sary to go to a German university for an education in science. In the early 1850's, even though his scientific research gained him membership in the Royal Society of London, he still could not find a satisfactory scientific position. Though his scientific accomplishments in diamagnetism, radiant heat, and spontaneous generation did not rank with those of Dalton, Faraday, Maxwell, Kelvin, or Darwin, they earned him a large measure of prominence. Coupled with the position he eventually attained at the Royal Institution, this prominence allowed him vociferously and effectively to promote the many aspects of the professionalization of science, to his countrymen's delight and chagrin. He and T. H. Huxley and others led a movement for change. Tyndall, for example, contributed greatly to the spread of scientific knowledge through his popular lectures at the Royal Institution, a lecture tour of America, and his wide-selling books on science. More unsettling to many of his contemporaries was his extension of such activities into a demand for the culture of the scientist to replace that of the clergyman in dominating the national outlook. These matters crystallized in his controversial presidential address in 1874 to the Belfast meeting of the British Association for the Advancement of Science. He was the agnostic scientist arguing that, in fairness, Britain should acknowledge the social and conceptual superiority of science to religion.

The remaining essays discuss specific parts of this overall picture. Of them, I would mention A. J. Meadows's "Tyndall as a physicist" and J. S. Rowlinson's "Tyndall's work on glaciology and geology." Meadows touches on Tyndall's fundamental view of nature as consisting of aether and molecules but in so short an essay cannot give it the full discussion it deserves. Rowlinson explores one of Tyndall's many controversies with other scientists and suggests a common pattern to these disputes of Tyndall's: "Tyndall takes up eagerly some field of research in which there has been already a considerable degree of progress, he adds some new observations or, very often, devises some ingenious experiments, but then claims a greater novelty or distinction for his additions than an impartial observer would allow.'

In summary, although this book deserves to achieve the purpose set for it, it is far from being the best that could be written on Tyndall.

DAVID B. WILSON Department of History,

Iowa State University, Ames 50011

Books Received

Advances in Potato Pest Management Papers from a conference, New Brunswick, N.J., Jan. 1980. James H. Lashomb and Richard Casagrande, Eds. Hutchinson Ross, Stroudsburg, Pa., 1982 (distribu-tor, Academic Press, New York). xiv, 290 pp., illus. \$22.

Advances in the Treatment of Inhorn Errors of Metabolism. Proceedings of a symposium, Harrow, England, Sept. 1981. M. d'A. Crawfurd, Dorothy A. Gibbs, and R. W. E. Watts, Eds. Wiley, New York, 1982. xviii, 366 pp., illus. \$47. A Wiley Medical Dublication Publication

Advances in X-Ray Analysis, Vol. 25, Proceedings of a conference, Denver, Aug. 1982. John C. Russ, Charles S. Barrett, Paul K. Predecki, and Donald E. Leyden, Eds. Plenum, New York, 1982. xviii, 398

Leyden, Eds. Pienuni, New York, Piener, H. S. Biomass for Energy in the Developing Countries. Current Role, Potential, Problems, Prospects, D. O. Hall, G. W. Barnard, and P. A. Moss. Pergamon, Mark 1982 every 220 nn. Cloth. \$40; paper, New York, 1982. xxxiv, 220 pp. Cloth, \$40; paper, \$20

Biometeorology in Integrated Pest Management. Proceedings of a conference, Davis, Calif., July 1980. Jerry L. Hatfield and Ivan J. Thomason, Eds. Academic Press, New York, 1982. x, 492 pp., illus.

Borderline and Other Self Disorders. A Developmental and Object-Relations Perspective. Donald B. Rinsley. Aronson, New York, 1982. xiv, 322 pp. \$27.50

Chemotherapy of Malaria. L. J. Bruce-Chwatt, R. H. Black, Craig J. Canfield, D. F. Clyde, W. Peters, and W. H. Wernsdorfer. World Health Organiza-tion, Geneva, ed. 2, 1981 (U.S. distributor, WHO Publications Centre USA, Albany, N.Y.). 262 pp., illus. Paper, \$15. World Health Organization Monograph Series, No.

Dosimetry of X-Ray and Gamma-Ray Beams for Radiation Therapy in the Energy Range 10 keV to 50 MeV. Recommendations of the National Council on Radiation Protection and Measurements. National

Radiation Protection and Measurements. National Council on Radiation Protection and Measurements, Washington, D.C., 1981. viii, 110 pp., illus. Paper, \$12. NCRP Report No. 69.
 Economics for Mathematicians. J. W. Cassels. Cambridge University Press, New York. 1982. xii, 146 pp., illus. Paper, \$14.95. London Mathematical Society Lecture Note Series, 62.
 Edward Jenner. The Cheltenham Years, 1795– 1823. Being a Chronicle of the Vaccination Cam-paign. Paul Saunders. University Press of New England, Hanover, N.H., 1982. xx, 470 pp. + plates. \$27.50.
 Fundamentals of Energy Production. Edwin L. Harder. Wiley-Interscience, New York, 1982. xvi, 368 pp., illus. \$44.50. Alternate Energy.
 Fundamentals of Interactive Computer Graphics.

Fundamentals of Interactive Computer Graphics. James D. Foley and Andries van Dam. Addison-Wesley, Reading, Mass., 1982. xx, 664 pp., illus., + plates. Cloth. The Systems Programming Series.

Galactic X-Ray Sources. Proceedings of a NATO Advanced Study Institute, Sounion, Greece. Peter W. Sanford, Paul Laskarides, and Jane Salton, Eds. Wiley-Interscience, New York, 1982. xviii, 450 pp., illus. \$45.

Games, Economic Dynamics, and Time Series Analysis. Papers from a symposium, Vienna, May 1980. M. Deistler, E. Fürst, and G. Schwödiauer, Eds. Physica-Verlag, Vienna, 1982 (U.S. distribu-tor, Birkhäuser, Boston). 384 pp. Paper, \$69,95. Human Cancer Markers. Stewart Sell and Britta

Wahren, Eds. Humana Press, Clifton, N.J., 1982. xx, 428 pp., illus. \$59.50. Contemporary Biomedi-

Immunological Approaches to Cancer Therapeu-tics. Enrico Mihich, Ed. Wiley-Interscience, New York, 1982. xii, 588 pp., illus. \$75.

Immunological Aspects of Mammalian Reproduction. Peter J. Hogarth. Praeger, New York, 1982.

viii, 196 pp., illus. \$35. Immunomodulation by Microbial Products and Related Synthetic Compounds. Proceedings of a sympo-sium, Osaka, July 1981. Yuichi Yamamura, Shozo Kotani, Ichiro Azuma, Akihide Koda, and Tetsuo Shiba, Eds. Excerpta Medica, Amsterdam, 1982 (U.S. distributor, Elsevier, New York). xvi, 562 pp., jilue, \$116.25 illus. \$116.25

The Logic of Machines and Structures. Paul San-ori. Wiley-Interscience, New York, 1982. xii, 180 5., illus. \$29.95. dori.

pp., illus. \$29.95. Luminescent Assays. Perspectives in Endocrinology and Clinical Chemistry. Papers from a meeting, Florence, July 1981. Mario Serio and Mario Paz-zagli, Eds. Raven, New York, 1982. xvi, 286 pp., illus, \$35. Serono Symposia Publications from Ra-uer Pares und 1 ven Press, vol. 1

Lymphatics of the Heart. Albert J. Miller. Raven, New York, 1982. xx, 382 pp., illus. \$46. Lymphokines. A Forum for Immunoregulatory Cell Products. Edgar Pick, Ed. Vol. 5, Monoclonal T

Cells and Their Products. Marc Feldmann and Max H. Schreier, Eds. Academic Press, New York, 1982. xxii, 496 pp., illus. \$55.

Mammal-like Reptiles and the Origin of Mammals. T. S. Kemp. Academic Press, New York, 1982. xiv, 364 pp., illus. \$49.50.

Managing the System Life Cycle. A Software De-velopment Methodology Overview. Edward Your-don. Yourdon Press, New York, 1982. xiv, 144 pp., illus. Paper, \$27.

Nutrition and Killer Diseases. The Effects of Dietary Factors on Fatal Chronic Diseases. John Rose, Ed. Noyes, Park Ridge, N.J., 1982. xviii, 186 pp. \$25.

Optical Devices and Fibers, 1982. Y. Suematsu, Ed. OHM, Tokyo, and North-Holland, Amsterdam, 1982 (U.S. distributor, Elsevier North-Holland, New York). vi, 392 pp., illus. \$124. Japan Annual Reviews in Electronics, Computers and Telecommunications, vol. 3. Origins of Clinical Chemistry. The Evolution of

Origins of Chincal Chemistry. The Evolution of Protein Analysis: Louis Rosenfeld. Academic Press, New York, 1982. xviii, 366 pp., illus. \$38. Oxygen Transport to Human Tissues. Papers from a symposium, Albuquerque, N.M., June 1981. Jack A. Loeppky and Marvin L. Riedesel, Eds. Elsevier/ North-Holland New York 1082 xvx 378 pp. illum North-Holland, New York, 1982. xxx, 378 pp., illus.

Parasitology. The Biology of Animal Parasites. Elmer R. Noble and Glenn A. Noble. Lea and Febiger, Philadelphia, ed. 5, 1982. viii, 522 pp., illus.

Proceedings of the International Workshop Role of Protectings of the International Workshop Kole of Potassium in Crop Production. A. Saurat and Mo-hamed M. El-Fouly, Eds. Cairo, Nov. 1979. Nation-al Research Centre, Cairo, 1981. xx, 188 pp., illus. Paper.

