

understood. They go on to point out that the family contains some of the most "benign" plants, such as potatoes, tomatoes, and peppers, as well as some of the most "sinister," such as mandrake, henbane, and tobacco. The family thus is clearly of more than ordinary interest. While this volume makes a substantial contribution toward an overview of the family, it is far from being as comprehensive as its title suggests and it is uneven in breadth and level of coverage.

The first section of the volume considers the taxonomy and floristics of the Solanaceae. It presents a synoptic classification of the family that recognizes three subfamilies, whereas in the chapter concerned with the South American members of the family that immediately follows only two subfamilies are recognized. These chapters are followed by accounts of Solanaceae that occur in India, Nigeria, and Australia, though it is not clear why these regions are singled out over others. The account of New World ethnobotany is limited to solanaceous hallucinogens; that of the Old World omits uses of the family as food. Seven chapters are concerned with alkaloids and four with various other classes of chemical compounds. Most of these deal with specific chemical compounds or with individual genera or species; again, an overview of the family is lacking. Two sections are concerned with anatomy and morphology, though the component chapters are concerned mostly with taxa below the familial level. Twelve of the 19 chapters devoted to "biosystematics" of genera and sections are concerned with *Solanum* alone.

Some papers in this volume present reviews of their topics, but the majority are original research publications which, in many instances, utilize members of the Solanaceae only incidentally as research objects. Many of these papers will be of little interest to biologists who are entranced by the Solanaceae per se. On the other hand, many of the papers concerned with such topics as floral biology, speciation, incompatibility, and numerical taxonomy will be of interest to those with little affection for nightshades and their kin. These latter papers deserve wider attention than they may receive having been published in a volume whose title does not convey the diversity of the papers included in it.

Clearly, one cannot fault editors for not producing a volume that they did not intend to produce. The audience of this publication, however, would have been broadened considerably if each section had included a prefatory review placing the component chapters in perspective

or an extensive introduction providing the bridges between the "eclectic mixture of unrelated facts" that the editors have tried to avoid with questionable success.

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## Binocularity

**Stereoscopic Vision.** Papers from a meeting, London, March 1978. The Royal Society, London, 1979. Pp. 377-518, illus. Paper, £6.10. Proceedings of the Royal Society of London, vol. 204, No. 1157.

The two eyes have slightly different views of the world. From a comparison of those views, the visual nervous system extracts information about the three-dimensional location of objects. The Royal Society in 1838 published Wheatstone's first formal demonstration of this visual capacity, and it is fitting that 141 years later it should give us a fascinating, if incomplete, progress report, in the form of ten papers from a meeting.

The topics range widely over the physiology, psychology, and development of binocular visual function. The papers vary from theoretical syntheses to summary reviews to research reports. They deal with experiments and data from cats, monkeys, people, sheep, and owls. The methodologies are those of electrophysiology, psychophysics, and neurology. It is not surprising that no great impression of unity emerges.

Nonetheless, there is much of interest here. Perhaps the most impressive recent contribution to our understanding of binocular vision has been the discovery and analysis, in the visual areas of the cerebral cortex, of single nerve cells that are sensitive to variations in retinal disparity, the difference between the positions of features in the two retinal images of a three-dimensional scene. The properties and development of these neurons are the concern of many of the papers. B. Fischer and G. F. Poggio provide a review of their elegant studies of the binocular properties of neurons in the cortex of awake behaving monkeys, and S. M. Zeki and D. Regan and his colleagues present some of the accumulating evidence that the brain contains specialized cells used for the analysis not simply of depth but of motion in depth. Two of the pioneers in this physiological arena, P. O. Bishop and C. Blakemore, give more theoretical reviews of the neuronal

connectivity and developmental plasticity of binocular interaction. Bishop proposes subtle local disorder in the otherwise highly organized structure of connections in the cortex as the basis for neural depth processing, and Blakemore considers the likely role of the early visual environment in establishing the precise parameters of that disorder. Another pioneer, J. D. Pettigrew, in the outstanding paper in the book, supplies a detailed description of binocular processing in the brain of the owl. In this species there exist neural mechanisms that are apparently identical to those seen in mammals, yet the two evolutionary lines diverged long before these mechanisms evolved.

The rest of the collection seems a little spotty, probably for lack of a contribution by Bela Julesz (the major figure in recent advances in the psychology of stereopsis) and for lack of significant representation of modern theoretical treatments. And the various contributions certainly lack unity of style. But after all this is not the final story, only a progress report. As such, it contains much that merits the close attention of anyone with two eyes and an interest in why.

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## Books Received

**Advanced Quantum Theory and Its Applications through Feynman Diagrams.** Michael D. Scadron. Springer-Verlag, New York, 1979. xiv, 386 pp. \$39.80. Texts and Monographs in Physics.

**Advances in Microbial Physiology.** Vol. 18. A. H. Rose and J. Gareth Morris, Eds. Academic Press, New York, 1979. x, 312 pp., illus. \$38.50.

**Annual Review of Materials Science.** Vol. 9. Robert A. Huggins, Richard H. Bube, and David A. Vermilyea, Eds. Annual Reviews, Palo Alto, Calif., 1979. x, 500 pp., illus. \$17.

