. A research program of interrelated human and nonhuman primate genetics would be particularly welcome. Previous primate experience not required. The primary selection criteria will be evidence of scientific excellence and promise of independent research of highest academic standard. Send letter of application, curriculum vitae, and three personal references to:

**Douglas M. Bowden, M.D.
Chairman, Search Committee
Regional Primate Research Center SJ-50
University of Washington
Seattle, Wash. 98195
Telephone: 206-543-1430**

Affirmative Action/Equal Opportunity Employer

MEDICAL GENETICS—Postdoctoral positions, Pediatrics/Genetics Division, University of Miami, large clinical, laboratory, and research program.

Clinical Genetics—M.D. with training in pediatrics, obstetrics, or internal medicine. Spanish helpful.

Cytogenetics—Ph.D. or M.D. Background in molecular genetics preferred.

Send résumé and three reference letters to: **Dr. H. A. Lubs, P.O. Box 016820, Miami, Fla. 33101.**

NEUROBIOLOGY Princeton University Department of Biology

The Department of Biology wishes to appoint one or more neurobiologists. The level is flexible and we are particularly interested in someone working in molecular or cell biological areas of neurobiology. Please write to: **J. T. Bonner, Chairman, Department of Biology, Princeton University, Princeton, N.J. 08544.**

Princeton University is an Equal Opportunity Affirmative Action Employer.

The Department of Pathology at the University of Pittsburgh School of Medicine wishes to recruit for several positions in the **DEPARTMENT OF PATHOLOGY**. These positions will entail research and teaching to medical students and to graduate students. There are ample clinical opportunities for research programs needing them. The level of academic appointment will be commensurate with the candidate's qualifications. Reply with curriculum vitae to: **Thomas J. Gill, III, M.D., University of Pittsburgh School of Medicine, Department of Pathology, Room 716 Scaife Hall, Pittsburgh, Pa. 15261.** *An Equal Opportunity/Affirmative Action Employer.*



SCIENCE AND ENGINEERING SHELL CHAIR OF COAL STUDIES

Applications are invited from suitably qualified persons, regardless of sex, race, colour or national origin, for appointment to the Shell Chair of Coal Studies in the Faculties of Science and Engineering.

Persons with interests in the following fields, or closely related fields are invited to apply for the above chair;

- Coal chemistry • Coal physics • Coal geology • Coal processing • Coal conversion.

The Chair has not yet been allocated to a department and the location of the successful applicant will be negotiated. The holder of the Chair will be expected to promote research in his field and act as a stimulator and co-ordinator for a wide range of coal related research and teaching in the University.

The position offers an outstanding opportunity for the development of research and teaching activities in an important field. The successful incumbent should be in a good position to attract substantial research funding from statutory bodies and industry.

The Chair is financed entirely by industrial sponsorship and a salary of up to R30 255 per annum (under review) is attached to this post. In addition to the salary a supplementation may be payable.

No restriction will be placed on the freedom of action of the Professor because of his sponsorship.

Intending applicants should obtain the detailed information sheet relating to this post from, and lodge their applications with, the Registrar (Planning and Staffing),

UNIVERSITY OF THE WITWATERSRAND
1 Jan Smuts Avenue, Johannesburg 2001.
South Africa



CITY OF JOHANNESBURG CHAIR OF MATHEMATICS

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

Chair of Mathematics. The successful applicant will normally be expected to be City of Johannesburg Professor and Head of the Department of Mathematics, in the first instance, for a period of three years. The title of City of Johannesburg Professor and the Headship may be continued for further three year periods or be rotated among the professors of the department. As a Professor of Mathematics, and as Head of the Department, the incumbent will be expected to provide leadership in teaching and research.

The salary attached to the post will be within the range R23 109 to R30 255 per annum, (under review). While holding the Headship of the Department, a non-pensionable salary supplementation of R2 000 per annum will be payable.

Intending applicants should obtain the information sheet relating to the post from, and lodge their applications with, the Registrar (Planning and Staffing),

UNIVERSITY OF THE WITWATERSRAND
1 Jan Smuts Avenue, Johannesburg 2001.
South Africa

HEALTH SCIENCE CENTRE FACULTY OF MEDICINE UNIVERSITY OF KUWAIT

CHIEF TECHNICIAN

THE DEPARTMENT OF ORGAN TRANSPLANTATION is seeking to hire a Chief Technician. The candidate should have an M.Sc. degree or equivalent and preferably be a member of a medical laboratory association. He should have technical and administrative experience in the surgical or related laboratory for a period of at least five years after final qualification. Preference will be given to candidates who have experience in transplantation research. The Chief Technician will help the department to organise and administer its research laboratory working with other technical staff. He may conduct his own research project within the departmental research policy. Salary will be in the range of KD. 450-512, (KD 1 = 2.2 Ster. Pound, USD. 3.4 approx.). There is no income tax in Kuwait and currency is transferable without restriction. Free, furnished, air-conditioned accommodation is provided, and electricity and water supplied free of charge. Sixty days paid annual leave for each completed year of employment and annual economy class return air tickets are provided for the appointee, spouse and 3 dependent children to the country of citizenship or permanent residence. Free medical treatment is available under the state health service.

Applications should be submitted to the **Chairman, Department of Organ Transplantation, Faculty of Medicine, University of Kuwait Health Science Centre, P.O. Box 24923, Safat, Kuwait**, with detailed curriculum vitae in duplicate, recent passport photograph and names, addresses and telephone nos. of three referees, to arrive no later than 3 February 1984.

GEORGIA — Augusta — Section Chief and Coordinator of Clinical Psychiatric Research. This position will be a joint appointment at the Augusta Veterans Administration Center and the Department of Psychiatry, Medical College of Georgia. The position requires supervision of an appropriate clinical section, along with the overall development, organization, and administration of clinical research services for the Psychiatric Service, Augusta VAMC. The position will require interdigitation of basic and clinical research to improve patient care capability and improve clinical procedures. Applicants should be board-certified in Psychiatry, eligible for medical license in Georgia, have demonstrated excellence in clinical patient care and research productivity, and academic qualifications for a senior level faculty appointment. Contact: **E. Mansell Pattison, M.D., Professor and Chairman, Department of Psychiatry and Health Behavior, Medical College of Georgia, Augusta, GA 30912, (404) 828-3284.** The Veterans Administration and the Medical College of Georgia are EOE employers.

GEORGIA—Augusta—Chief of Psychiatry, Augusta Veterans Administration Medical Center. This is a joint appointment with the Department of Psychiatry, Medical College of Georgia. The position requires overall administration of two divisions, including 500 psychiatric beds, outpatient and community services. Specialized clinical units include: geropsychiatry, behavioral medicine, milieu therapy, neuropsychopharmacology, medicine/psychiatry, substance abuse, psychiatric ICU, transitional hospital care, and ambulatory care. All clinical programs are fully integrated components of the teaching and research programs of MCG. Applicants should be board-certified in Psychiatry, eligible for medical license in Georgia, have demonstrated excellence in clinical administration, and have academic qualifications for a senior level faculty appointment. Contact: **E. Mansell Pattison, M.D., Professor and Chairman, Department of Psychiatry, Medical College of Georgia, Augusta, GA 30912.** The Veterans Administration and the Medical College of Georgia are EOE employers.