Proceedings of the Workshop on the Management **Rechology**. Mysore, India, July 1979. K. T. Achaya, Ed. Central Food Technology. Mysore, India, July 1979. K. T. Achaya, Ed. Central Food Technological Research Institute, United Nations University, Mysore, India, 1001. vi 200 pp. illug. Pages 1981. vi, 220 pp., illus. Paper. Progress and Its Discontents. Papers from a confer-

ence, Palo Alto, Calif., Feb. 1979. Gabriel A. Al-mond, Marvin Chodorow, and Roy Harvey Pearce,

 Risk and Culture. An Essay on the Selection of Technical and Environmental Dangers. Mary Doug-las and Aaron Wildavsky. University of California Press, Berkeley, 1982. x, 222 pp. \$14.95. Rituals of Manhood. Male Initiation in Papua New

Guinea. Papers from a symposium, 1979. Gilbert H. Herdt, Ed. University of California Press, Berkeley, 982. xxvi, 368 pp., illus. \$32,50. The Scanning Patterns of Human Infants. Implica-

The Scanning Fatterns of Human Infinites
 Tions for Visual Learning. Gordon W. Bronson.
 Ablex, Norwood, N.J., 1982. xvi, 136 pp., illus.
 \$16.50. Monographs on Infancy.
 Science and Morality. New Directions in Bioeth-

ics. Papers from 3 annual conferences beginning spring 1979. Doris Teichler-Zallen and Colleen D. Clements, Eds. Lexington (Heath), Lexington, Mass., 1982. xx, 294 pp. \$25.95.

Semiotics 1980. Proceedings of a meeting, Lub-bock, Tex., Oct. 1980. Michael Herzfeld and Margot D. Lenhart, Eds. Plenum, New York, 1982. xii, 594 pp. \$69.50. Serial Changes in Subcutaneous Fat Thicknesses of

Serial Changes in Subcutaneous Fat Thicknesses of Children and Adults. A. F. Roche and 6 others.
Karger, Basel, 1982. x, 110 pp., illus. Paper, \$47.50.
Monographs in Paediatrics, vol. 17.
Teaching of Statistics and Statistical Consulting.
Proceedings of a conference, Columbus, Ohio, Nov.
1980. Jagdish S. Rustagi and Douglas A. Wolfe, Eds.
Academic Press, New York, 1982. xvi, 548 pp. \$36.
Technical College Physics. Jerry D. Wilson.
Saunders, Philadelphia, 1982. x, 604 pp., illus.
Cloth. Saunders Golden Sunburst Series.
Techniques of Chemistry. Vol. 5. Part 3, Technique of Electroorganic Synthesis. Scale-up and
Engineering Aspects. N. L. Weinberg and B. V.
Tilak, Eds. Wiley-Interscience, New York, 1982.
xiv, 536 pp., illus. \$85.

Tilak, Eds. Wiley-Interscience, New York, 1982.
xiv, 536 pp., illus. \$85.
Vehicle System Components. Design and Safety.
Rudolf Limpert. Wiley-Interscience, New York, 1982.
xiv, 144 pp., illus. \$32.95.
Voyages to Saturn. David Morrison. National Aeronautics and Space Administration, Washington, D.C., 1982 (available from the Superintendent of Documents, Washington, D.C.).
x, 228 pp., illus. ASA SP-451.
The Warning. Accident at Three Mile Island.
Mike Gray and Ira Rosen. Norton, New York, 1982.
288 pp., illus. \$14.95.
Who's Who in Health Care. Aspen Systems Corporation, Rockville, Md., ed. 2, 1981. xviii, 612 pp.

poration, Rockville, Md., ed. 2, 1981. xviii, 612 pp. \$69.95; deluxe edition, \$79.95.

World Directory of Research Projects, Studies and Courses in Science and Technology Policy. UNESCO, Paris, 1981 (U.S. distributor, Unipub, New York). xxviii, 426 pp. Paper.

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Cell Sorting/Analysis, Ph.D. Pioneer in field with proven ability to develop new concepts, seeks position giving opportunity to pursue innovative applications of technology to medicine. Prefers academic position with solid funding. Box 196, SCIENCE. 8/6, 13

Collagen/Connective Tissue Biochemist, Ph.D. Biochemistry of collagen types in soft and hard tissues. Analytical, preparative, clinical, and HPLC meth-ods development. Several publications. Box 211, SCIENCE

Environmental Scientist-Researcher/Educator. M.S., biology. Research experience: limnology, agroecosystems, forestry, vertebrate behavior. Teaching experience: ecology, biology, general sci-ence. Seeks challenging position providing profes-sional growth opportunities. Box 202, SCIENCE. X

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Epidemiologist/Biostatistician, M.P.H. (microbiolo gy, B.A.). Seeks a position in industrial R & D marketing. Experience in various immunological techniques, vaccine clinical trials, serum banks, and designing surveys for the collection of population data. Computer knowledge includes SPSS, BMD, Minitab, SAS, and BASIC. Training in parametric, nonparametric, and regression statistics. Box 217, SCIENCE. X

Industrial Toxicologist, Regulatory and Product Safe-ty, Contract Administration. Ph.D. with 10 years of experience. Manager of \$2 million/annual industrial product safety, waste effluent, environmental and health, occupational safety program. Heavy regula-tory, management, and administration background. Senior federal, local agency negotiations, legal support. Program management and consultant experi-ence. Petroleum, synfuels, pharmaceuticals, tobac-co, food products, and by-products. Seeks industrial position. Box 215, SCIENCE. 8/6, 13

Psychobiologist, Ph.D. expected December 1982. Currently employed as computer programmer and research technician at prominent New York City university medical center; seeks to relocate to southaniversity medical center, seeks to relocate to south-eastern Canada, particularly Montréal (limited knowledge of French, will learn). Research back-ground in human EEG and in perceptual deficit following stroke; strong course background in biochemistry and physiology. Extensive experience in computer applications, including Fortran, BASIC, and Assembler-Machine language programming. Teaching experience and coauthorship of one book chapter. Research position in human experimental neuropsychology or technical post in invertebrate physiological psychology/neurobiology desired. Pro-gram portfolio and curriculum vitae available on request. Box 216, SCIENCE. X

Toxicologist/Pharmacologist, Ph.D. Research and teaching experience, publications, in vivo and in vitro drug metabolism, reproductive toxicology-ter-atology. Management and supervisory experience. Seeks research/administrative position in pharmaceutical/chemical or contract research organization Box 200, SCIENCE. 8/6, 13

Zoologist/Oceanographer. M.S. (1972). Self-motivated individual seeks research-oriented position in East or West Coast location. Broad background includes: crustacean systematics; 16 publications and proven skills as technical and proposal writer; oceanographic cruises with experience in planning and directing successful deep-sea programs and familiarity with most benthic sampling devices; ben-thic sample sorting and animal identification; comtaching experience; small boat operation and main-tenance; experience; small boat operation and main-tenance; experienced diver; microphotography; sci-entific illustration. Box 212, SCIENCE. X

POSITIONS OPEN

ANALYTICAL CHEMIST. The Department of Chemistry of the University of Texas at Austin is seeking an outstanding individual to full a new faculty position in analytical chemistry. The appointment will probably be at the assistant professor level, but truly exceptional senior candidates will be considrered. The field of research specialization is open. However, we particularly encourage applications from candidates with research interests in mass spectrometry, chemical applications of synchrotron spectrometry, chemical applications of synchrotron radiation, or modern magnetic resonance methods. Applications with curriculum vitae, publications, and three letters of recommendation should be sent to: Professor James A. Holcombe, Department of Chemistry, The University of Texas at Austin, Austin, Texas 78712. The deadline for receipt of completed applications is 1 November. The University of Texas is an Equal Opportunity Employer and encourages applications from all qualified persons.

ASSOCIATE PROFESSOR-PROFESSOR. Faculty ASSOCIATE PROFESSOR—PROFESSOR. Faculty of Dentistry and Medicine, the State University of New York at Buffalo, invites applications for a senior faculty position. The applicant should have a D.D.S., M.D., Ph.D., or equivalent degrees, and an established reputation for high-quality research in microbiology. Applicants with experience in micro-bial genetics and biochemistry or other areas related to bacterial pathogens are encouraged to apply. Please send résumé to: Dr. Robert Genco, Depart-ment of Oral Biology. State University of New York at ment of Oral Biology, State University of New York at Buffalo, 4510 Main Street, Buffalo, New York 14226. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ANATOMY ASSISTANT PROFESSOR. The De-partment of Anatomy, the Medical College of Penn-sylvania, has a tenure-track position at the assistant professor level beginning 1 July 1983. Applicants professor level beginning 1 July 1983. Applicants should be qualified to teach gross anatomy and embryology. Candidates should have postdoctoral research experience and a significant record of re-search accomplishment with the capacity to function as an independent researcher in the field of cellular or developmental neurobiology. Current research areas in the department include neurobiology, mus-cle biology, and cell biology. Salary is dependent upon qualifications and experience. Applicants are invited to submit curriculum vitae, names of three references, and a statement of research interests and references, and a statement of research interests and teaching experience by 1 December 1982 to: Dr. Leonard L. Ross, Chairman, Department of Anato-my, MEDICAL COLLEGE OF PENNSYLVANIA, 3300 Henry Avenue, Philadelphia, Pa. 19129. An Equal Opportunity Employer.