**Annual Review of Sociology.** Vol. 5. Alex Inkeles, James Coleman, and Ralph H. Turner, Eds. Annual Reviews, Palo Alto, Calif., 1979. x, 416 pp. \$17.

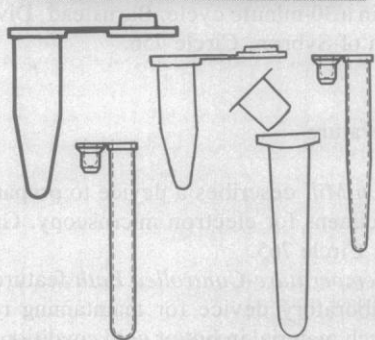
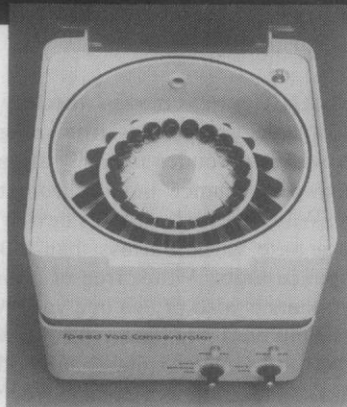
**Arctic and Tropical Arboviruses.** Proceedings of a symposium, Mont Gabriel, Canada, May 1977. Edouard Kurstak, Ed. Academic Press, New York, 1979. xiv, 328 pp., illus. \$19.50.

**Assessment of Technical Decision.** Case Studies. Ernest Braun. David Collingridge, and Kate Hinton. Butterworths, Boston, 1979. 60 pp. Paper, \$2.95. Science in a Social Context.

**Astroblemes.** Crytoexplosion Structures. G. J. H. McCall, Ed. Dowden, Hutchinson and Ross, Stroudsburg, Pa., 1979 (distributor, Academic Press, New York). xviii, 440 pp., illus. \$39.50. Benchmark Papers in Geology, vol. 50.