POSITIONS OPEN

MICROBIOLOGIST—GENETICIST: The Biology Department, Missouri Southern State College, invites applications for a tenure-track position with teaching responsibilities to include microbiology, genetics, general biology, virology, and immunology. Ph.D. preferred with a strong commitment to undergraduate teaching and research. Cell and molecular emphasis is desirable. Rank and salary open. Closing date: 15 March 1984. Send a letter of application, curriculum vitae, and three letters of reference to: **Dr. Ray A. Malzahn, Dean, School of Arts and Sciences, Missouri Southern State College, Newman and Duquesne Roads, Joplin, Mo. 64801.** *Missouri Southern State College is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGIST

The Divisions of Clinical Immunopathology and Experimental Pathology of the Department of Pathology, University of Pittsburgh School of Medicine, seek a molecular biologist to establish an independent research program. Potential areas of clinically oriented collaboration include human tissue transplantation, lymphoproliferative disease, autoimmunity (emphasizing insulin-dependent diabetes), aging, and immune deficiency diseases. Collaboration is also sought in defining structural and functional properties of the rat major histocompatibility complex.

Please send curriculum vitae and three letters of recommendation to:

Bruce S. Rabin, M.D., Ph.D.
Chairman of the Search Committee
Division of Clinical Immunopathology
Department of Pathology
School of Medicine
University of Pittsburgh
Pittsburgh, Pa. 15261

PHYSICS OF SOIL EROSION. A 3-year postdoctoral research position with CSIRO Division of Environmental Mechanics, Canberra, Australia, to study the movement of soil particles by wind and water. Salary to A\$30,038 per annum. Contact: **Dr. J. R. Philip, Chief, CSIRO Division of Environmental Mechanics, GPO Box 821, Canberra ACT 2601, Australia,** or refer to *Nature* or *Eos* for full details.

PHYSIOLOGY AND EMBRYOLOGY

The Ohio College of Podiatric Medicine invites applications for two faculty positions in physiology (general) and embryology/histology. This is a full-time, career position with rank open. Applicants must demonstrate the abilities to teach in a medical school setting and to develop an independent research program. The candidate should have a Ph.D., D.P.M., and/or M.D., or the equivalent. Inquiries, including a letter of application, curriculum vitae, and three references, should be sent to: **Dr. R. N. Iyer, Director, Division of Basic Sciences, Ohio College of Podiatric Medicine, 10515 Carnegie Avenue, Cleveland, Ohio 44106.** *Equal Opportunity Employer.*

PLANT CELL BIOLOGISTS: United AgriSeeds, Inc., has professional opportunities for M.S.- and Ph.D.-level plant cell biologists who have experience in plant cell, tissue, or organ culture and training in plant biochemistry, genetics, or breeding. Successful candidates will initiate and conduct research programs with corn, soybeans, or wheat and model plant species as necessary. Publication of research results will be encouraged. United AgriSeeds conducts a multidisciplinary crop improvement program and interaction among plant cell biologists and whole plant breeders is essential. United AgriSeeds has a commitment to apply state-of-the-art knowledge in plant cell biology to crop improvement, and the established whole plant breeding and marketing divisions required to transfer these improvements to the marketplace. To apply, send curriculum vitae and names of three references to: **Dr. John Snyder, United AgriSeeds, Inc., P.O. Box 4011, Champaign, Ill. 61820.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS available immediately for studying: (i) fundamental chemical and biological properties of pyridine coenzymes, and (ii) applications of 2d-NMR for determining solution structures of peptides, small proteins and drug/DNA complexes. Applicants should have strong backgrounds in chemistry, biochemistry, or NMR spectroscopy. Send curriculum vitae and names of three references to: **Dr. N. Oppenheimer, Department of Pharmaceutical Chemistry, University of California, San Francisco, Calif. 94143.**

POSITIONS OPEN

POSTDOCTORAL POSITION IN ASTRONOMY

We are inviting applications for a postdoctoral position in our program of interferometric imaging of stellar atmospheres and active galactic nuclei. This program uses a differential interferometry technique recently implemented on the Multiple Mirror Telescope to give the highest angular resolution available to any existing astronomical telescope in optical wavelengths. The applicant should have an interest and background in the physics of stellar atmospheres and/or active galactic nuclei, and will be expected to take part in data acquisition, reduction, analysis, and interpretation. Knowledge of image detection and computer image analysis is therefore desirable. This appointment is for 1 year, extendable to 2 years subject to continued funding.

Applications, including résumé and three references, should be submitted before 15 April 1984 to:

Dr. E. K. Hege
Steward Observatory
University of Arizona
Tucson, Arizona 85721

For more information, telephone: **E. K. Hege at 602-621-1049.**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITIONS are available immediately in Health Psychology Research. Participating faculty includes Judith Rodin, Irving Janis, Dennis Turk, Jerome Singer, and Patricia Linville. Applicants should submit curriculum vitae, reprints of publications, a statement of research interests and career goals, and three letters of recommendation to: **Dr. Gary E. Schwartz, Professor of Psychology and Psychiatry, Department of Psychology, Yale University, P.O. Box 11A Yale Station, New Haven, Conn. 06520.** *Yale is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN THE BIOCHEMISTRY AND BIOPHYSICS OF VISUAL TRANSDUCTION AVAILABLE IMMEDIATELY. Research in this laboratory is aimed at (i) elucidating the factors controlling membrane protein conformational changes, and (ii) the functional expression of these changes as they are manifested in visual transduction. The former studies involve measurements of the rates of light-induced conformational changes in rhodopsin in characterized lipid systems, while the latter involves studies of the light-induced interaction of peripheral membrane enzymes with rhodopsin. Experimental techniques employed include flash photolysis, circular dichroism, fluorescence depolarization and lifetime determinations, NMR, membrane reconstitution, and measurements of light-activated enzyme processes. Send curriculum vitae and three letters of recommendation to: **Dr. Burton J. Litman, Department of Biochemistry, University of Virginia Medical School, Charlottesville, Virginia 22908.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE. Available immediately to study growth factors and protein kinase. Experience with handling of protein and tissue culture desirable. Send résumés and names of three references to: **James Tam, Box 294, Rockefeller University, 1230 York Avenue, New York, N.Y. 10021.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE

The Department of Biotechnology Research of Pioneer Hi-Bred International, Inc., has an opening for a postdoctoral research associate in the Plant Tissue Culture Laboratory. This position is for a 1- to 2-year term and is available immediately. Research will focus on efficient culture initiation and plant regeneration, genetics of regeneration, and evaluation of plants regenerated from tissue cultures of corn and alfalfa. Additional research will focus on single cell technology. The successful applicant will participate fully in the ongoing research of the tissue culture and other laboratories in the department which include molecular plant pathology, cytogenetics, molecular biology, and biochemistry. Publication is encouraged. A Ph.D. with relevant research experience in basic plant biology is required. Excellent germplasm, facilities, and technical support are available for this position. Salary level is competitive and commensurate with experience. Letters of application, curriculum vitae, and names of references should be sent to: **Dr. Dwight T. Tomes, Pioneer Hi-Bred International, Inc., Box 38, Johnston, Iowa 50131.**

HEALTH SCIENCE CENTRE FACULTY OF MEDICINE UNIVERSITY OF KUWAIT

The Department of Organ Transplantation is a newly created academic department of the Faculty of Medicine of Kuwait University. The department is responsible for service, research and training in organ transplantation in its broadest sense. During the past five years an active renal transplantation centre has been established which has carried out 160 kidney grafts and the department is now developing clinical transplantation of other organs and is in the process of establishing an active clinical and research team. The research interests of the department include immunosuppression, organ preservation and development of artificial organs. The department also performs some vascular and general surgery. The following appointments are available:

1. Assistant Professor in transplantation surgery (2 positions) with background in general and vascular surgery.
2. Research Assistant Professor (2 positions) with science or medical or surgical qualifications with background in any area related to transplantation.
3. Assistant/Associate Professor (1 position) in transplantation anaesthesia, respiratory care and experimental surgery with appropriate background and training in anaesthesia.
4. Assistant Professor (1 position) in experimental surgery with background in surgical research.