Assistant Director for Animal Programs National Zoological Park **Smithsonian Institution**

Applications are being accepted until 1 October 1982 for the position of **ASSISTANT DIRECTOR FOR ANIMAL PROGRAMS**, National Zoological Park, Smithsonian Institution, Washington, D.C. Salary: GM-15, \$46,685 to \$60,689 (salary limited by federal statute to \$57,500). Incumbent is responsible for the administration program planning direction for the administration, program planning, direction, and management of the animal collection of approxi-mately 2500; and an active basic research program on both the collection and in the field. Incumbent is expected to provide leadership and support to the 150 employees in these activities. Qualifications: scholarly distinction in the field of vertebrate zoology, conservation, or ecology; doctoral degree pre-ferred; administrative and managerial experience ferred; administrative and managerial experience with a strong emphasis on program planning and management; experience with captive animal man-agement desirable; and U.S. citizenship. Applica-tions or inquiries should be sent to: Director, Nation-al Zoological Park, Washington, D.C. 20008. Send curriculum vitae and Civil Service Qualifications Form SF-171.

The Smithsonian Institution is an Equal Opportunity Employer.

ASSISTANT PROFESSOR. The Department of Medicine at the Beth Israel Hospital and Harvard Medical School in Boston is seeking applicants for Medical School in Boston is seeking applicants for an assistant professor position within the Cardiovas-cular Division. The position requires several years of experience in the administration of a Coronary Care Unit, and an on-going research interest in hemodynamic aspects of myocardial ischemia, the study of cardiogenic shock, or the pathoanatomy of coronary artery obstruction. The individual would be encouraged to conduct independent research, but will be expected to expende a portion of bis or ber be encouraged to conduct independent research, but will be expected to expend a portion of his or her research effort in collaborative studies within the division. Recognized excellence in teaching, and experience in administering a Cardiovascular Train-ing Program are desirable. Send curriculum vitae and references to: Dr. William Grossman, Depart-ment of Medicine, Beth Israel Hospital, 330 Brookline Avenue, Boston, Massachusetts 02215. Women and members of minority groups are encouraged to apply. apply

ASSISTANT PROFESSOR; teach physics, astrono-ASSISTANT PROFESSOR, teach physics, astrono-my, mathematics; design science curriculum for adults; academic counseling and program coordina-tion. Ph.D., high energy physics; experience in computer programming and history of science. Teach 12 hours weekly. Salary from \$18,500. Profes-sional Placement Center, 485 Fifth Avenue, New York, N.Y. 10017. Order number 1395203-68.

ASSISTANT RESEARCH PHYSICIST

The Space Sciences Laboratory of the University In Space Sciences Laboratory of the University of California at Berkeley has an opening for an assistant research physicist. The candidate will be responsible for the analysis of upper atmospheric data obtained from a satellite-borne EUV spectrom-eter. A relevant Ph.D. and research experience in upper atmospheric physics is required. Send résumé and three letters of recommendation by 31 August 1982 to: 1982 to:

> Professor C. S. Bowyer Space Sciences Laboratory University of California, Berkeley Berkeley, Calif. 94720

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

TENURE-TRACK ASSISTANT PROFESSOR IN CLINICAL CHEMISTRY, Division of Medical Technology. Responsibilities: teach courses and co-ordinate clinical internship in clinical chemistry area or an 2 + 2 medical therms in in clinical chemistry area of a 2 + 2 medical technology curriculum; partici-pate in the development of a graduate program and eventually supervise students in this program; schol-arly and creative production resulting in publication. Requirements: 2 years of clinical chemistry labora-tory experience, MT certification by ASCP or NCA, M.S. in an appropriate related area, and teaching experience. Prefer Ph.D. and additional certification in NRCC or ABCC. Submit curriculum vitae by 30 October 1982 to: October 1982 to:

Chairman, Search Committee Division of Medical Technology Department of Medical Allied Health Professions University of North Carolina Medical School Wing B, 207H Chapel Hill, North Carolina 27514

Equal Opportunity/Affirmative Action Employer. We are keenly interested in attracting outstanding women and/or minority faculty to this department.

ASSISTANT/ASSOCIATE PROFESSOR IN RESI-**DENCE** (Pharmacologist)—The Department of Medicine and the University of California, San Die to conduct independent laboratory research related to concer chemotherapy and to participate in the research program of the Laboratory of Pharmacolo-gy and Cytokinetics of the UCSD Cancer Center. Appointee must have demonstrated research pro-ductivity; background in molecular biology, biochemical pharmacology, or molecular genetics pre-ferred. At the associate level, appointee must have ferred. At the associate level, appointee must have previous experience teaching medical and postdoc-toral students. Salary related to rank and step of appointment within the established salary schedule of the University of California, San Diego. All applications received by 6 October 1982 will receive thorough consideration. Contact: Dr. Stephen B. Howell, Department of Medicine, T-006, UCSD, La Jolla, Calif. 92093. The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

The Lovelace Medical Foundation Announces its Second Annual **Research Symposium** and The Summa Medical Corporation Announces its Second International Symposium on RADIOIMMUNOIMAGING (RII) At the Sheraton Old Town Inn Albuquerque, New Mexico November 4,5 and 6, 1982 Registration: \$275. (Fee includes lunches and refreshments for the evening cocktail party/poster session.) Abstracts: Will be accepted for poster presentations and publication in HYBRIDOMA. Deadline for submission is September 10th. Proceedings of the symposium will be published. **REQUESTS:** Form or information should be addressed to: Debra Thomas or Donna Neff RII Symposium, Lovelace Medical Center, 5400 Gibson Blvd., S.E., Albuquerque, New Mexico 87108

6 AUGUST 1982

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POSITIONS OPEN

A position will be available at the ASSISTANT PROFESSOR level (tenure-track) in the Department **PROFESSOR** level (tenure-track) in the Department of Anatomy and Cell Biology, The University of Michigan Medical School, beginning July to Septem-ber 1983. Applicants should have a strong research program that is focused at the cell level and has a molecular outlook. Preference will be shown to those with 2 to 3 years of postdoctoral experience in a good laboratory. The department has excellent facilities for electron microscopy and other aspects of cell biology. Teaching recroonshifting will be of cell biology. Teaching responsibilities will be either in histology, gross anatomy, or neuroanato-my, depending on the background of the individual. Applicants should send curriculum vitae and a para-Applicants should send curriculum vitae and a para-graph describing their current research interests, and have three letters of reference sent to: Dr. A. Kent Christensen, Department of Anatomy and Cell Biology, The University of Michigan Medical School, MS240 Medical Science I Building, Box 045, 1335 East Catherine Street, Ann Arbor, Mich. 48109. A nondis-criminatory, Affirmative Action Employer. Code 08.

ASSISTANT SCIENTIST

ASSISTANT SCIENTIST Research positions available for qualified biochemist and cell biologist. Biochemist should have experi-ence in lipid analysis and other biochemical isolation procedures. Cell biologist should be experienced with primary cultures of smooth, cardiac, and skele-tal muscle. Applicants should include curriculum vitae and copies of recent research publications. Submit all application materials by 1 September 1982. Nathaniel Revis, Oak Ridge, Tenn. 37830. Equal Opportunity/Affirmative Action Employer.

CURATOR OF VERTEBRATE ZOOLOGY. The candidate must be a taxonomist with a strong interest in field biology as well as an administrator. He/ she will prepare exhibitions and educational pro-grams. The candidate will be expected to organize and/or participate in field studies of local fauna. Application, including curriculum vitae and publica-tions, should be sent to: Chairperson, Department of Zoology, George S. Wise Faculty for the Life Sciences, Tel Aviv University, Tel Aviv 69978, Israel.

POSITIONS OPEN

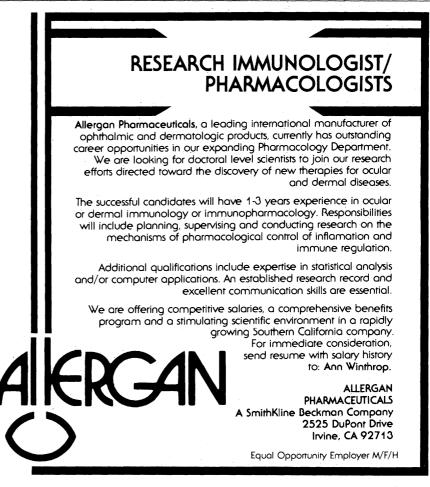
Virginia Mason Research Center (VMRC), a nonprofit biomedical research organization which is part of the Virginia Mason Medical Center, has positions open in a **new Immunology Research Laboratory**. Candidates should possess an M.D. or Ph.D. degree. Appointments will be at the level of **ASSOCIATE MEMBER** (equivalent to associate professor). Rec-ognition in specialty as well as experience in leading a scientific team and managing research programs are required. Candidates should have major research interests in one or more of the following areas: HLA and disease; immunobiology of rheumatic and autoimmune disease; lymphocyte differentiation, func-tion, and immunoregulation; and/or immunology as it relates to cancer. Candidates are expected to develop their own program and pursue independent research ideas in the area of immunology as it relates to human disease and must be able to interact with clinicians. A major fund-raising campaign to provide a stable base of support from which to launch grant applications is under way.

VMRC is an Equal Opportunity Employer; minor-ities and women especially are encouraged to apply. Please send résumé to: John Rasmussen, Ph.D., Director, Virginia Mason Research Center, 1000 Sen-eca Street, Seattle, Washington 98101.

The Institute for Behavioral Genetics (IBG), University of Colorado, Boulder, is seeking a **BEHAV-IORAL GENETICIST** to fill a tenure-track position the assistant professor level, beginning September 983. Applicants must have a Ph.D. and demonstrated ability for superior teaching and research. Salary is dependent upon experience.

We seek candidates with expertise in the genetics of psychopathology and with qualifications for appointment in a cognate academic unit, for example, psychology. However, applications from outstand-ing behavioral geneticists with expertise in other areas will also be considered.