- Astronomy and Astrophysics Abstracts.** Vol. 22. Literature 1978, part 2. S. Böhme and seven others, Eds. Published for Astronomisches Rechen-Institut by Springer-Verlag, New York, 1979. x, 852 pp. \$41.80.
- Astronomy with Binoculars.** James Muirhead. Crowell, New York, ed. 2, 1979. xvi, 150 pp., illus. + plates. \$8.95.
- At Work in Copper.** Occupational Health and Safety in Copper Smelting. Manuel Gomez, Richard Duffy, and Vincent Trivelli. Frank Stella, Ed. INFORM, New York, 1979. Three volumes. Vol. 1, Industry Performance. xvi, 288 pp., illus. Paper, \$40. Vol. 2, Smelter Performance. vi, 336 pp. Paper, \$20. Vol. 3, Smelter Performance. vi, 484 pp. Paper, \$20. The three-volume set, \$70.
- Atlas and Manual of Plant Pathology.** Ervin H. Barnes. Photographs by Philip G. Coleman. Plenum, New York, ed. 2, 1979. xviii, 326 pp. Spiral bound. \$19.50.
- Atlas of Mercury.** Merton E. Davies, Donald E. Gault, Stephen E. Dwornik, and Robert G. Strom. National Aeronautics and Space Administration, Washington, D.C., 1978 (available from the Superintendent of Documents, Washington, D.C.). iv, 128 pp. \$10. NASA SP-423.
- Atlas of Rectoscopy and Colonoscopy.** Peter Otto and Klaus Ewe. Translated from the German edition by B. Clowdus. Springer-Verlag, New York, 1979. xii, 112 pp. \$53.90.
- An Atlas of the Sea Floor around Japan.** Aspects of Submarine Geomorphology. Akio Mogi. University of Tokyo Press, Tokyo, 1979 (U.S. distributor, ISBS, Forest Grove, Ore.). viii, 96 pp. \$60.
- Atlas of Virginia Precipitation.** Bruce P. Hayden. University Press of Virginia, Charlottesville, 1979. xvi, 142 pp. \$20.
- Atom-Molecule Collision Theory.** A Guide for the Experimentalist. Richard B. Bernstein, Ed. Plenum, New York, 1979. xx, 780 pp., illus. \$57.50. Physics of Atoms and Molecules.
- Atomic Spectra and Radiative Transitions.** Igor I. Sobelman. Translated from the Russian edition (Moscow, 1977). Springer-Verlag, New York, 1979. xii, 308 pp., illus. \$35. Springer Series in Chemical Physics, vol. 1.
- Automata, Languages and Programming.** Papers from a colloquium, Graz, Austria, July 1979. Herman A. Maurer, Ed. Springer-Verlag, New York, 1979. x, 684 pp. Paper, \$32.50. Lecture Notes in Computer Science, vol. 71.
- Biochemistry and Pathology of Basement Membranes.** Role in Diabetes. Papers from a colloquium, Paris, Oct. 1977. A. M. Robert, R. Boniface, and L. Robert, Eds. Karger, Basel, 1979. xvi, 352 pp., illus. \$102.50. Frontiers of Matrix Biology, vol. 7.
- Biological Indicators of Water Quality.** Papers from a symposium, Newcastle, England, Sept. 1978. A. James and Lilian Evison, Eds. Wiley-Interscience, New York, 1979. Various pages, illus. \$37.50.
- Biology of Seaweeds.** Levels of Organization. A. R. O. Chapman. Illustrations by Pat Evans and Terry Collins. University Park Press, Baltimore, 1979. xviii, 134 pp. Paper, \$10.75.
- Biophysical and Biochemical Information Transfer in Recognition.** Proceedings of a colloquium, Varna, Bulgaria, Oct. 1977. Julia G. Vassileva-Popova and Elwood V. Jensen, Eds. Plenum, New York, 1979. xx, 876 pp., illus. \$75.
- Cells of Immunoglobulin Synthesis.** Papers from a symposium, New York, June 1978. Benvenuto Pernis and Henry J. Vogel, Eds. Academic Press, New York, 1979. xxiv, 432 pp., illus. \$42. P & S Biomedical Sciences Symposia Series.
- Chemical Engineering.** Vol. 5, Solutions to the Problems in *Chemical Engineering*, vol. 2. J. R. Backhurst and J. H. Harker. Pergamon, New York, 1979. viii, 256 pp., illus. Cloth, \$25; paper, \$15.
- Child Development.** Grace J. Craig. Prentice-Hall, Englewood Cliffs, N.J., 1979. xvi, 524 pp., illus. \$14.95.
- Childhood Psychopathology.** A Developmental Approach. Irwin J. Knopf. Prentice-Hall, Englewood Cliffs, N.J., 1979. xii, 498 pp., illus. \$15.95.
- Chinese Family and Kinship.** Hugh D. R. Baker. Columbia University Press, New York, 1979. xii, 244 pp., illus. \$17.50.
- The Cholinergic Synapse.** Papers from a symposium, Zinkovy, Czechoslovakia, May 1978. Stanislav Tuček and six others, Eds. Elsevier, New York, 1979. xx, 512 pp., illus. \$92.75. Progress in Brain Research, vol. 49.
- The Chronic Schizophrenias.** Christian Astrup. Universitetsforlaget, Oslo, 1979 (U.S. distributor, Columbia University Press, New York). xiv, 122 pp. Paper, \$14.
- Cigarette Smoking as a Dependence Process.** Papers from a meeting, Washington, D.C., June 1978. Norman A. Krasnegor, Ed. National Institute on Drug Abuse, Rockville, Md., 1979 (available from the Superintendent of Documents, Washington, D.C.). x, 194 pp. Paper, \$4.50. NIDA Research Monograph 23. DHEW Publication No. (ADM) 79-800.
- Climatic Atlas of the Indian Ocean.** Stefan Hastenrath and Peter J. Lamb. University of Wisconsin Press, Madison, 1979. Two volumes. Part 1, Surface Climate and Atmospheric Circulation. xx, 98 pp. Part 2, The Oceanic Heat Budget. xx, 94 pp. Spiral bound, \$70.
- Clinical Methods in Study of Cholesterol Metabolism.** H. S. Sodhi, B. J. Kudchodkar, and D. T. Mason. Karger, Basel, 1979. xii, 168 pp., illus. Paper, \$53.50. Monographs in Atherosclerosis, vol. 9.
- Coalition Formation by Sophisticated Players.** Amnon Rapoport, James P. Kahan, Sandra G. Funk, and Abraham D. Horowitz. Springer-Verlag, New York, 1979. viii, 170 pp. \$9.80. Lecture Notes in Economics and Mathematical Systems, vol. 169.
- The Computational Complexity of Logical Theories.** Jeanne Ferrante and Charles W. Rackoff. Springer-Verlag, New York, 1979. x, 244 pp. Paper, \$14.30. Lecture Notes in Mathematics, vol. 718.
- Computer Power for the Small Business.** Charles J. Sippl and Fred Dahl. Prentice-Hall, Englewood Cliffs, N.J., 1979. xii, 306 pp., illus. Cloth, \$15.95; paper, \$8.95.
- The Concepts of Illness, Disease and Morbus.** F. Kräupl Taylor. Cambridge University Press, New York, 1979. x, 132 pp. \$14.95.
- Current Topics in Microbiology and Immunology.** Vol. 85. W. Arber and 13 others, Eds. Springer-Verlag, New York, 1979. iv, 184 pp., illus. \$48.40.
- The Curves of Life.** Being an Account of Spiral Formations and Their Application to Growth in Nature, to Science and to Art. Theodore Andrea Cook. Dover, New York, 1979. xxxii, 480 pp., illus. Paper, \$5.95. Reprint of the 1914 edition.
- The Cutting and Polishing of Electro-optic Materials.** G. W. Fynn and W. J. A. Powell. Halsted (Wiley), New York, 1979. xvi, 216 pp., illus. \$67.50.
- A Cybernetic Approach to the Assessment of Children.** Toward a More Humane Use of Human Beings. Papers from a AAAS symposium, Denver, Colo., Feb. 1977. Mark N. Ozer, Ed. Westview Press, Boulder, Colo., 1979. xii, 236 pp. \$22.50. A Westview Special Study.
- Data Communications and Teleprocessing Systems.** Trevor Housley. Prentice-Hall, Englewood Cliffs, N.J., 1979. x, 262 pp., illus. \$21.95.
- Data Structures and Operating Systems.** Teodor Rus. Translated from the Romanian edition (Bucharest, 1974). Editura Academiei, Bucharest, and Wiley-Interscience, New York, 1979. xii, 364 pp., illus. \$31.25. Wiley Series in Computing.
- DC Power Supplies.** Application and Theory. Robert J. Traister. Reston (Prentice-Hall), Reston, Va., 1979. xvi, 234 pp., illus. \$16.95.
- Deaf Children.** Developmental Perspectives. Lynn S. Liben, Ed. Academic Press, New York, 1978. xiv, 246 pp., illus. \$17.50. Developmental Psychology Series.
- Electron Microscopy and Cytochemistry of Plant Cells.** J. L. Hall, Ed. Elsevier/North-Holland, New York, 1978. xii, 444 pp., illus. \$46.25.
- Electron Spectroscopy.** Theory, Techniques and Applications. Vol. 3. C. R. Brundle and A. D. Baker, Eds. Academic Press, New York, 1978. x, 362 pp., illus. \$44.50.
- Electronic Transmission Technology.** Lines, Waves, and Antennas. William Sennema. Prentice-Hall, Englewood Cliffs, N.J., 1979. viii, 264 pp., illus. \$18.95.
- The Encyclopedia of Prehistoric Life.** Rodney Steel and Anthony P. Harvey, Eds. McGraw-Hill, New York, 1979. vi, 218 pp., illus. + plates. \$24.95.
- Excavations at La Pampa in the North Highlands of Peru.** Report 1 of the Japanese Scientific Expedition to Nuclear America. Kazuo Terada. University of Tokyo Press, Tokyo, 1979 (U.S. distributor, ISBS, Forest Grove, Ore.). xii, 194 pp., illus. + plates. \$79.50.
- Exercise and Sport Sciences Reviews.** Vol. 6. Robert S. Hutton, Ed. Franklin Institute Press, Philadelphia, 1979. x, 314 pp., illus. \$25.
- The Expedition Handbook.** Tony Land, Ed. Butterworths, Boston, 1978. xii, 288 pp., illus. Paper, \$13.95.
- Experimental Hematology Today 1979.** Papers from a meeting. Chicago, 1978. Siegmund J. Baum and G. David Ledney, Eds. Springer-Verlag, New York, 1979. xviii, 268 pp., illus. \$58.80.
- Experimental Magnetism.** Vol. 1. G. M. Kalvius and Robert S. Tebble, Eds. Wiley-Interscience, New York, 1979. xvi, 346 pp., illus. \$40.
- Explorers of Humankind.** Thomas Hanna, Ed. Harper and Row, New York, 1979. viii, 148 pp. \$6.95.
- Forces of Life.** The Botanic Man. David Bellamy. Crown, New York, 1979. 208 pp., illus. \$15.95.
- A Forecasting and Policy Simulation Model of the Health Care Sector.** The HRRC Prototype Microeconomic Model. Donald E. Yett, Leonard Drabek, Michael D. Intriligator, and Larry J. Kimbell. Lexington (Heath), Lexington, Mass., 1979. xiv, 206 pp. \$19.95. Human Resources Research Center Monograph Series, 2.
- Forest Resource Management.** Decision-Making Principles and Cases. William A. Duerr, Dennis E. Teeguarden, Neils B. Christiansen, and Sam Guttentberg, Eds. Saunders, Philadelphia, 1979. xvi, 612 pp., illus. \$22.50.
- Graph Theory.** An Introductory Course, Béla Bollobás. Springer-Verlag, New York, (Continued on page 208)