Conditions of Appointment

SALARIES: Total monthly salaries will be within the following scales according to qualifications and experience (1 KD = Ster.2.2, US dollar 3.4 approx.).

Associate Professors with clinical appointments = KD 989-1149 (8 increments)

Associate Professors non-medically qualified = KD 875-1035 (8 increments)

Assistant Professors with clinical appointments = KD 768-928 (8 increments)

Assistant Professors non-medically qualified = KD 680-840 (8 increments)

CLINICAL SUPPLEMENTS: In addition to the above university salaries there will be a monthly clinical supplement paid by the Ministry of Public Health for ten months a year to medical school staff with clinical service commitments. These are:

Associate Professor KD. 150, Assistant Professor KD. 100.

CONFERENCE: A member is entitled to attend one academic conference a year which would be subject to the university rules and regulations.

GRATUITY: There is a gratuity of one month's basic salary for each year employed payable on termination of contract.

HOUSING: Suitably furnished, air-conditioned accommodation, electricity and water free of charge.

MEDICAL CARE: Free, comprehensive treatment is available in Kuwait under the State Health Service.

TRAVEL: Air tickets are provided from the country of recruitment for the appointee, spouse and up to three dependent children under 20 years. Thereafter, return air tickets are issued annually to the country of citizenship or permanent residence for annual leave of 60 days. On termination of contract, air tickets are provided to the country of recruitment. A baggage and freight allowance is also provided.

EDUCATION: This is provided free in state schools where the instruction is in Arabic. Staff who have to send their children to non-Arabic schools in Kuwait will have the tuition fees of up to a maximum of three met by the university.

TAXATION: There is no income tax in Kuwait. Currency is transferable without restriction.

Requirements for Appointment

GENERAL REQUIREMENTS

Applicants should possess a Ph.D., or higher professional qualification, in their respective speciality and have conducted and published research in their field. Professors should have 14 years' experience, 4 as an Associate Professor or its equivalent, i.e. Senior Lecturer or Reader. Associate Professor should have 9 years' experience, 4 as an Assistant Professor or its equivalent, i.e. Lecturer.

SPECIAL REQUIREMENTS

For clinical appointments a minimum of five years of training post-F.R.C.S. or two years post-F.R.C.S. (C) or American Board, and 2-3 years of training in a recognised transplant centre. The candidate may have interest or expertise in any area of organ transplantation.

For non-clinical appointments 3 to 4 years of training in areas related to transplantation, artificial organs, tissue culture, transplantation immunology, bone marrow preservation and transplantation, following the Ph.D.

Appointments are usually for two years, renewable.

Method of Application

Curriculum vitae in duplicate which should include the names of three referees, personal particulars, qualifications with dates, career history, teaching experience, research accomplishments and, where appropriate, clinical experience, should be sent to the **Dean, Faculty of Medicine, University of Kuwait Health Science Centre, P.O. Box 24923, Safat, Kuwait**, to arrive no later than 1st February 1984.

POSITIONS OPEN

POSTDOCTORAL POSITIONS available after 1 May 1984 to investigate aspects of ribosome structure and function in prokaryotes and eukaryotes utilizing cross-linking, monoclonal antibodies, and in vitro mutagenesis. Experience in protein biochemistry, hybridoma techniques and/or recombinant DNA techniques desired. Send curriculum vitae and references to: **Robert R. Traut, Department of Biological Chemistry, School of Medicine, University of California, Davis, Calif. 95616; telephone: 916-752-3354.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION: Funded by 3-year NIH grant, to study yeast sugar carriers reconstituted in proteoliposomes. Candidates with experience in membrane biochemistry preferred. Others with special qualifications will be considered. Salary equivalent to NIH fellowships. Send curriculum vitae and names of three references to: **Dr. Vincent P. Cirillo, Department of Biochemistry, State University of New York (SUNY) at Stony Brook, Stony Brook, N.Y. 11794.** *SUNY, Stony Brook, is an Equal Opportunity/Affirmative Action Employer. AK number 822.*

POSTDOCTORAL RESEARCH ASSOCIATE

A position as research associate will be available starting in spring 1984 for study of the deoxyribonucleoprotein structure of intracellular herpes simplex virus genomes, and the mechanism of HSV DNA replication. Individuals with research experience in chromatin structure, molecular genetics, enzymology of DNA replication or virology are encouraged to apply. Training opportunities in these areas are available in laboratories associated with the Program for Molecular Biology and Biotechnology, and the Cancer Research Center on campus. Interested candidates should send curriculum vitae and names of three references to: **Dr. Steven Bachheimer, Department of Microbiology and Immunology, The University of North Carolina, 804 FLOB, Chapel Hill, N.C. 27514.** *The University of North Carolina is an Equal Employment/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH APPOINTMENT. To study protein structure and dynamics by high field NMR. Emphasis on calcium-binding proteins and enzymes. Experience with protein isolation, HPLC, and NMR an asset. Salary commensurate with experience. Position will be open until filled. Reply to: **Professor J. T. Gerig, Department of Chemistry, University of California, Santa Barbara, Calif. 93106.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL—RESEARCH ASSOCIATE

Available immediately for studies on nuclear structure and functions in erythroid differentiation and lymphocytic blastogenesis. Project area concerns with primary transcripts, heterogeneous nuclear RNA, small nuclear RNA, and nuclear protein. Background in biochemistry, molecular biology, and some training in tissue culture is desirable. The applicant will join an active research program in recombinant DNA technology. Send curriculum vitae and letters of reference to: **Dr. Oscar Pogo, Head, Department of Cell Biology, Kimball Research Institute, The New York Blood Center, 310 East 67 Street, New York, N.Y. 10021.** *An Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE. Position open for recent Ph.D. with strong background in molecular biology, biochemistry, or cell biology to study DNA damage and repair in human skin, as part of an ongoing collaboration with investigators at the Department of Dermatology, Harvard Medical School, and Skin and Cancer Hospital, Temple University. The successful candidate will be expected to travel occasionally for experiments at these institutions. Initial appointment is for 1 year beginning on or about 1 March 1984, at a salary of \$17,000 per year minimum. Send curriculum vitae and names of three referees to: **Dr. Betsy Sutherland, Biology Department, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, New York 11973.** *Equal Opportunity Employer, M/F.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE to study the biosynthesis of photosynthetic pigments and related molecules. Recent Ph.D. in biochemistry, plant physiology, or related field is required. Experience with enzyme characterization and/or tetrapyrrole biochemistry is desirable. Send curriculum vitae and names of three references to: **Samuel I. Beale, Division of Biology and Medicine, Brown University, Providence, R.I. 02912.** *Brown University is an Equal Opportunity/Affirmative Action Employer.*