Send curriculum vitae, statement of interest, and three letters of reference to: Search Committee, IBG, Campus Box 447, University of Colorado, Boulder, Colorado 80309. Closing date is 31 October 1982. The University of Colorado is an Equal Opportu-nity/Affirmative Action Employer.



BIOLOGY. Full-time faculty position beginning 15 August 1983. Applicants must have a Ph.D. in microbiology. Duties include teaching courses in microbiology, immunology, cell physiology, and biochemistry. Send curriculum vitae and three refer-ences by 15 October 1982 to: **Dr. John A. Ward**, 4301 Broadway, San Antonio, Texas 78209. Affirma-tive Action/Equal Opportunity Employer.

CHAIRPERSON, DEPARTMENT OF ANATOMY. The College of Medicine of the State University of New York–Upstate Medical Center is soliciting ap-plications and nominations for professor and chair-person of the Department of Anatomy. Candidates should have a distinguished record of research, an interest in teaching administrative experience and interest in teaching, administrative experience, and Ph.D. or M.D. degree. Please address correspon-dence to: David Fromm, M.D., Chairman of Anatodence to: David Fromm, M.D., Chairman of Anato-my Search Committee, Department of Surgery, Up-state Medical Center, 750 East Adams Street, Syra-cuse, New York 13210. Deadline for receipt is 15 September 1982. Equal Opportunity/Affirmative Ac-tion Employee tion Employer.

Major Midwest medical center and hospital is seek ing candidates for a senior position in the testing of CLINICAL EVOKED POTENTIALS and related applied clinical neurophysiology investigations Responsibilities include direct technical supervision and the development of scientific programs

Qualified candidates will possess a Ph.D. or M.S. in neurophysiology with a minimum of 5 years of experience in evoked potentials, as well as related experience in electrophysiology, neurodiagnostics, and laboratory administration. Submit résumés to:

Box 208, SCIENCE

An Affirmative Action/Equal Opportunity Employer

Sterility Research Center Director Food and Drug Administration (FDA) Minneapolis, Minnesota

The function of the center is to design and conduct a research program to develop new or improved meth-odology for sterility and associated microbiological analyses.

The director is the chief scientist of the center and is responsible for the development, planning, and di-rection of the research activities. The director is also responsible for general administration, including staff and budget.

This position has Civil Service status with a salary range of \$33,586 to \$50,112 (GS-13/14), depending upon individual qualifications. Eligible candidates must be U.S. citizens and have creditable academic credentials supported by a strong record of achieve-ment in sterility research problems and demonstrat-ed experience in supervision and research management.

All candidates should submit their credentials using Standard Form 171, Office of Personnel Manage-ment Forms 1170 and 1386 (available at local Federal ment Forms 11/0 and 1380 (available at local Federal Job Information Centers). Send applications to: De-partment of Health and Human Services, Regional Personnel Office, 300 South Wacker Drive, Chicago, Illinois 60606; Melba Acciari, Personnel Staffing Spe-cialist. Refer to: Vacancy Announcement Number MA-1-82. Additional information can be obtained from: Arvin P. Shroff, Ph.D., telephone: 301-443-3320. FDA is an Equal Opportunity Employer.

UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applicants are solicited for FACULTY POSITIONS in the following departments:

MEDICINE: (Number 409) Assistant/associate pro resor. Academic nephrologist for teaching clinical nephrology and research. Eligible for licensure in Oklahoma. Board-eligibility in internal medicine and nephrology is required. (Number 412) Assistant pro-fessor. Director of Pulmonary Funcation Labora-tory. Certified by American Board of Internal Medi-cine and pulmonary Board-eligible. Duties to include MICU and consultation attending in rotation with other faculty along with medical school teaching and individual research individual research.

Applicants should send curriculum vitae identifying vacancy number for which they are applying to: O. C. Coleman, Assistant Dean, College of Medicine, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Okla. 73190. We are an Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR OF COAL EXTRACTION AND UTILIZATION RESEARCH CENTER Southern Illinois University at Carbondale

Southern Illinois University-Carbondale invites applications and nominations for the position of direc-tor, Coal Extraction and Utilization Research Center. The director's primary responsibilities are to stimulate, develop, and coordinate research activi-ties related to the mission of the Center. 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.

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 deadline for receipt of applications and nomina-tions is 1 October 1982. The date of appointment will be on or about 1 January 1983. Send inquiries or applications (must include letter of intent, current and complete curriculum vitae, and at least three references) to:

James A. Tweedy Chairperson, Search Committee Office of the Vice President for Academic Affairs and Research Southern Illinois University-Carbondale Carbondale, Ill. 62901

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

FACULTY POSITIONS IN BASIC AND CLINICAL SCIENCE RELATED TO DENTISTRY. Candidates holding a Ph.D. or equivalent qualification who are capable of carrying out independent research in an appropriate discipline are invited to apply. Dental advantage. Applications should be sent to: Dr. James P. Lund, Assistant Dean for Research, Faculté de médecine dentaire, Université de Montréal, C.P. 6209 Succursale A, Montréal, Québec, Canada H3C 3T9; telephone: 514-343-7815.

FACULTY POSITION in avian immunogenetics and quantitative genetics. Applications are invited from persons with Ph.D. degree with training in immunogenetics and quantitative genetics. Responsibilities include basic and applied research and teaching at the graduate and undergraduate level. Submit résu-mé of education, including transcripts, professional experience, list of publications, and other completed work, and have a minimum of three references. Forward letters of recommendation to: **Dr. S. A.** Ewing, Head, Department of Animal Science, 101 Kildee Hall, Iowa State University, Ames, Iowa 50011. Affirmative Action/Equal Opportunity Emplover

Challenging opportunity in oncology practice and clinical research for Board-certified/eligible INTER-NIST—ONCOLOGIST. The opportunity features a NIST—ONCOLOGIST. The opportunity features a research-based multispecialty group clinical practice in an oncology center. For those interested in the challenge of such an opportunity, submit your inquiries and résumé to: Chief of Medicine, Morton Cancer and Research Hospital, P.O. Box 35988, Dallas, Texas 75235.

Challenging opportunity in clinical practice and clinical research for INTERNIST. Board-certified/eligible in infectious diseases. The opportunity features a research-based multispecialty group clinical practice in an oncology center. For those interested in the challenge of such an opportunity, submit your in-quiries and résumé to: Chief of Medicine, Morton Cancer and Research Hospital, P.O. Box 35988, Dallas, Texas 75235.

University of Michigan Medical School, Department of Biological Chemistry, has an opening for a Ph.D. at the LECTURER, INSTRUCTOR, OR ASSIST-ANT PROFESSOR (nontenure) level, depending upon experience. Candidates should have a Ph.D. in biochemistry with postdoctoral experience with xanbiochemistry with postdoctoral experience with xan-thine oxidase or related enzymes, and the use of rapid reaction techniques. Training in the use of EPR would also be helpful. Send résumé to: Dr. Vincent Massey, Department of Biological Chemistry, University of Michigan Medical School, M5240 Medi-cal Science I Building, Box 045, 1335 East Catherine Street, Ann Arbor, Mich. 48109. A nondiscrim-inatory, Affirmative Action Employer. Code 42.

POSITIONS OPEN

University of Pennsylvania School of Medicine Department of Pathology and Laboratory

Medicine Division of Laboratory Medicine

Applicants are solicited for FACULTY POSITIONS in the chemistry, blood bank, hematology-coagula-tion, immunology, microbiology, and data process-ing sections. Individuals with research interests and backgrounds, as well as a commitment to excellence in patient care, are sought. Medical graduates trained in laboratory medicine or clinical pathology will be considered most seriously. However, M.D.'s or Ph.D.'s with relevant clinical laboratory training or experience are value currical automatic appoint-ment and salary will be commensurate with previous experience and service responsibility. Send curricu-lum vitae, list of at least three references, and a statement about research goals and areas of service interest to:

David B. P. Goodman, M.D., Ph.D. Director, William Pepper Laboratory Hospital of the University of Pennsylvania 3400 Spruce Street Philadelphia, Pennsylvania 19104

The University of Pennsylvania is an Equal Oppor-

tunity/Affirmative Action Employer.

FACULTY POSITION ASSISTANT/ASSOCIATE PROFESSOR OF PHARMACOLOGY UNIVERSITY OF CINCINNATI MEDICAL CENTER COLLEGE OF PHARMACY

Applications are invited for a full-time, tenure-track, academic-year position in pharmacology, available I September 1982. Successful applicant will be expected to participate in undergraduate and graduate teaching, to develop a viable research program, and to perform committee and other service functions. A Ph.D. in pharmacology or related area required; a B.S. in pharmacy is preferred but not required. Send application letter, curriculum vitae, and names and addresses of three references to:

Stephen M. Roberts, Ph.D. Chairman, Pharmacology Faculty Search Committee Pharmacology Section, College of Pharmacy University of Cincinnati Medical Center, ML 4 Cincinnati, Ohio 45267

The University of Cincinnati is an Equal Opportuni-ty/Affirmative Action Employer.

MICROBIOLOGIST, MOLECULAR BIOLOGIST, OR BIOCHEMIST

The Naval Biosciences Laboratory, an Organized Research Unit of the University of California, Berkeley, has two openings at the assistant professor level in the professional research series. Candidates for these positions should have a strong background in nucleic acid chemistry and recombinant DNA technology including at least 2 years of postdoctoral experience. The successful candidates will be ex-pected to establish independent research programs n an area related to ranid diagnostic test for in an area related to rapid diagnostic tests for bacterial or viral infections, regulation of gene expression of eukaryotic genes (either plant or ani-mal), or synthesis of eukaryotic gene products from cloned genes. These are full-time research positions which require the individuals to assume the role of resident hoder including the uncertaining of laboration. project leader, including the supervision of labora-tory personnel and preparation of proposals, as well as report and manuscript preparation. These are nontenure-track positions funded from a contract between the Office of Naval Research and the Unibetween the Office of Naval Research and the University of California. Interested candidates should submit curriculum vitae and the names and addresses of three references to: David T. Kingsbury, Ph.D., Director, Naval Bioscience Laboratory, Naval Supply Center, Building 844, Oakland, Calif. 94625. The University of California is an Equal Opportunity/ Affirmative Action Employer.