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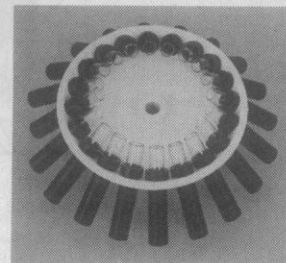
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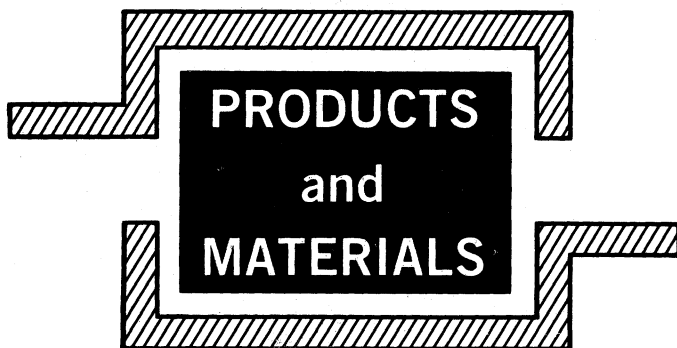
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#### Clinical Microscope

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and techniques of observation. The Laborlux 11 may be easily adapted to photomicrography as well. E. Leitz. Circle 755.

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#### Literature

*Ion Mill* describes a device to prepare specimens for electron microscopy. Gatan. Circle 765.

*Temperature-Controlled Bath* features a laboratory device for maintaining research material in hot or cold conditions. Cambridge Thermionic. Circle 766.