TWO POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS available beginning 1 March 1984 to study molecular biological aspects of vaccinia virus replication. Ph.D. and background in recombinant DNA and/or nucleic acid sequencing procedures are required. Send letter of application, curriculum vitae, and three letters of reference to: **Dr. Dennis E. Hruby, Department of Microbiology, Oregon State University, Corvallis, Ore. 97331-3804,** before 29 February 1984. *Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.*

RESEARCH ASSOCIATE position available immediately to work on the mechanism of wildfire disease resistance in tobacco and the development of dominant selectable markers for plant recombinant DNA vectors. Experience with recombinant DNA techniques or the Ti plasmid are desirable. Salary up to \$22,000. Please submit curriculum vitae before 15 March 1984 to: **Dr. Robert Dickson, Department of Biochemistry, or Dr. Glenn Collins, Department of Agronomy, University of Kentucky, Lexington, Ky. 40536.** *An Equal Opportunity Employer.*

RESEARCH ASSOCIATE

Permanent position for a biochemist or immunochemist to participate in research on tumor-specific glycolipids. Laboratory experience in analytical and preparative biochemical techniques for glycolipid work essential. Excellent salary and benefits. Please send résumés to: **Dr. P. Desai, Immunochemistry Research, Evanston Hospital, 2650 Ridge Avenue, Evanston, Illinois 60201.**

Pharmacologists

Sterling-Winthrop Research Institute, the research division of Sterling Drug, Inc., a Fortune 200 pharmaceutical company, is accepting applications for 2 positions as Senior Research Biologists to join a multidisciplinary team currently developing novel approaches to drug therapy. Candidates should have a PhD or equivalent in Pharmacology with 2 years of postdoctoral experience in a relevant area of research.

NEUROPHARMACOLOGIST

Experienced in behavioral and/or neurophysiological techniques and having an interest in pain and analgesic drug research.

GENERAL PHARMACOLOGIST

Possessing broad training in pharmacology with specialization in techniques used to measure pulmonary disease or gastrointestinal function.

We offer an attractive salary and benefits package with the opportunity for professional growth. The Institute is located near Albany, New York, which is a major center for summer and winter recreational activities.

Please send CV including salary requirements in confidence to:

Mr. William F. Sheldon
Employee Relations Administrator



**STERLING-WINTHROP
RESEARCH INSTITUTE**

A Division of Sterling Drug, Inc.

Columbia Turnpike, Rensselaer, NY 12144

Equal Opportunity Employer M/F/H

Immunochemist/ Protein Chemist

A challenging position for a highly motivated individual is available in the Infectious Neoplastic Diseases Research Section, Medical Research Division of American Cyanamid Company.

The position requires a Ph.D. Immunochemist with a minimum of three-five years post-graduate training and experience in Immunochemistry/Protein Chemistry. The successful candidate will have a strong background in Protein and Immunoglobulin Chemistry and will be capable of applying state-of-the-art technology to the isolation, purification and characterization of monoclonal antibodies, tumor cell antigens and lymphokines. The preferred candidate will have a documented record of achievement in his/her area of expertise and have demonstrated a capacity for independent research.

This position will require at-the-bench research with the expectation of carrying out investigations directed to product development.

American Cyanamid offers competitive salaries, excellent benefits, and a stimulating scientific environment. Please send resumes, including salary requirements, in confidence, to: Mrs. K. McDevitt, Professional Employment Coordinator.



American Cyanamid Company

Medical Research Division
Lederle Laboratories
Pearl River, N.Y. 10965
An Equal Opportunity Employer

AGRICULTURE RESEARCH



The Northern Regional Research Center, U.S. Department of Agriculture (USDA), is seeking skilled and imaginative scientists for the programs listed below.

1) **Genetic engineering of rumen microorganisms.** This research will focus on understanding and using the fermentative and biosynthetic properties of genetically modified obligate anaerobes for improved energy and protein metabolism and fermentation technology. Positions are open for a **geneticist**, a **biochemist**, and a **microbiologist**.

2) **Control of Fusaria growth and mycotoxin production.** The main emphasis will be on Fusaria and their trichothecene toxins employing genetic and biochemical techniques to define the primary metabolic events that trigger toxin production. Positions are open for **biochemists**, a **plant pathologist**, and a **geneticist**.

3) **Biochemistry of seed development and maturation in corn.** The research will focus on the dynamics and mechanism of partitioning carbon and nitrogen into the biosynthetic pathways that result in protein, lipid, and polysaccharide. Positions are open for **plant physiologists** and **plant biochemists**.

This Center employs about 150 scientists engaged in diverse programs of basic and applied research. Benefits include a stimulating professional environment and relocation expense assistance. Salary is based on qualifications and experience, GS-11/12, \$25,366 to \$30,402. U.S. citizenship is required. Send curriculum vitae for position in: (1) to: **Dr. R. J. Bothast**; (2) to: **Dr. R. W. Detroy**; and (3) to: **Dr. C. G. Crawford**, Northern Regional Research Center, USDA, ARS, 1815 North University Street, Peoria, Ill. 61604. Telephone: 309-685-4011. The USDA is an Equal Opportunity/Affirmative Action Employer.

BE ON THE CUTTING EDGE OF INNOVATIVE TECHNOLOGY ANALYSIS

The Energy and Environmental Systems Division of Argonne National Laboratory is an integrated multidisciplinary team developing solutions to a wide range of technology and public policy problems and issues. Opportunities for qualified individuals aggressively interested in achievement and professional growth are available in the Integrated Assessments and Policy Evaluation Group of EES, in the following area:

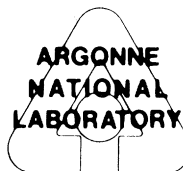
POLICY ANALYST

(PhD Level, Science or Engineering)

Will be part of an interdisciplinary team responsible for quantitative analyses of major energy/environmental policy issues; proposal of policy options; and providing support for policy development. This position will involve project management, liaison with sponsors and creative technical analyses.

Position requires 5 or more years related experience including analyses of energy/environmental systems; knowledge of government policy-making and regulatory activities; and demonstrated ability to develop/manage programs. Specialization in atmospheric transport processes or electric utility systems preferred, with emphasis on analysis of acid rain control strategies. Strong oral/written communication skills are essential. PhD or equivalent in energy or environmental-related field also required.

Inquiries are treated confidentially. Resumes should be sent to:



R.L. Bottino
Box J-EES-14772-55
9700 S. Cass Avenue
Argonne, IL 60439
Affirmative Action/Equal
Opportunity Employer

NATIONAL INSTITUTE OF ARTHRITIS, DIABETES, AND DIGESTIVE AND KIDNEY DISEASES OFFICE OF THE DIRECTOR

ASSOCIATE DIRECTOR FOR NUTRITION

Incumbent must be a recognized and respected leader in the field who plans, develops, and implements a high quality research program in nutrition. This involves identifying research needs and opportunities; working with other leaders in individual/specialized fields of nutrition; reviewing existing training programs to evaluate their effectiveness and identifies new training that might advance the field; and plans and develops conferences, workshops, and/or seminars in those areas that might be most productive.