MICROBIOLOGISTS

Systems and Applied Sciences Corporation (SASC) has professional opportunities for individuals with an M.S. or Ph.D. in biology/chemistry/biophysics to work on biological aerosol detection and documentation. The work will involve mathematical model-ing, spectroscopy, and remote sensing.

For more information, telephone: Ed Chang at 301 699-6167, or send your résumé to: SYSTEMS AND APPLIED SCIENCES CORPORATION, 5809 An-napolis Road, Hyattsville, Maryland 20784, attention: Ed Chang. An Equal Opportunity Employer

FUNGAL GENETICS, INC. VICE PRESIDENT AND DIRECTOR OF RESEARCH and

STAFF SCIENTIST IN MOLECULAR BIOLOGY

Fungal Genetics, Inc., a newly formed company in the field of filamentous fungi, is seeking scientists to fill two positions: Director of Research and staff scientist.

 Research Director of Molecular Genetics. The successful candidate will direct a research program relating to the genetic engineering of industrially important fungi. Applicants with experience in fungal genetics and recombinant DNA technology are encouraged to apply. A background in the expression of recombinant molecules in prokaryotes and eukaryotes as well as fungal fermentation technology and protein chemistry is desirable.

2) Staff Scientist. A staff scientist (PhD level) is sought with experience in recombinant DNA techniques. A background in yeast genetics or *Neurospora* genetics is desirable but not essential. The position offers a unique opportunity for advancement in a growing corporation which will exploit its proprietary position in filamentous fungi.

Applications from both the academic and industrial sectors are invited.

Fungal Genetics, Inc. is located in Seattle, Washington, a community with an excellent mix of cultural, recreational, and educational opportunities with attractive residential areas and mild climate year-round.

Highly competitive salaries are offered including excellent fringe benefits and substantial equity participation. Please send your Curriculum Vitae including salary requirement in confidence to:

> Fungal Genetics, Inc. 14721 Cottonwood Place Bothell, Washington 98011

ATT: Dr. Alan Lambowitz, Chairman Scientific Advisory Board

(Before August 20, 1982)

Ph.D. Microbial Geneticist

P-L Biochemicals, Inc., a growth company in the biotechnology industry, has an opportunity for a recent Ph.D. Microbial Geneticist. The person we are seeking in this newly created position will be the *B. subtilis* specialist on our recombinant DNA team. Duties will include in-house and contract research projects to support growth of our newly formed Biogenetics Research Division and will contribute to ongoing Research Enzymes business.

Ph.D. Immunologist

Monoclonal Antibody production experience required.

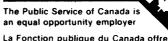
New position available at P-L Biochemicals, Inc. for a Ph.D. Immunologist with a minimum of two years postdoctoral experience in Monoclonal Antibody work. Inhouse applications in immunosorption and recombinant DNA screening plus development of new products for the research immunology market will contribute to the growth of our Research Enzymes business.

> Candidates should submit resume including telephone numbers of references to: Dr. James E. Willis, Vice President and

> > in hischemistry

Technical Director, Enzymes

PL biochemicals, inc.



La Fonction publique du Canada offre des chances égales d'emploi à tous

Chief, Wildlife Toxicology and Pathology

Salary: \$41,958 - \$46,637 Ref. No.: 82-NCRSO-DOE-4 (4030)

Environment Canada Canadian Wildlife Service Hull, Quebec

Duties

The Environmental Conservation Service requires a manager to be accountable for the direction and co-ordination of the Canadian Wildlife Service's national programs in wildlife, toxicology, pathology, parasitology, bioelectronics and acid rain.

Qualifications

University graduation in a life science. Several years experience in conducting biological research including the publishing of results. Experience in directing biological research and in program management.

Language Requirements

The successful candidate will be working to a significant degree in both English and French. Bilingual persons, as well as unilingual persons who are willing to undertake language training and who can demonstrate the necessary aptitude to become bilingual, are invited to apply.

Clearance No.: 312-154-020

Additional job information is available by writing to this address

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

How to apply

Send your application form and/or résumé to: Brian Beyer National Capital Region Staffing Office Public Service Commission of Canada 300 Laurier Avenue West Ottawa, Ontario K1A 0M7 Telephone: (613) 593-5331 ext. 483 Closing date: August 31,1982

Please quote the applicable reference number at all times.



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ENZYME TECHNOLOGY CORPORATION ASHLAND, OHIO

Enzyme Technology Corporation (ETC) has positions available in the following areas:

FERMENTATION MICROBIOLOGIST. This position requires an individual with a Ph.D. in microbiology or biochemical engineering who has experi-ence in the field of industrial fermentations related to enzyme manufacture. The successful candidate will have a minimum of 5 years of experience in conducting fermentations from laboratory through pilot plant, and will be familiar with equipment, including computer/fermentor interfacing, associated with fer-mentation processes. Additionally the candidate will have a strong background in microbial physiology and regulation of enzyme biosynthesis.

MOLECULAR GENETICIST. This position re-quires a Ph.D. microbiologist with experience in the area of microbial genetics and recombinant DNA methodology, especially as relates to Gram-positive microorganisms. The successful candidate will have academic postdoctoral experience and a minimum of years of experience in an industrial R & D envi ronment. ETC is an enzyme manufacturing compafor building and leading a team of scientists who will apply recombinant DNA methodology toward strain improvement.

Enzyme Technology Corporation offers a compet tive salary and complete benefits package. Qualified candidates should send a complete résumé with salary history in complete confidence to:

Employment Coordinator Enzyme Technology Corporation P.O. Box 777 Ashland, Ohio 44805

The National Aeronautics and Space Administra-tion, Langley Research Center, located in Hampton, Virginia, invites applications for the position of HEAD, THEORETICAL STUDIES BRANCH, AT-MOSPHERIC SCIENCES DIVISION (salary range: \$39,689 to \$57,500). The successful applicant will be responsible for performing individual research; for originating, defining, and supervising the scientific research of a group of atmospheric researchers; and for coordinating their work into coherent efforts on a number of advanced research projects. The focus of number of advanced research projects. The focus of the research is to provide fundamental knowledge of the research is to provide fundamental knowledge of the chemical, physical, and dynamical processes that control the atmosphere and climate so as to better interpret the impact of man on his environ-ment. The research encompasses a significant ana-lytical modeling effort, which includes one-, two-, and three-dimensional photochemical, dynamical models of the atmosphere, and an expanding empiri-cal modeling effort, which relies on statistical and enbergen bergenet models to analyze ground based spherical harmonic models to analyze ground-based, airborne, and satellite measurements of the atmo-sphere. Candidates must have an in-depth knowledge of atmospheric science as indicated by a Ph.D. or equivalent experience, and a successful record of research and research leadership. The incumbent must have the ability to manage and direct scientific and technical research programs of major impor-tance as well as the ability to effectively present the program plan, results of research, defend resource requirements, and represent the Center in the area of atmospheric science. Standard Form 171, Personal Qualifications Statement, should be sent to: **National** Qualifications Statement, should be sent to: National Aeronautics and Space Administration, Langley Re-search Center, Personnel Division, c/o John J. Cox, Mail Stop 174, Hampton, Virginia 23665. U.S. citi-zenship required. Applications must be received by 3 September 1982. Forms may be obtained from your local Office of Personnel Management or any federal agency. An Equal Opportunity Employer.

POPULATION ECOLOGIST (FISHERIES)

Academic position (assistant research biologist, University of California) available starting summer or fall 1982 for a Ph.D. experienced in working with the population dynamics of nearshore marine fishes. The successful candidate will assist the principal The successful candidate will assist the principal investigator of a multidisciplinary research program assessing environmental impacts of a southern Cali-fornia power plant on the local fish fauna. Appli-cants must have: (i) experience in solving problems related to the size, growth, yield, and mortality of fish stocks, (ii) demonstrated ability in scientific writing, and (iii) some practical experience in envi-ronmental consulting. Salary to depend on experi-ence. Send résumé, including a brief description of experience in applied research and the names of three references, to: Dr. E. DeMartini, 533 Stevens Avenue E-55, Solana Beach, California 92075, before 20 August 1982. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

HEMATOPATHOLOGIST. The Department of Pathology is seeking an experienced Board-certified pathologist for a position at a junior to intermediate aculty level with responsibilities to assist in Clinical faculty level with responsibilities to assist in Chincal Laboratories hematology services and educational programs. Proven teaching ability and research ac-complishments are necessary. Particular expertise in coagulation is desired. Send curriculum vitae and names of four references to: George S. Smith, M.D., Director, Clinical Laboratories, University of Califor-nia, Los Angeles (UCLA) Center for Health Sciences, Los Angeles, Calif. 90024. UCLA is an Equal Oppor-tunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply. women candidates are encouraged to apply.

HYBRIDOMA LABORATORY

Position available immediately as ASSOCIATE DI-RECTOR of the University of Virginia Lymphocyte Culture Center. Preference will be given to individuals with experience in all phases of monoclonal antibody production. Appointment and salary will be commensurate with experience and degree. Send résumé with list of references to: Dr. John C. Herr, Director, University of Virginia Lymphocyte Culture Center, Bóx 439, University of Virginia Medical Cen-ter, Charlottesville, Virginia 22908. An Equal Oppor-tunity/Affirmative Action Employer.