*Instrument Publications and Educational Aids* is a catalog. Instrument Society of America. Circle 767.

*Biochemicals* lists immunoglobulins and substrates. Boehringer Mannheim Biochemicals. Circle 768.

*Porometer* is devoted to the LI-1600, steady-state device for plant physiology. Li-Cor. Circle 769.

*Glass* catalogs laboratory ware including micro weighing funnels, Luer valves, filtration apparatus, HPLC columns and more. Radnoti Glass Technology. Circle 757.

*Metering Pumps* describes 30 different positive displacement pumps for a variety of laboratory applications. New Brunswick Scientific. Circle 758.

*Chromatography* lists more than 1500 products for HPLC, TLC, GC and other separatory techniques. Regis Chemical. Circle 759.

*Glass and Quartz Tubing* describes precision-bored materials for analytic use. Some forms offer inside diameters precise to within 0.00005 inch. Wilmad Glass. Circle 760.

*Plasticware* is devoted to hundreds of items including finished products and raw materials for laboratory and teaching uses. Dynalab. Circle 761.

*Isotope Analysis* is a catalog of mass spectrometers and instrumentation for research. VG-Isotopes. Circle 763.

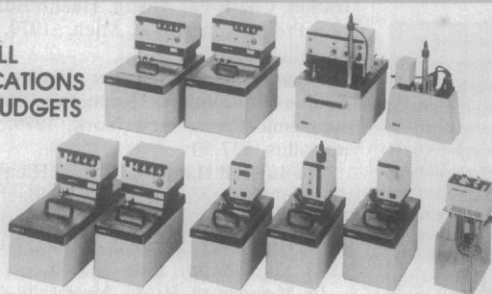


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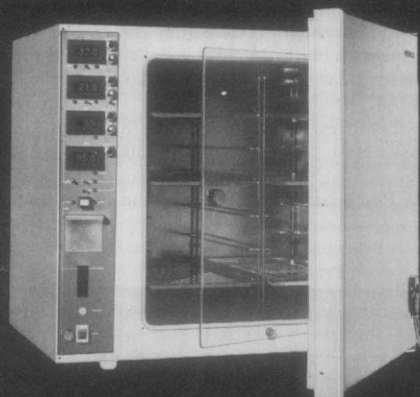
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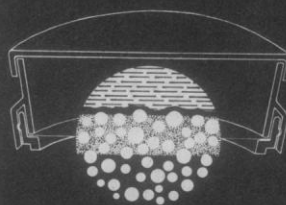
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## BOOKS RECEIVED

(Continued from page 172)

1979. x, 182 pp., illus. \$16.80. Graduate Texts in Mathematics, 63.

**Handbook of Nonprescription Drugs.** American Pharmaceutical Association, Washington, D.C., ed. 6, 1979. xviii, 488 pp., illus. \$20.

**Handbook of Separation Techniques for Chemical Engineers.** Philip A. Schweitzer, Ed. McGraw-Hill, New York, 1979. Various-ly paged, illus. \$42.50.