Salary Range — \$56,945 to \$63,800 per annum

Position information and qualifications requirements may be obtained by contacting:

Mr. Clifford Moss, Executive Secretary,
Search Committee for Associate Director for Nutrition
Building 31, Room 9A34, National Institutes of Health
Bethesda, Maryland 20205 (301) 496-4231

Applications (SF-171, CV and Bibliography) must be submitted to above address and postmarked not later than January 31, 1984.

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POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITIONS: Associate positions are available to work on various aspects of the biochemistry and molecular biology of dopamine and adrenergic receptors, their mechanisms of action, and regulation. Candidates with a strong background in biochemistry, molecular biology, or biochemical pharmacology are preferred. Send résumé and three letters of recommendation to:

**Dr. Marc G. Caron and
Dr. Robert J. Lefkowitz**
Box 3287, Department of Medicine
Duke University Medical Center
Durham, N.C. 27710

PRE- AND POSTDOCTORAL TRAINING IN TOXICOLOGY

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

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

To apply for either the Toxicology Program or the NIEHS Fellowship, send curriculum vitae, academic records, and three letters of reference to:

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

Application closing date is 1 April 1984.

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

RESEARCH ASSOCIATE

Candidate must have postdoctoral experience and strong background in glomerular basement membrane induced nephritis in chickens, interpretation of pathological slides, immunological and biochemical techniques required. Salary depends upon experience. D.V.M. with M.V.Sc. and Ph.D. in poultry pathology is desired. Send curriculum vitae to: **Dr. W. Kline Bolton, Renal Division, Box 133, University of Virginia Medical Center, Charlottesville, Va. 22908.** An Equal Opportunity Employer.

DEPARTMENT OF ZOOLOGY UNIVERSITY OF ALBERTA

The Department of Zoology, University of Alberta, invites applications from individuals who would qualify for support as a **RESEARCH SCHOLAR** at the rank of nontenured assistant professor (1983-1984 salary: \$29,720 to \$41,820 per annum) or nontenured associate professor (1983-1984 salary: \$37,420 to \$53,658). The department is interested in an individual with training and research experience in the field of vertebrate developmental neurobiology, at the cell or molecular level. Applicants should minimally have a Ph.D. degree or equivalent and postdoctoral experience, and must be highly qualified investigators capable of a vigorous independent biomedical research program. This position will be long term and will be funded by 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. Scholars normally receive extensive support to initiate a research program. Applicants should forward their curriculum vitae with names of three referees and selected reprints to: **Dr. R. E. Peter, Acting Chairman, Department of Zoology, University of Alberta, Edmonton, Alberta, Canada T6G 2E9,** by 7 March 1984.

The University is an Equal Opportunity Employer, but in accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

POSITIONS OPEN

PROJECT COORDINATOR

The Institute for the Study of Developmental Disabilities (ISDD), University of Illinois at Chicago, has an immediate opening for a new/recent Ph.D. Responsibilities include: implementing a research project on event-related potentials during perceptual development of infants. Good opportunity for research and publications. Minimum requirements: Ph.D. (ABD), experience with ERP methodology, computer skills, and/or infancy research. Prefer also experience in supervising team of assistants and ability to interact well with parents and clinical staff. Closing date is 1 March. Position available 1 April. Funded by federal grant for up to 3 years. Send curriculum vitae to: **Rathe Karrer, Ph.D., ISDD, 1640 Roosevelt Road, Chicago, Ill. 60608.** The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

REPRODUCTIVE BIOLOGIST

Position available for individual with Ph.D. degree to initiate reproductive biology unit. Must have knowledge and previous experience in all aspects of mammalian reproductive physiology including in vitro mammalian fertilization. Highly desirable that candidate have ongoing interests in male reproductive physiology. Candidate must be able to work closely with clinicians and supervise establishment of a human in vitro fertilization laboratory. Send résumé to:

Lester A. Ballard, M.D.
Chairman, Department of Gynecology
Cleveland Clinic Foundation
9500 Euclid Avenue
Cleveland, Ohio 44106

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE. Conduct research on the basic mechanisms of blood coagulation and thrombosis with emphasis on the structural properties of plasma proteins interacting with cellular receptors.

Requirements include Ph.D. in biochemistry, 3 years of research experience, and thorough knowledge and experience in the biochemistry of fibrinogen and other adhesive plasma proteins which interact with blood platelets. Detailed knowledge of basic techniques to determine structural properties of plasma proteins, and of purification and synthesis of peptides.

Forty hours per week; \$23,600 per year.

Send résumé to: **Robert Willis, Job Order Number 4089, Division of Employment Security, Hurley Building, Government Center, Boston, Massachusetts 02202.**

ANNONCE POUR CANDIDATURE DE SCHOLAR

The Department of Pharmacology at the Université de Montréal is looking for a qualified **RESEARCHER IN NEUROPHARMACOLOGY**. The position is at a level equivalent to assistant professor and salary would have to come from sources outside the University (such as scholarships, and so forth). Applicants should have Ph.D. in pharmacology or its equivalent, and their current research interests should be in biochemical neuropharmacology. Deadline for application is 1 April 1984. Send curriculum vitae and references to:

Dr. Michel G. Côté
Director
Department of Pharmacology
Faculty of Medicine
Université de Montréal
C.P. 6128, Succursale "A"
Montréal, Québec, Canada H3C 3J7

U.S. Department of Agriculture, Insect Ecology and Behavior Research, Yakima, Washington, is seeking a **SUPERVISORY RESEARCH ENTOMOLOGIST** to serve as research leader conducting research on biological control, insect ecology, vector-virus-plant interactions, and integrated pest management. Applicants must be U.S. citizens and should have knowledge of biology and ecology of fruit and vegetable insects, nonchemical method of insect pest control, vector-virus-plant interactions and system modeling. Salary range: \$34,930 to \$53,661. For announcement and application information, contact: **Mary Nell Tull or Roberta Saah, Special Examining Unit, Agricultural Research Service, U.S. Department of Agriculture, 6505 Belcrest Road, Room 555, Hyattsville, Md. 20782; telephone: 301-436-7315.** An Equal Opportunity Employer.

POSITIONS OPEN

RESEARCH SCHOLAR. The University of Alberta, Department of Medicine, invites applications for a position as research scholar at assistant/associate professor (C\$27,720 to C\$39,829; C\$35,420 to C\$51,658) rank. The successful candidate must have M.D., D.D.S., and/or Ph.D. degree(s). Preference will be given to candidates who have a strong background in basic cellular immunology, and who have demonstrated clear potential for an independent research for developing a research program in clinical facets of immunoregulation. This position will be long term and will be funded through an external agency, 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, outlines of their research interests, and names of three references to: **Dr. A. S. Russell, Department of Medicine, University of Alberta, Edmonton, Alberta, Canada T6G 2H1.** Closing date: 1 March 1984.