University of Michigan Medical School, Department of Surgery, has an opening for an M.D. at the INSTRUCTOR level.

Candidates should have an M.D. and completed an Candidates should have an M.D. and completed an accredited urology residency program. Candidates should have experience in urological operative pro-cedures and be Board-certified or -eligible for certifi-cation by the American Board of Urology. Send curriculum vitae to: Jack Lapides, M.D., Head, Section of Urology, Department of Surgery, Box 03, 1405 East Ann Street, Ann Arbor, Mich. 48109. A nondiscriminatory, Affirmative Action Employer. Code 204 Code 204.

MOLECULAR BIOLOGIST will be assigned to the U.S. Department of Agriculture (USDA), Animal Disease Center at Plum Island, N.Y.

Will characterize RNA animal virus (picornavirus and reovirus) genomes at the molecular level, con-tributing to a multidisciplined effort (molecular biology, protein chemistry, immunochemistry) studying ogy, protein chemistry, immunochemistry) studying virus genome structure/function and biochemical antigenic characterizations of their polypeptides. Will clone related strains and characterize these by recombinant DNA procedures. Requirements: Ph.D. in molecular biology or biochemistry with experience in recombinant DNA and DNA sequenc-ing methods. Research experience with mammalian viruses is desirable. The term of employment: I year with renewal for a second year possible. Contact:

Dr. J. J. Callis Plum Island Animal Disease Center P.O. Box 848

Greenport, Long Island, N.Y. 11944 An Affirmative Action/Equal Opportunity Employer

UNIVERSITY OF LEICESTER POSTS IN MOLECULAR BIOLOGY/MOLECULAR GENETICS

BIOLOGY/MOLECULAR GENETICS Exciting new developments in molecular biology are taking place in a major expansion programme in the School of Biological Sciences. Particulars of several teaching and research posts associated with these developments will be announced shortly. Indi-viduals with relevant research interests and postdoc-toral experience, preferably in gene structure and expression in yeast, higher plants, or mammals, are invited to write now for further information to: Registrar (Biological Sciences), University of Leices-ter, Leicester LE1 7RH, United Kingdom, giving brief career details. The posts will be funded for up to 5 years with the possibility in some cases of a further long-term extension. long-term extension.

POSTDOCTORAL POSITION

A postdoctoral position is available immediately for a recent Ph.D. in chemistry or chemical engineering. Experience in coal chemistry, physics, or in physical chemistry is desirable. The candidate should possess knowledge of recent developments in coal science, macromolecular theories of crosslinked networks and/or transport phenomena in materials. Work in-volves structural characterization of coals using macromolecular (polymer) theories. Send curricu-lum vitae and names of three references to: **Professor** Nicholas A. Peppas, School of Chemical Engineering, Purdue University, West Lafayette, Indiana 47907 An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

PHYSICAL OCEANOGRAPHER. Continental Shelf Associates, Inc., seeks a Ph.D. in physical oceanography to design and conduct studies, manage data, and prepare proposals and reports related to applied marine science and technology. Ability to collabo-rate with team members essential. Forward curriculum vitae, statement of professional goals, and three references as soon as possible to: Dr. Richard M. Hammer, Continental Shelf Associates, Inc., P.O. Box 3609, Tequesta, Florida 33458.

PHYSIOLOGY TEACHER

The Department of Physiology of the University of Texas Health Science Center at San Antonio is seeking an experienced physiologist to teach broadly in different areas of physiology. This state-funded teaching position is on a nontenure-track with rank teaching position is on a nontenure-track with rank and salary open to negotiation. Responsibilities will include teaching cell and systems physiology (in-cluding neurophysiology) to allied health, nursing, dental, and other students. Deadline for application is 1 November 1982. Candidates should send curric-ulum vitae and a maximum of three letters of recom-mendation to: Dr. Roger McCarter, Department of Physiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284. Texas 78284.

Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL ASSOCIATE. Chemist or biochemist with knowledge of the design and synthesis of novel halogenated compounds of potential che-motherapeutic value. Basic skill in laboratory syn-thesis, instrumentation (such as chromatography, UV, IR, mass spectra, and hetero nuclear NMR) are mandatory. Ability to interpret data obtained from instrumentation is assumed. Considerable knowl-edge in the biochemical techniques of enzyme mechanism analysis such as, enzyme assays, kinetics, anism analysis such as, enzyme assays, kinetics, isotope effect; pH and metal effects; synthesis of radiolabeled compounds. Ph.D. is required. Salary: \$20,000 per annum. Forty hours per week. Send résumés or curriculum vitae to: Job Services Techni-cal Unit, Connecticut Department of Labor, Hart-ford, Conn. 06115, Job Order Number 216223. An Equal Opportunity Employer.

POSTDOCTORAL FELLOW

Advanced postdoctoral position in Division of Nutrition and Metabolism. Ph.D. sought with documented potential in biomedical re-search to join established research team search to join established research team studying lipoprotein metabolism in primates. Associated with Brown University, Program in Medicine. Salary commensurate with experience. An Equal Opportunity Employ-er. Please forward résumé or any inquiries to: Employment Coordinator, The Miriam Hospital, 164 Summit Avenue, Providence, R.I. 02906.

POSTDOCTORAL FELLOW/RESEARCH ASSO-POSTDOCTORAL FELLOW/RESEARCH ASSO-CIATE. Ph.D. in biochemistry, physiology, cell biology, and so forth. To study mechanisms of stimulus-secretion coupling in pancreatic acinar cells and models of acute pancreatitis. Laboratory in major Harvard teaching hospital. Begin mid-Sep-tember. Send curriculum vitae and names of three references to: Dr. Michael Steer, Department of Surgery, Beth Israel Hospital, 330 Brookline Avenue, Boston, Mass. 02215.

POSTDOCTORAL POSITION available immedi-ately to use recombinant DNA technology to study gene regulation in Dictyostelium. Experience with recombinant DNA or protein purification preferred. Send curriculum vitae and three letters of recom-mendation to: Dr. S. Chung, Department of Biologi-cal Chemistry, University of Illinois Medical Center, 1853 West Polk Street, Chicago, Ill. 60612.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available immediately for research on DNA replication by retroviruses and site-specific mutagenesis by reverse transcripand site-specific mutagenesis by reverse transcrip-tase. Background in genetics, biochemistry, and molecular biology desirable. Send curriculum vitae and three letters of reference to: Dr. Jim Champoux Department of Microbiology and Immunology SC-42 UNIVERSITY OF WASHINGTON Seattle, Washington 98195 The University of Washington is an Equal Opportu-nity Employer

nity Employer.

POSTDOCTORAL POSITIONS IN INSECT BIO-CHEMISTRY. Study metabolism of chitin on tyro-sine and synthesize compounds that inhibit cuticle formation and degradation. Send résumé and names of three references to: Dr. Karl J. Kramer, Department of Biochemistry, Kansas State University, Man-hattan, Kans. 66506. Kansas State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available for recent Ph.D. in biochemistry/cell biology. Research is on molecular mechanism of alteration in cytoskeletal structure-function of fibroblast caused by viral trans-formation. Experience in cell culture essential; background in protein biochemistry, immunology, and/or EM desirable. Send curriculum vitae to: **Dr**. Shin Lin, Department of Biophysics, Johns Hopkins University, 3400 North Charles Street, Baltimore, Md. 21218. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN MEMBRANE BIOCHEMISTRY: Research on molecular aspects of complement-mediated membrane damage. Available 1 September 1982. Send curriculum vitae and names of three references to: **Personnel/Manpower**, Dr. Valerie Hu, Department of Biochemistry, Uni-formed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Maryland 20814.

POSTDOCTORAL POSITION available September 1982 in laboratory studying effects of cancer thera-peutic agents on various immune defense systems, their development and regulation. Background in cellular immunology and/or pharmacology is essen-tial. Techniques used include tissue culture, in vivo and in vitro primary sensitization, radiolabeled tar-get cell assays, functional and physical cell separa-tion, and utilization of monoclonal antibodies. Please send statement of research interest, curricu-Jum vitae, and names and addresses of three refer-ences to: Dr. E. Mihich, Director of Grace Cancer Drug Center and Department of Experimental Thera-peutics, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, New York 14263. An Equal Opportu-nity Employer, M/F.

POSITIONS OPEN

Several POSTDOCTORAL POSITIONS available with Interdepartmental Immunology Group at the University of Massachusetts Medical School, Worcester. Areas of research include immunoregu-lation, molecular immunology, viral and tumor im-munology, and immunology of diabetes. Send ré-sumés to: **Dr. R. M. Welsh, Chairman of the Interde**partmental Immunology Program, Department of Pa-thology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, Mass. 01605. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available for studies at the molecular level concerning: (i) initiation, direction, and timing of DNA replication in cultured mammalian cells; (ii) relationship between transcrip-tional activity and DNA replication; and (iii) origins of replication in mammalian DNA. Supported by an NIH training grant. Send curriculum vitae and have two letters of reference sent to: Dr. Carl Schild-kraut, Department of Cell Biology, Albert Einstein College of Medicine, Bronx, New York 10461.