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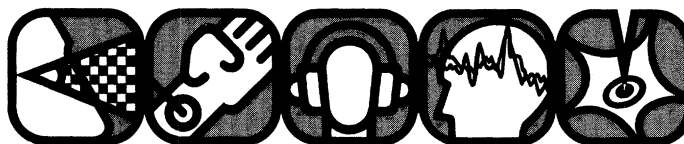
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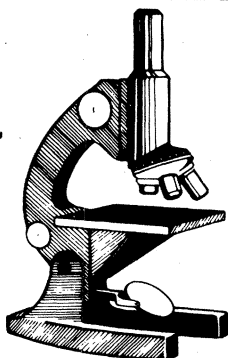
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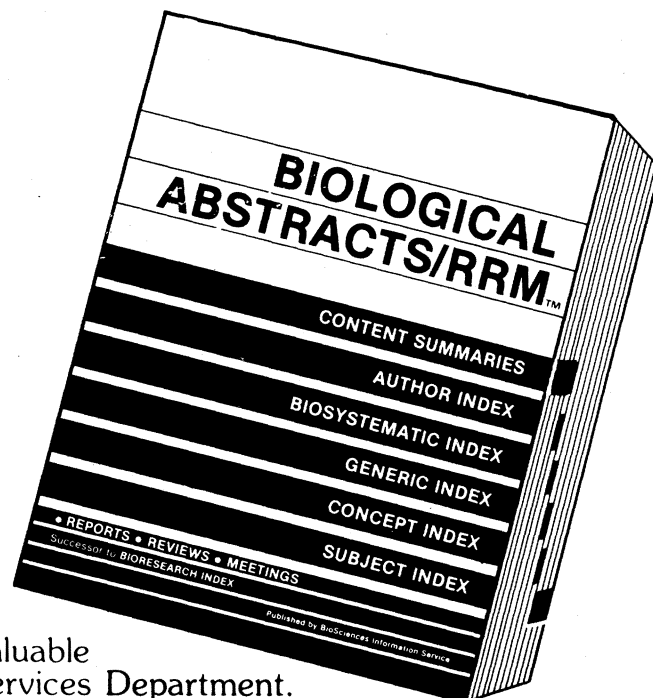
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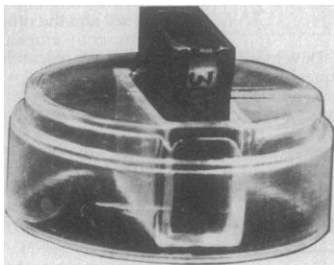
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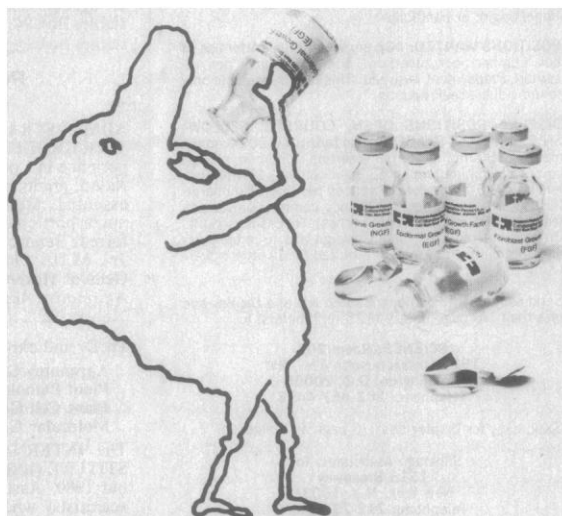
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**ANATOMIST—INSTRUCTOR LEVEL.** Prefer individual with research interest in reproductive biology, pulmonary, developmental, and cell biology. Candidates completing degree program will be considered. Individual will teach human gross anatomy to allied health students in Physical Therapy Program. Prefer individual who has had experience in conducting and teaching in Physical Therapy Program. We have moved to new facilities with well-equipped laboratories. Salaries are highly competitive. Interested individuals should submit current curriculum vitae before 25 April 1980 to: **Dr. A. V. Boccabella, Chairman, Department of Anatomy, COLLEGE OF MEDICINE AND DENTISTRY OF NEW JERSEY—NEW JERSEY MEDICAL SCHOOL, 100 Bergen Street, Newark, N.J. 07103.** An Equal Opportunity/Affirmative Action Employer, M/F.

**ASSISTANT/ASSOCIATE PROFESSOR—Seek vertebrate ecologist,** 18 August 1980. Teach undergraduate and graduate courses and develop courses appropriate to his/her area of expertise. Ph.D. required. Should have field orientation and research interest in birds or mammals and have strong theoretical background in population biology and ecology. Must have research experience in any of the following subdisciplines: population or community dynamics, demography or life history strategies, ecological genetics, or energetics. Salary dependent upon qualifications (\$18,000 minimum). Curriculum vitae and three references should be sent by 1 May to: **John D. Lynch, Chairman, Ecology Search Committee, School of Life Sciences, The University of Nebraska-Lincoln, Lincoln, Nebraska 68588.** Affirmative Action/Equal Opportunity Employer.

**RESEARCH ASSOCIATE—**Postdoctoral position to study the role of proteases in the senescence of soybean nodules; 18 August 1980. Applicant should have Ph.D. in plant physiology with a strong background in biochemistry and plant senescence; \$13,000 per year. Applications and résumés should be sent by 15 May to: **Dr. Fred W. Wagner, Laboratory of Agricultural Biochemistry, The University of Nebraska-Lincoln, Lincoln, Nebraska 68583.** Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### ANATOMY DEPARTMENT OPENING

The Department of Anatomy at the University of Rochester invites applications for two tenure-track positions in gross anatomy/embryology. It is expected that one position will be filled by September 1980 and the other by January 1981. The department presently emphasizes research in neurobiology. Applicants research interest should complement ongoing programs within the department. Preferential consideration will be given to applicants with interest in neurobiology and/or developmental biology. Letters of application, including curriculum vitae and a statement of research interest, should be sent to: **Robert M. Herndon, M.D., Chairman, Department of Anatomy, School of Medicine and Dentistry, University of Rochester, Rochester, N.Y. 14642.** The University of Rochester is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT DEAN FOR INSTRUCTIONAL AND RESEARCH SUPPORT

The Uniformed Services University of the Health Sciences (USUHS) invites applicants for the position of Assistant Dean for Instructional and Research Support, with responsibility for overseeing a multifaceted program in support of research and teaching activities at the medical school, to include the multidiscipline laboratories, laboratory animal medicine, audio-visual, computer support, environmental health, and grants management. Candidates must possess a professional degree in the sciences (for example, M.D., D.O., D.V.M.), and have substantial experience in medical teaching and educational administration, medical or scientific research activities as reflected by significant numbers of scientific publications in critically reviewed journals appropriate to the research. Excellent facilities are available for support of these programs. Salary commensurate with training and experience. Address inquiries, with complete curriculum vitae and bibliography, by 25 April 1980 to: **Personnel Office, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Md. 20014.** The USUHS is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT PROFESSOR

University of California, Irvine, Department of Pathology, is recruiting for a faculty position at the assistant professor level. Required: M.D., must be Board-certified in anatomic pathology and eligible for licensure in California. Subspecialty expertise highly desirable. Demonstrated interests in clinical service functions, teaching, and research. Duties: assist the division chief in such administrative activities as the functioning of the histology laboratory, maintenance of clerical support and the Residency Teaching Program; instructing medical students and residents in pathology; and presenting conferences for the clinical staff and the community. Affirmative Action Employer. Send curriculum vitae and references to: **Stephen G. Romansky, M.D., Department of Pathology, University of California, Irvine, 101 City Drive South, Orange, California 92668,** by 26 May 1980.