The University of Alberta is an Equal Opportunity Employer but, in accordance with Canada Employment and Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents.

RESEARCH SCIENTIST to develop a more complete understanding of the mechanism by which hormones act to stimulate adenylate cyclase. Day-to-day responsibility of running laboratory. Understanding of scientific literature concerning receptors, adenylate cyclase, phosphodiesterases, desensitization, cyclic GMP, protein kinases, phosphoprotein, and phosphatases. Must be familiar with CDC Cyber 174 computer as well as FORTRAN 77; purifying both the stimulatory and inhibitory guanine nucleotide binding proteins of adenylate cyclase; immunology as applies to producing to polyclonal as well as monoclonal antibodies using either the in vivo or in vitro routes of immunization; and tissue culture techniques. Ph.D. degree required with 2 years of postdoctoral experience, 40 hours per week; \$22,000 annual salary. Apply to: **Texas Employment Commission, Houston, Texas,** or send résumé to: **Texas Employment Commission, TEC Building, Austin, Texas 78778. Job Order Number 3223087.** Ad paid by an Equal Opportunity Employer.

SUPERVISORY PLANT PHYSIOLOGIST. Career Federal Service. Agricultural Research Service, Fort Collins, Colorado, is seeking a research leader for the cryopreservation of Plant Germplasm Research Unit. Responsible for research on cryopreservation of germplasm, genetic variability, and cell and tissue culture methodologies for preservation of germplasm. Must be U.S. citizen. Salary commensurate with experience, \$34,950 to \$48,553. Telephone: **Cathy Enuton at 303-344-2765,** no later than 17 February 1984, for application instructions. An Equal Opportunity Employer.

VETERINARY EPIDEMIOLOGIST

The Department of Veterinary Pathobiology, University of Illinois, is seeking qualified applicants to fill a tenure-track faculty position in veterinary epidemiology at the assistant professor level. Candidates should possess an M.S., M.P.H., or Ph.D. degree in epidemiology, preventive medicine, or a related discipline. A D.V.M. or equivalent degree would be advantageous. Capability in analytical epidemiology and biostatistics is highly desirable. Responsibilities include teaching epidemiologic principles to professional and graduate students and development of a strong research program in veterinary epidemiology. The successful candidate's research interests should complement existing programs in the College. Ample opportunities exist for interaction with veterinary diagnostic, clinical, and extension programs. Salary is negotiable.

Submit résumé plus three letters of recommendation to:

Dr. Ronald D. Smith, Chairman
Veterinary Epidemiology Search Committee
College of Veterinary Medicine
University of Illinois
2001 South Lincoln
Urbana, Illinois 61801
Telephone: 217-333-2449

Applications will be accepted until 31 March 1984 or until a suitable candidate is found. The position will be filled as soon as possible thereafter.

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


POSTDOCTORAL POSITION

Wyeth Laboratories

Postdoctoral fellow position is immediately available at our headquarters facility in Radnor, PA. This position will study the mechanism of bacterial resistance to antimicrobial agents and will identify and evaluate biochemical targets directed against clinical pathogens. Candidates should have expertise in biochemical isolation, purification and characterization techniques for enzymes and biologically active proteins. Experience in enzyme/inhibitor interaction is desirable. Applicant should have a degree in microbiology and a strong background in biochemistry.

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

Qualified candidates can send resume in strict confidence to Personnel Department.

 **Wyeth Laboratories, Inc.**
P.O. Box 8299
Philadelphia, PA 19101
TM

Equal Opportunity Employer, M/F/H

National Institutes of Health Public Health Service

SENIOR INVESTIGATOR

The Laboratory of Biochemistry, Division of Cancer Biology and Diagnosis, National Cancer Institute, seeks a senior investigator who will conduct a strong independent research program.

Applicant's interests should be in the molecular biology/genetics of prokaryotes or lower eukaryotes; they should have an outstanding record of original and independent research accomplishments. The position will be classified as GS 14-15 with a salary range of \$42,722 to \$65,327 per year depending on qualifications.

Send CV, bibliography, and a short statement of current research interests to Maxine Singer, Chief, Laboratory of Biochemistry, Building 37, Room 4E-28, National Institutes of Health, Bethesda, MD 20205 by February 10, 1984. (Telephone Number (301) 496-5957) U.S. citizenship and an M.D. or Ph.D. or equivalent in experience and training required. NIH is an Equal Opportunity Employer.

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LABORATORY ANIMAL MEDICINE

The Lovelace Inhalation Toxicology Research Institute is seeking an individual with a Doctor of Veterinarian Medicine degree who is trained and experienced in laboratory animal medicine (board certified or board eligible by American College of Laboratory Animal Medicine).

The Institute has a strong multi-disciplinary research team of physical, biophysical and biomedical scientists oriented towards comparative animal research involving varied health effects endpoints. The Institute addresses significant societal problems concerning airborne materials inhaled by man with emphasis on those related to energy technologies. Interests include dose-response relationships of lung injury, animal models of human lung disease and functional/structural/biochemical correlations.

The successful applicants will have primary responsibility for the care and production of rodents at the Institute including the supervision of 25-30 animal technicians. An interest and demonstrated capability for independent research and supervisory ability are required.

Salary and starting data are negotiable. Submit curriculum vitae and summary of experience to: **Personnel Unit, Lovelace Inhalation Toxicology Research Institute, P.O. Box 5890, Albuquerque, NM 87185**, or call (505) 844-9431.

We are an Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL POSITION available now through June 1984 to characterize human growth factor antagonists in clinical malnutrition and voluntary caloric restriction. Candidates with training in biochemistry, particularly with experience in protein chemistry and purification, are preferred. Send résumé and names of three references to: **Dr. Lawrence S. Phillips, Director, Division of Endocrinology and Metabolism, EMORY UNIVERSITY SCHOOL OF MEDICINE, 69 Butler Street, SE, Atlanta, Ga. 30303.**

Emory University is an Affirmative Action/Equal Opportunity Employer.

TROPICAL MARINE RESEARCH OPPORTUNITIES

The Hawaii Institute of Marine Biology (HIMB) of the University of Hawaii has a research facility on Coconut Island, Oahu, that provides a broad spectrum of year round research opportunities in the tropical marine environment. A laboratory, a 36-foot research vessel equipped for limited oceanographic investigations, and living accommodations are available for qualified visiting investigators. Direct inquiries to: **Director, HIMB, P.O. Box 1346, Kaneohe, Hawaii 96744.**

UROLOGY FACULTY POSITION. Requires formal postresidency training in pediatric urology with strong interest in research. *Equal Opportunity Employer.* Reply to: **Box 21, SCIENCE.**

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THE 25th ANNUAL BAR HARBOR COURSE

Short Course in Medical and Experimental Mammalian Genetics
The Jackson Laboratory
Bar Harbor, Maine
16 through 27 July 1984

First given in 1960 as a short course in medical genetics and from 1967 to 1977 given on alternate years as a course in experimental mammalian genetics, this is now a combined course. A joint effort of Johns Hopkins University and The Jackson Laboratory, with financial support of the March of Dimes Birth Defects Foundation.