POSTDOCTORAL POSITION available Autumn 1982 involving research in mammalian cell-virus systems on DNA replication and repair and the mechanism of mutagenesis by chemical carcinogens. Salary: \$17,500 plus benefits. Please send curriculum vitae to:

a vitae to: Barbara H. Rosenberg, Ph.D. Sloan-Kettering Institute, Walker Laboratory 145 Boston Post Road Rye, New York 10580

POSTDOCTORAL RESEARCH ASSOCIATE. Position available fall 1982 to study radiolabeled mono-clonal antibodies for in vivo tumor imaging. Applicants should have a strong background in biochemis-try or immunochemistry; experience in radiolabeling and handling radioactivity also desirable. Send cur-riculum vitae and three letters of recommendation to: Dr. Karen D. McElvany, Mallinckrodt Institute of Radiology, Washington University School of Medi-cine, 510 South Kingshighway, St. Louis, Mo. 63110. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS Veterans Administration Medical Center (VAMC) is inviting applications from postdoctoral level scientists to assist with research programs in the areas of: (i) molecular mechanisms of chemical mutagenesis (1) molecular mechanisms of chemical mutagenesis and carcinogenesis and (ii) metabolism of chemical toxicants. Applicants must be U.S. citizens and have training in chemistry, pharmacology, or bio-chemistry. Salary range: approximately \$23,566. In-terested persons should send curriculum vitae and three names for reference to: Carl B. Ferrell, Admin-terative Officer for Research VAMC 300 Fast Roo. istrative Officer for Research, VAMC, 300 East Roo-sevelt Road, Little Rock, Ark. 72206.

STATE UNIVERSITY OF NEW YORK AT BUFFALO Department of Biological Sciences Full Professor and Chairman

We are seeking a distinguished scientist with a we are seeking a distinguished scientist with a substantial ongoing research program who can pro-vide effective leadership for a well-established teaching/research department in the biological sci-ences. Candidates from all biological subdisciplines are encouraged to apply. However, preference will be given to those candidates who demonstrate a breadth of understanding across the biological sciences.

The departmental program consists of 27 faculty, 61 graduate students, and a large undergraduate program, all housed in a new well-equipped facility. The majority of current graduate students are en-rolled in cell and molecular biology, comparative physiology, or ecology.

Earliest appointment date is January 1983 but the actual starting date can be negotiated. Application closing date is 1 December 1982.

Interested applicants should send a complete résumé, including a detailed description of current re-search activities, to: Dr. Chester Langway, Chair-man, Biological Sciences Search Committee, c/o Office of the Dean-FNSM, 732 Clemens Hall, State Universi-ty of New York at Buffalo, Buffalo, New York 14260.

State University of New York at Buffalo is an Equal Opportunity/Affirmative Action Employer.

CSIRO AAAS Memberships and Subscriptions RESEARCH SCIENTIS1 Whenever you write us about your member-A\$21,810-A\$32,070 per annum ship or subscription, please attach a Sci-ence address label to ensure prompt ser-DIVISION OF PLANT INDUSTRY CANBERRA, ACT, AUSTRALIA vice CSIRO has a broad charter for research into primary and secondary industry areas. The organization has approximately 7500 employees, 2700 of whom are research and professional scientists, located in divisions and sections throughout Australia. • Mail to: Membership and Subscription Rec-ords, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005. ATTACH LABEL Change of Address: Please provide 6 weeks' notice. Paste an address label from a recent FIELD: Plant nutrition. HERE **GENERAL**: The division carries out research on problems fundamental to agricultural production. Members of its Plant Nutrition and Soil Fertility Section are engaged in research concerned with the diagnosis and correction of nutrient deficien-cies, toxicities, and imbalances in plants significant to Australian agriculture. The cultivation of oilseed crops is a relatively new development with potential for considerable expansion, based on the use of the oil as diesel fuel and the meal as a protein supplement for extensive animal production systems issue in the space provided. Print new address below. □ Query: If you have a question, place your address label here and attach this form to vour letter. • To join or subscribe: Mail this form with your payment, mark the appropriate boxes, and print your name and address in the space below. (For renewals, attach label.) supplement for extensive animal production systems **DUTIES:** Undertake investigations on nutritional problems associated with the production of sunflower and oilseed rape crops. The broad objective of the program is to ascertain the nutrient requirements of these crops and to develop techniques for meeting them over a range of soil and climatic conditions. □ Membership rates (individual only) □ \$48 USA □ \$72 Canada □ \$ □ \$103 air-surface delivery via Holland 🗆 \$75 Foreign QUALIFICATIONS: Applicants should possess a Ph.D. degree with a background in plant physiology and a sound knowledge of soils. Previous research experience in the field of plant nutrition Subscriber rates □\$85 USA □\$109 Canada □\$112 Foreign □\$140 air-surface delivery via Holland would be an advantage **TENURE**: Indefinite. However, applications will be considered from scientists interested in a term appointment. Superannuation Payment enclosed □ Bill me later **APPLICATIONS:** Stating full personal and professional details, names and addresses of at least two referees, and quoting reference number A4711, should reach: Name Please print The Chief Division of Plant Industry P.O. Box 1600 Canberra City, ACT 2602, Australia Address City MX08 State Zip , 565

6 AUGUST 1982

benefits available

by 3 September 1982

POSTDOCTORAL TRAINING IN CLINICAL CHEMISTRY. Positions available 1 July 1983 for basic scientists or physicians interested in careers as laboratory directors in academic laboratory medicine. The 2-year program provides practical experience in clinical chemistry laboratories and extends relevant basic fellowships. Deadline: 1 November 1982. Write: Dr. Margaret Kenny, Department of Laboratory Medicine, SB-10, University of Washington, Seattle, Wash. 98195. An Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL TRAINING IN ENVIRONMEN-TAL NEUROBIOLOGY. Several postdoctoral positions are available to study the effects of toxic environmental chemicals on the nervous system and behavior. The program involves a multidisciplinary faculty from the Departments of Environmental Health Sciences, Neurosciences, Neurology, Psychology, and Epidemiology. Stipends determined by NIH Training Grant. Qualified individuals should apply to: Dr. Z. Annau, Division of Toxicology, Department of Environmental Health Sciences, The Johns Hopkins University, 615 North Wolfe Street, Baltimore, Md. 21205.

UNESCO is recruiting a **PROGRAMME SPECIAL-IST** who shall assist in the planning and execution of the part of the UNESCO programme concerning the scientific study and mitigation of natural hazards, such as earthquakes, volcanic eruptions, landslides, and so forth, including their geological engineering aspects.

Qualifications and experience required:

- University degree in geophysics, engineering geol-
- ogy, or geology, • Experience in field and/or laboratory research related to earthquakes, volcanic eruptions, geological engineering aimed at hazard control,
- Experience in international scientific co-operation, and
- Excellent knowledge of English and French; knowledge of other official languages of the organization (which also include Arabic, Chinese, Russian, and Spanish) is an asset.

Annual emolument exempt from taxation equivalent to U.S.\$35,135 (U.S.\$32,822 if without dependents). Candidates should send detailed curriculum vitae with photocopy of diplomas and photograph to: Chief PER/RFS, Bureau of Personnel, UNESCO, 7 Place de Fontenoy, 75007 Paris, France, before 17 September 1982. American nationals should channel applications through: Director, UN Personnel Policy and Recruitment Staff, Bureau of International Organization Affairs (10 EX), Department of State, Washington, D.C. 20520.

RESEARCH ASSISTANT II—Inmediate opening in the genetics laboratory for individuals with M.Sc. degree in biochemistry, chemistry, or genetics. Responsibilities include original investigations on polyamine metabolism and biology in mammalian systems. Capabilities of carrying on original investigations in methodology development. Operate routine laboratory equipment and maintenance of equipment. Operation of automated amino acid analyzer, high-performance liquid chromatography, and electrophoresis. Send résumé and three references to: Owen M. Rennert, M.D., Chairman, Department of Pediatrics, University of Oklahoma, P.O. Box 26901, Oklahoma City, Oklahoma 73190.

RESEARCH ASSOCIATE

The Department of Physics at the Massachusetts Institute of Technology (MIT) seeks a research associate to conduct experimental studies of thermotropic liquid crystals. Candidates should have a Ph.D. in physics and experience in studying liquid crystal phases, using high resolution x-ray scattering, optical microscopy, and precision calorimetric methods. Experience in synthesis and purification of liquid crystal materials also required. Salary range: \$19,000 to \$20,000.

Please submit two copies of résumé to:

MIT Personnel Office E19-239 77 Massachusetts Avenue Cambridge, Mass. 02139

(Attention: Job Number R800) MIT is an Equal Opportunity/Affirmative Action Employer.



POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR

The University of Arizona, Department of Biochemistry, is currently seeking a Ph.D. biochemist to fill a research-oriented faculty position (nontenuretrack). The position involves studies of receptor proteins for vitamins D and A and will be associated with Professor Mark R. Haussler's laboratory. Candidates must have at least 2 years of postdoctoral experience in the area of receptor proteins. Knowledge of immunochemistry is also essential. Send curriculum vitae and the names of three references to: **Professor Mark R. Haussler, Department of Biochemistry, University of Arizona Health Sciences Center, Tucson, Ariz. 85724**. Deadline for applications is 20 August 1982.

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

RESEARCH ASSOCIATE to study effects of hormones on the growth and remodeling of bone using organ cultures and primary cultures of bone cells. Qualifications: Ph.D. in an appropriate area of cell biology or molecular endocrinology and up to 3 years of postdoctoral experience. Salary range: 818,000 to \$23,000; available immediately. Send curriculum vitae and names of three references to: Dr. James Hamilton, Calcium Research Laboratory, VA Medical Center, 4801 Linwood Boulevard, Kansas City, Mo. 64129. Equal Opportunity Employer.

RESEARCH ASSOCIATE. Ph.D. or M.D. with minimum of 2 years of postdoctoral experience in neuropharmacology. Candidates should have behavioral and neurochemical expertise and experience with drug metabolism and analysis, especially with antipsychotic drugs. Knowledge of computers, statistics and experience managing technicians, trainees is necessary. Available fall 1982. Contact: Judy Perry, Business Manager, Biological Sciences Research Center, University of North Carolina, Chapel Hill, N.C. 27514.