### ASSISTANT PROFESSOR

Tenure-track position, starting August 1980, for Ph.D. in vertebrate physiology, to teach anatomy and physiology, advanced physiology, and general biology. Send statement of teaching and research interests, curriculum vitae, transcripts, and three letters of reference by 30 April 1980 to:

**Dr. T. C. Rambo**  
Biological Sciences  
Northern Kentucky University  
Highland Heights, Ky. 41076

Northern Kentucky University is an Affirmative Action/Equal Opportunity Employer and actively seeks the candidacy of minorities and women.

### ASSISTANT PROFESSOR OF BIOCHEMISTRY

The University of British Columbia invites applications for a position beginning after 1 January 1981. The successful applicant will have an M.D. or Ph.D. degree in biochemistry and at least 1 year of postdoctoral research experience. The applicant will have a strong commitment to teaching and research. Applications with complete curriculum vitae, including a list of publications, a brief statement of research interests and the names of three individuals whom we may contact for references, should be sent before September to: **Search Committee, Department of Biochemistry, University of British Columbia, Vancouver, British Columbia, Canada V6T 1W5.**

## POSITIONS OPEN

**ASSISTANT PROFESSOR** position available immediately for qualified individual with a firm commitment to: (i) teaching programs in cardiovascular pharmacology oriented to medical and graduate students, and (ii) collaborate and develop research with emphasis in heart cell pharmacology. Apply to: **Dr. Walmor C. De Mello, Chairman, Department of Pharmacology, Medical Sciences Campus, G.P.O. Box 5067, San Juan, Puerto Rico 00936.**

**ASSISTANT PROFESSOR, BIOCHEMISTRY/ORGANIC CHEMISTRY.** The Department of Chemistry of Linfield College has a tenure-track opening at the assistant professor level in biochemistry/organic chemistry beginning 1 August 1980. Deadline for applications is 1 May 1980; later applications will be accepted until the position is filled. Ph.D. required in biochemistry or organic chemistry. Graduate course work in cell biology desirable. Courses to be taught include organic chemistry and biochemistry. Commitment to liberal arts program, strong interest and potential for undergraduate teaching, and interest in research required. Submit letter of inquiry to: **Rose Song, Executive Secretary to the Dean, Linfield College, McMinnville, Oregon 97128. Linfield College is an Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT PROFESSOR BIOCHEMISTRY IN PEDIATRICS

The Departments of Pediatrics and Biochemistry, Case Western Reserve University, will fill at the rank of assistant professor a tenure-track position in biochemical genetics. Applicants should have a Ph.D., plus 2 years of postdoctoral training with strong evidence of research productivity.

Send résumé and name of three references to: **Dr. Irwin A. Schafer, Division of Medical Genetics, Cleveland Metropolitan General Hospital, 3395 Scranton Road, Cleveland, Ohio 44109. Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT PROFESSOR OF BIOLOGY SKIDMORE COLLEGE

Behavioral geneticist, evolutionary biologist. Teach upper-level courses in genetics, animal behavior, and evolution. Participate in team-taught core courses in principles, population, and cell biology. Supervise senior research. Starting 1 September 1980. Tenure-track position. Ph.D. required. Application review will begin 30 April 1980. Send letter of application, curriculum vitae, and names of three references to:

**Dr. Robert P. Mahoney, Chair  
Department of Biology  
Skidmore College  
Saratoga Springs, New York 12866**

*An Affirmative Action/Equal Opportunity Employer*

**ASSISTANT PROFESSOR OF CELL BIOLOGY-PHYSIOLOGY** with plant or animal interests, July 1980. Preference to applicants with active research interests. Postdoctoral experience preferred. Applicants expected to develop vigorous research program and teach undergraduate and graduate programs. Send résumé, research interests, and three references to: **Dr. Frank Fisher, Biology Department, Rice University, Houston, Texas 77001. Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT PROFESSOR OF OCEANOGRAPHY

Applications are invited for a 12-month, tenure-track position as assistant professor in the School of Oceanography. The applicant must have demonstrated ability to conduct independent research and to obtain research funding in marine geology with emphasis on marine micropaleontology, numerical data analysis, and paleoclimatology. Applicant must have a Ph.D. in geological oceanography and postdoctoral experience.