Apply to one of the codirectors:

Victor A. McKusick, M.D.
Johns Hopkins Hospital
Baltimore, Md. 21205

Thomas H. Roderick, Ph.D.
The Jackson Laboratory
Bar Harbor, Maine 04609

TRAINEESHIPS

POSTDOCTORAL TRAINEESHIPS at the University of Virginia in cancer cell biology, molecular biology, virology and immunology supported by a training grant from the National Cancer Institute (U.S. citizens or permanent residents). Highly competitive stipends and fringe benefits. Primary research interests (and supervisors) include: (i) immune regulation and hybridomas (Benjamin); (ii) cell and adenovirus transcription regulation (Beyer); (iii) erythroleukemia differentiation and membranes (Brown); (iv) viral/cell transcription controls (Emerson); (v) molecular biology of histocompatibility gene expression (Engelhard); (vi) protein/nucleic acid sequencing (Fox); (vii) bacterial genetics/recombinant DNA (Kadner); (viii) sarcoma virus DNA recombinants and sequencing (Parsons); (ix) molecular organization and genetics of bacterial membranes (Schnaitman); (x) yeast histone gene DNA sequences and function (Smith); (xi) molecular biology of leukemogenic viruses (Thomas); (xii) viral hybridomas/monoclonal antibodies (Volk); (xiii) viral membranes and pathogenicity (Wagner); (xiv) molecular events in viral transformation (Weber).

APPLICATIONS: Send curriculum vitae, description of research interests, and letters from three references to: **Dr. Robert R. Wagner, Chairman, Department of Microbiology, Box 441, University of Virginia Medical School, Charlottesville, Virginia 22908.**

GRADUATE STUDY

GRADUATE STUDIES IN BIOCHEMISTRY. The Department of Biochemistry of the Albany Medical College invites applications for its graduate training programs leading to the master's and doctoral degrees. M.S. program can be 1 or 2 years, Ph.D. program usually 4 years. Research and teaching assistantships with tuition remission available for qualified candidates on a competitive basis. The department emphasizes individually tailored training programs qualifying students for careers in biomedical research and stresses close faculty-student interactions. For further information, contact: **Director of Graduate Studies, Department of Biochemistry, Albany Medical College of Union University, Albany, New York 12208.**

We are an Affirmative Action/Equal Opportunity Employer.

PREDOCTORAL TRAINING IN PHYSIOLOGY

Fellowship available for training toward a Ph.D. in physiology with emphasis on cell biology, neurophysiology, renal, respiratory and cardiovascular physiology, or molecular endocrinology. For application forms, write: **Dr. Ann E. Stuart, Department of Physiology, School of Medicine, University of North Carolina, Chapel Hill, N.C. 27514.**

FELLOWSHIPS

GRADUATE FELLOWSHIPS IN BIOMEDICAL AND PHYSICAL SCIENCES

Physics	Physiology	Molecular Cell Biology
Anatomy	Biochemistry	Computer Sciences
Biology	Oral Biology	Biophysical Sciences
Genetics	Pharmacology	Biomathematics
Chemistry	Biostatistics	Physiological Optics
Pathology	Neurosciences	Biomedical Engineering
Virology	Immunology	Medical Psychology

Well-funded faculty with diverse interests. Good postgraduate placement record. Above average stipends include full payment of tuition. Contact: **The Graduate School (A), University of Alabama in Birmingham, Birmingham, Ala. 35294; telephone: 205-934-8227. Equal Opportunity/Affirmative Action Institution.**

POSTDOCTORAL FELLOWSHIP, Ph.D. or equivalent, 2-year position. To participate in active research program on inflammation, arachidonic acid metabolism in blood vessels. Salary: \$17,000. To begin January to June 1984. Send inquiries, curriculum vitae, and two references to: **Michael A. Moskowitz, M.D., Harvard Medical School, Massachusetts General Hospital, Boston, Mass. 02114.**

SEVEN POSTDOCTORAL FELLOWSHIP POSITIONS available in fall 1984 for research in estuarine lagoon and nearshore continental shelf waters. Research areas include phytoplankton systematics and ecology, zooplankton biology, invertebrate reproduction development, benthic community ecology, fish ecology and behavior sedimentary processes, biogeochemistry, physical oceanography and algal or animal mariculture emphasizing nutrition, pathology, genetics, or reproductive biology. Deadline for application is 1 April 1984. Request information brochure and application packet from: **Dr. Kevin J. Eckelbarger, Postdoctoral Program, Harbor Branch Institution, Inc., RR 1, Box 196-A, Ft. Pierce, Fla. 33450. An Equal Opportunity Employer.**

PEDIATRIC ENDOCRINE FELLOWSHIP. Available July 1984 for 3-year period at Children's Hospital, Boston, and Harvard Medical School. At least 2 years of postgraduate training in either pediatrics or internal medicine required. A well-rounded program provides excellent clinical experience with training in basic clinical and laboratory research. Interested persons contact: **Dr. Constantine S. Anast or Dr. John F. Crigler, Jr., 300 Longwood Avenue, Boston, Mass. 02115.**

NIH INSTITUTIONAL POSTDOCTORAL FELLOWSHIP IN COMMUNICATION BIOPHYSICS OR NEUROBIOLOGY

A position is available immediately for someone to work in the fields of psychoacoustics, audiology, communication engineering, neurochemistry, or neurophysiology. This position must be filled by 30 June 1984. Contact: **Dr. Bruce Warr, Boys Town National Institute for Communication Disorders in Children, 555 North 30 Street, Omaha, Neb. 68131; telephone: 402-449-6528.**

FELLOWSHIPS

GRADUATE FELLOWSHIPS AND ASSISTANTSHIPS. The Department of Biology at George Mason University offers a Ph.D. in environmental biology—public policy, training environmental biologists for involvement in public policy issues. In fall 1984 departmental assistantships and fellowships from \$4300 to \$8500 will be awarded to outstanding applicants. Write for brochure and application materials. Closing date for application is 15 March 1984. Contact: **Doctoral Coordinator, Program of Environmental Biology—Public Policy, Department of Biology, George Mason University, Fairfax, Va. 22030. George Mason University is an Affirmative Action/Equal Opportunity Employer.**

TOUR DU VALAT POSTDOCTORAL FELLOWSHIP IN ECOLOGY

Applications are invited for the first Tour du Valat postdoctoral fellowship in ecology. The fellowship, which is for 2 years, will be held at the Station Biologique de la Tour du Valat, Camargue, France. The Foundation Tour du Valat is an independent research organization specializing in fundamental and applied research in the ecology of Mediterranean wetlands. The first fellowship will be offered within the general area of avian ecology.