RESEARCH AND GRADUATE TEACHING ASSO-CIATE (ADJUNCT INSTRUCTOR). Expertise in synthesis of vitamin A analogs, physical characterization, biological testing, metabolism. Good research record, proven teaching ability; \$17,280 per year; 31 August 1982 deadline. Contact: Dr. J. A. Olson, Department of Biochemistry and Biophysics, Jowa State University, Ames, Iowa 50011. Affirmative Action/Equal Opportunity Employer.

RESEARCH POSITION IN HUMAN CYTOGENETICS

B.S. or M.S. with experience in cytogenetics is needed to work with cell synchronization and Gbanded prophases in human neoplasia or birth defects. Salary close to \$18,000. Please send curriculum vitae and references to: Dr. Jorge J. Yunis, Professor, Department of Laboratory Medicine and Pathology, Box 198 Mayo Memorial Building, University of Minnesota, Minneapolis, Minnesota 55455. An Equal Opportunity Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP

Battelle Columbus Laboratories, a world leader in contract research, has an immediate need for a recent Ph.D. in bioengineering, chemical engineering, chemistry, or biological sciences to serve an 18month postdoctoral fellowship. The person we select will provide technical support on a NIH-NHLBI Institute program and will have experience in one or more of the following: FT-IR of biological systems, hematology/biocompatibility studies, physical biochemistry/radiolabeling of protein, and hemodynamies/vascular physiology.

Battelle offers a competitive salary and benefits program, a multidisciplined approach to research and state-of-the-art equipment and facilities. Interested persons should forward a résumé in confidence to: Richard C. Needles, Employment Department I-2.



FELLOWSHIPS

TERRY FOX TRAINING CENTRE FELLOWSHIPS

New positions for outstanding M.D.'s or Ph.D.'s with an interest in 1 or, preferably, 2 years of involvement in cancer research at The Ontario Cancer Institute in Toronto. Areas of research cover a broad spectrum, including clinical investigation, epidemiology and biostatistics, molecular and cellular biology, biophysics and medical physics. All awards are competitive with other prestige fellowships in Canada. Send curriculum vitae, brief statement of research background and interests, plus names, addresses, and telephone numbers of three references to: Professor J. E. Till, Coordinator, Terry Fox Postgraduate Program, Ontario Cancer Institute/Princess Margaret Hospital, 500 Sherbourne Street, Toronto, Ontario, Canada M4X 1K9.

An immediate opening for a **POSTDOCTORAL RE-SEARCH FELLOWSHIP** is available in the Department of Pathology, University of Texas Health Science Center, San Antonio. Training will be given in basic research relating to cell biology with special emphasis on factors involved in the regulation of endocytosis, including cell surface charge, mitogens, cytoskeletal components, and receptor function. Degree required: Ph.D., M.D., or D.V.M. Applicants must be either U.S. citizens or permanent residents. *We are an Equal Opportunity/Affirmative Action Employer*. Send résumé and names of three referees to: **Colin J. Schwartz, M.D., F.R.A.C.P.**

Colin J. Schwartz, M.D., F.R.A.C.P. Director, NHLBI Training Grant Professor, Department of Pathology The University of Texas Health Science Center, San Antonio

San Antonio 7703 Floyd Curl Drive San Antonio, Texas 78284 Telephone: 512-691-6121

A POSTDOCTORAL RESEARCH FELLOWSHIP is available in the Department of Pathology, University of Toronto, to work in the development and application of immunological methods for the diagnosis and characterization of human neoplasms. It is expected that the production and use of monoclonal antibodies will form a major part of this project. Candidates should have a Ph.D., M.D., or equivalent degree and should have experience in tissue culture methods and immunology or immunochemistry. This position is available immediately and is renewable annually to a maximum of 3 years. Salary will be dependent upon qualifications and experience. Please send curriculum vitae and the names of three references to: **Dr. E. Farber**

Dr. E. Farber Department of Pathology Banting Institute 100 College Street Toronto, Ontario, Canada M5G 1L5

TRAINEESHIPS

POSTDOCTORAL TRAINEESHIPS IN NUTRI-TIONAL BIOCHEMISTRY—DENTAL HEALTH. Postdoctoral traineeships are available in a NIDRfunded interdisciplinary program of research in nutritional biochemistry with an emphasis on problems related to oral biology and dental health. Research interests of the training staff include calcified tissue metabolism, trace element metabolism, fat-soluble vitamin metabolism, amino acid metabolism, salivary gland metabolism, and blood coagulation. Trainee stipends range from \$13,380 to \$14,736 per year. The program is open to U.S. citizens and noncitizen nationals who are holders of Ph.D. or dental degrees, and applicants with D.D.S. or Ph.D.-D.D.S. degrees are particularly invited to apply. For information and application forms, contact: J. W. Suttie, Department of Biochemistry, University of Wisconsin-Madison, Madison, Wis. 53706. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

MARKETPLACE

CAREER CHANGE

Fully accredited Mexican medical school offers unique opportunity to the holder of a doctorate (Ph.D.) in the sciences to earn a medical doctor (M.D.) degree in 2 calendar years. There are also 4year opportunities in Mexico and the Philippines to earn an M.D. or D.V.M. degree. **Proven Medical and** Veterinary Student Placement Service, 100 LaSale Street, New York, N.Y. 10027, telephone: 212-864-3933.



The International Atomic Energy Agency seeks Safeguards Inspectors

to participate in the execution of the Agency's safeguards programme. Required university degree in nuclear chemistry, nuclear chemical engineering or nuclear electronics/instrumentation. Experience in the processing of nuclear materials, preferable in plant operation or in the instrumental measurements of quantities of nuclear material advantageous. Fixed-term contract for two years with the possibility of further extension if service satisfactory. Tax-free emoluments depending on qualifications and experience, between US\$ 32,500.00 and US\$ 35,000.00 per annum. Send C.V., indicating your nationality under Vacancy Notice No. 46/82 to Division of Personnel, International Atomic Eneray Agency, P.O. Box 100, A-1400 Vienna, Austria.



With the impending retirement of the present Director, the National Botanic Gardens of South Africa invites applications for this prestigious post.

As Director of the National Botanic Gardens of South Africa and responsible to the Board of Trustees, you will be charged with guiding specialist subordinates in the fields of botanical science, horticulture, education and administration. Prime considerations are, therefore, that you have outstanding academic capabilities allied with good managerial and communication skills. Fluency in English is a prerequisite — a working understanding of Afrikaans after one year would be required.

You will also, ex officio, be the Harold Pearson Professor of Botany at the University of Cape Town where you will have full professorial status and be a member of the Senate.

Remuneration is presently R30 255 p.a. (RI equals approx. \$0.92) and is augmented by an annual service bonus of R2 344, an official vehicle, medical aid and pension benefits and relocation assistance. The official residence is set in the particularly beautiful surroundings of the Kirstenbosch Botanic Garden and is available at a nominal rental.

Kindly forward a full curriculum vitae and the names of at least two referees to: The Chairman of the Board of Trustees, National Botanic Gardens of South Africa, Private Bag X7, Claremont 7735, Republic of South Africa. Applications, clearly marked "Confidential — Application" should reach us on or before 30 September 1982. Further information will be furnished by Mr A.W. Jordan at the above address or at 021 (area code) 77-1166.



PERSONA 11019/05

Dermatological Research

Pfizer Central Research seeks an individual with a PhD in Biological Sciences and at least two years research experience in Investigative Dermatology. We are interested in persons who have experience in developing new tools for studying the structure/function of human stratum corneum and viable epidermis, especially with respect to the interactions of these structures with topically-applied molecules. Candidates with recent, relevant industrial experience are being sought.

This position provides excellent opportunities for professional recognition and considerable interaction with scientists in other disciplines. In addition we offer career growth, a competitive compensation/benefit package and the opportunity to live in an attractive shoreline environment. Please send resume in confidence to: Dr. J. K. Larson, Pfizer Central Research, Eastern Point Road, Groton, CT. 06340.



An Equal Opportunity Employer

SCIENTIST Q.C. Procedure Validation

Genetech, Inc., a recognized leader in recombinant DNA research and manufacturing, is seeking an individual to join our Quality Control Department.

The successful candidate will be asked to develop, review, modify and validate test procedures for in-process and final products. The individual selected will possess a PhD with 0-3 years post-doctoral experience in Biochemistry or an M.S. with 2-4 years of related research experience.

This position involves independent research and development in a team environment. We offer excellent salaries and benefits in a stimulating and challenging environment. For immediate consideration please send your curriculum vitae and three references to Human Resources, referring to Position # S-74.





The Third Annual International Congress For

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November 1-3, 1982 — Miami, Florida **Omni International Hotel**

> Chaired By William E. Stewart II of the University of Florida School of Medicine

The Third International Congress for INTERFERON RESEARCH, organized by Scherago Associates in cooperation with the Journal of Interferon Research.*

Interferon research has greatly proliferated, and the synthesis of Interferon has added a new dimension to recent developments and clinical trials. This Congress provides the major forum for both current research and clinical work and the new areas of application will be presented.

Program Topics Will Include

- Interferon inducers.
- Induction mechanisms.
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- Genetics of interferon actions.
- Mechanisms of antiviral actions.
- Immuno-modulatory actions of interferons.
- In vivo studies on pharmacology of interferons and their antitumor and antiviral actions in animals and in man.
- Results of clinical studies.

*Published by Mary Ann Liebert Inc., Publishers, New York, New York.

Regular Registration: \$350 Student Registration: \$175

Attendance will be limited to approximately 800.

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