The closing date for applications is 15 April 1984; further details may be obtained from: **The Scientific Director, Station Biologique de la Tour du Valat, Le Sambuc, 13200 Arles, France.**

POSTDOCTORAL FELLOWSHIPS IN CARDIOPULMONARY BIOMEDICAL ENGINEERING

Multidisciplinary research training in basic quantitative physiological and engineering aspects of cardiopulmonary systems available 1 January 1984. Appropriate for fellows with Ph.D. degrees in engineering, physiology, or biophysics or a medical degree (M.D.). Send résumé and three letters of recommendation to: **Fred S. Grodins, M.D., Ph.D., Chairman, Department of Biomedical Engineering, University of Southern California, Los Angeles, California 90089-1451. An Equal Opportunity/Affirmative Action Employer.**

DEPARTMENT OF ZOOLOGY UNIVERSITY OF ALBERTA

Applications are invited for an NSERC UNIVERSITY RESEARCH FELLOWSHIP position. Applicants should have a Ph.D. degree or equivalent, preferably with postdoctoral experience. The department is interested in an individual with training and research experience in the field of population biology, specifically aspects of regulation and/or modeling of boreal vertebrate populations. Position will involve some teaching responsibilities appropriate for the specialization of the appointee. Salary commensurate with experience, equivalent to assistant professor level, 1983-1984 base, \$29,720. Submit complete curriculum vitae with names of three referees and reprints by 7 March 1984 for consideration in the November 1984 NSERC competition to: **Dr. R. E. Peter, Acting Chairman, Department of Zoology, University of Alberta, Edmonton, Alberta, Canada T6G 2E9.**

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Qualified personnel are invited to apply for the following posts of Faculty Members (Professors, Associate Professors, Assistant Professors), Lecturers, Demonstrators, Research Assistants and Technicians for the academic year 1984 — 1985.

Department	Specialization	Qualification
I. Staff members:		
1. Food Science	a. Human nutrition metabolism	Ph.D. teaching experience, Arabic speaking
	b. Dairy technology Food analysis	
2. Animal Science	a. Poultry nutrition	same as above
3. Plant Production	a. Cytogenetics	same as above
4. Agricultural Economics & Rural Sociology	a. Farm management	PhD. teaching experience, Associate or Professors only, Arabic speaking.
	b. Marketing of agricultural products	same as above
5. Home Economics & Nutrition	a. Textiles and costumes	Ph.D., teaching experience, Arabic speaking
II. Lecturers:		
1. Home Economics & Nutrition	a. Plant production (Ornamentals)	M.Sc., teaching experience, Arabic speaking
	b. Plant production (field crops)	
2. Plant Production	a. Plant production (vegetable crops)	same as above
3. Animal Production	a. Animal production	same as above
III. Demonstrators:		
1. Food Science	a. Fish & meat technology	B.Sc. "B" average or higher, Past experience in teaching is preferred, Arabic speaking
	b. Food Microbiology	
	c. Food analysis	
2. Plant Production	a. Horticulture (Vegetable crops)	same as above
3. Agricultural Engineering	a. Agricultural Engineering	same as above
IV. Technicians:		
	a. Human nutrition	Experience in field work, conducting and operating laboratory equipment.
	b. Cereal technology	same as above
	c. Analytical chemistry in the field of food science	Experience and training in operating food and nutrition analyses equipment preferably IR, AAA, AA, GLC, HPLC. Good knowledge of English Language.
V. Research Assistants:		
	a. Food microbiology	Preferably M.Sc. with research experience in the field of specialization
	b. Food chemistry and analysis	
	c. Horticulture (Pomology)	
	d. Field Crops (Breeding)	

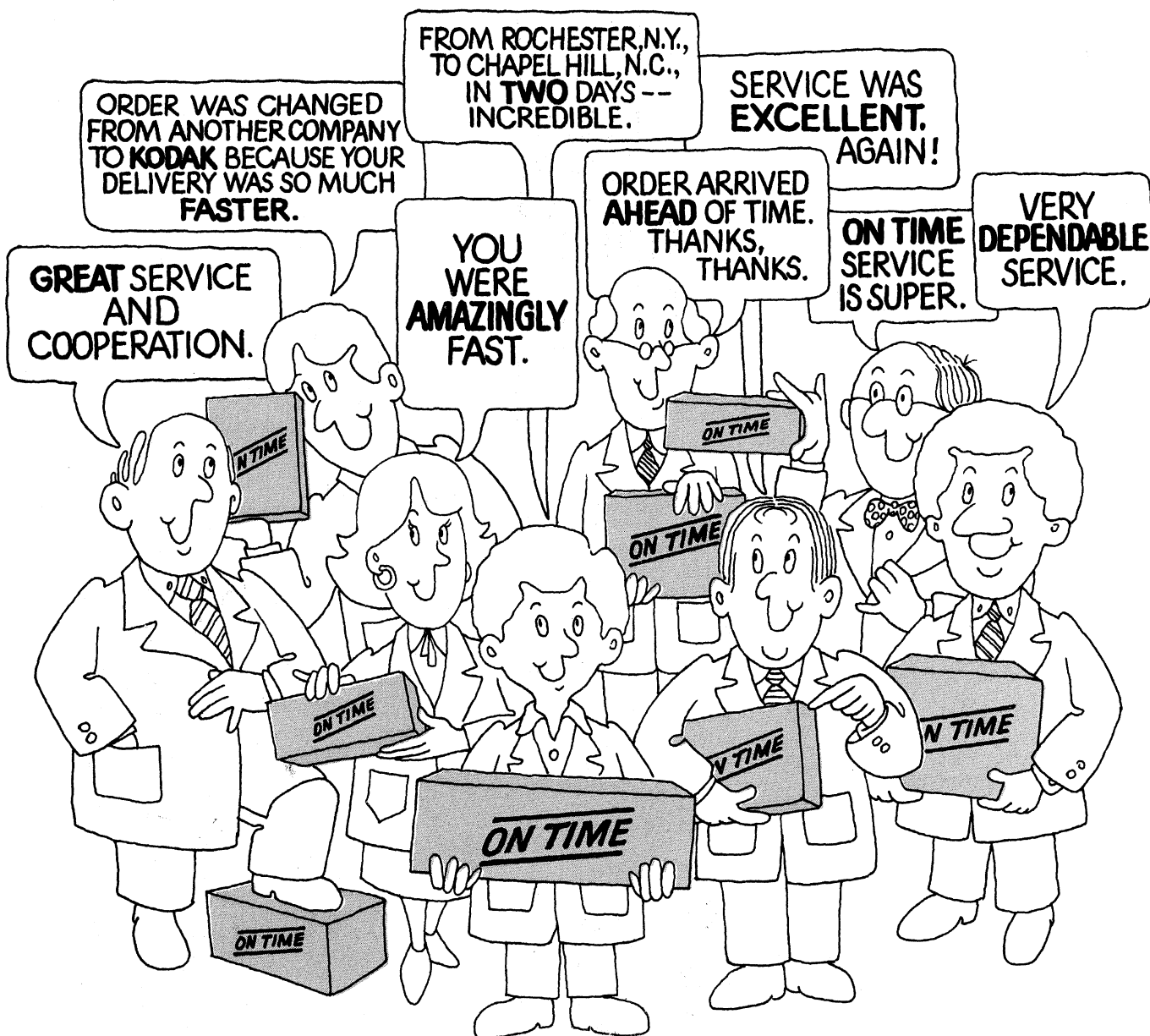
Interested academicians are kindly requested to send non-returnable photocopies of their academic diplomas and specialized experience certificates together with their resumes (including lists of their problems publications and references) and written applications indicating the positions applied for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

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

A second copy of applicants resume and credentials should be sent to

King Saud University Office
2425 West Loop South, Suite 450
Houston, TX 77027
Attention: Miss Aida Ganim

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