The appointee will be expected to teach marine geological core courses, a course on marine geological data analysis and other courses of his or her specialty, supervise graduate students, and develop a program of grant-funded research. Salary: \$19,000 to \$25,000, negotiable. Application material, including a brief statement of research plans and the names of three references, should be submitted not later than 1 July 1980 to: **Dr. G. Ross Heath, Dean, School of Oceanography, Oregon State University, Corvallis, Oregon 97331.**

*Oregon State University, an Affirmative Action/Equal Opportunity Employer, complies with Section 503 of the Rehabilitation Act of 1973.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF MICROBIOLOGY (Ph.D. tenure-track)

We are seeking an individual with strong commitment to teaching with a preferred specialty in one or more of the following areas: microbial physiology, microbial genetics, or mycology. Major teaching responsibilities will include undergraduate courses in general and pathogenic microbiology. Development of an advanced course at the undergraduate and graduate level in the area of specialization will be expected. Research activities will be encouraged. Send résumé and have three letters of reference sent no later than 2 May 1980 to: **Dr. Kenneth Kaloustian, Chairman, Department of Medical Laboratory Sciences, Box 154, Quinnipiac College, Hamden, Conn. 06518. An Equal Opportunity/Affirmative Action Employer.**

### INTERDISCIPLINARY NEUROSCIENCES PROGRAM UNIVERSITY OF OREGON

A position is available in the Biology Department for a nontenure-track **ASSISTANT PROFESSOR IN NEUROBIOLOGY.** There are 5 years of assured funding beginning 16 September 1980. The successful applicant will be expected to carry a normal teaching load and to pursue a vigorous research program. Qualified persons should submit their credentials to: **Michael Menaker, Chairman, Neurosciences Search Committee, Department of Biology, University of Oregon, Eugene, Oregon 97403. Application deadline is 7 May 1980. The University of Oregon is an Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT PROFESSOR PHYSICS AND ASTRONOMY INDIANA UNIVERSITY NORTHWEST

Tenure-track position available August 1980. Teaching load is six courses at the undergraduate level per academic year. Ph.D. required. Salary is highly competitive. Send curriculum vitae and names of three references to: **Keith Lorentzen, Chairperson, Department of Chemistry/Physics/Astronomy, Indiana University Northwest, 3400 Broadway, Gary, Indiana 46408. Closing date for receipt of applications is 1 May 1980.**

*An Equal Opportunity/Affirmative Action Employer*

The **DEPARTMENT OF POULTRY SCIENCE** at Oregon State University invites applications for a position at the **ASSISTANT PROFESSOR** level in the field of poultry genetics-endocrinology, involving both research and teaching responsibilities. The Ph.D. degree is required. Salary range: \$19,500 to \$22,000. The position will be available 1 October 1980 but no later than 1 January 1981. Application deadline is 15 June 1980. *Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.* For information about the department and the requirements for the position write:

**Dr. G. H. Arcsott, Head  
Department of Poultry Science  
Oregon State University  
Corvallis, Oregon 97331**

### ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF PSYCHOLOGY FLORIDA STATE UNIVERSITY TALLAHASSEE, FLORIDA 32306

Tenure-track position is open 7 September 1980 in the Department of Psychology for a neuroscientist with expertise in the areas of neuroanatomy/neurophysiology of the central nervous system, particularly as related to pain. Doctorate degree and postdoctoral experience are required. Salary negotiable.

Applicants with demonstrated research excellence and a commitment to teaching at the undergraduate and graduate levels should submit a résumé, a brief description of future research plans, and names of at least three references to: **Faculty Search Committee, Department of Psychology, Florida State University, Tallahassee, Fla. 32306, by 25 April 1980.**

*Florida State University is an Equal Opportunity/Affirmative Action Employer.*

Immediate opening for **Ph.D. IN BIOCHEMISTRY** in research laboratory to study the role of lipid intermediates in glycoprotein biosynthesis in animal cells. Must have at least 3 years of experience in research on biochemistry of polyphenols and glycoproteins. Salary: \$16,000. Send curriculum vitae and names of three references to: **Dr. R. W. Jeanloz, Harvard Medical School at Massachusetts General Hospital, Fruit Street, Boston, Mass. 02114.**

## POSITIONS OPEN

### CENTER FOR GREAT LAKES STUDIES UNIVERSITY OF WISCONSIN—MILWAUKEE

Applications are sought for four new career positions at the University of Wisconsin's Great Lakes Research Facility:

**ASSOCIATE DIRECTOR:** this is a senior position for a well-established Ph.D. with a proven record in publication and contract research. The successful candidate will be responsible for coordinating, initiating, and conducting scientific programs of excellence in multidisciplinary Great Lakes-related research, and will be encouraged to pursue a strong personal research program.

**SENIOR RESEARCHER:** this is a full-time research position for a Ph.D.-level scientist in any discipline related to Great Lakes research with a proven research record of the potential to develop such research. The successful candidate will be expected to initiate research projects and participate in multidisciplinary research programs at the center.

**ANALYTICAL/ENVIRONMENTAL CHEMISTS:** these persons will establish, operate, and maintain a state-of-the-art analytical facility for trace organic and inorganic compounds encountered in Great Lakes research. The positions require a B.S. or M.S. in analytical chemistry, chemical limnology or oceanography, or geology with a working knowledge of instrumental analytical techniques.

Send résumé, names of references, and other supporting information by 1 May to:

**Dr. David N. Edgington, Director  
Center for Great Lakes Studies—  
Great Lakes Research Facility  
The University of Wisconsin—Milwaukee  
Milwaukee, Wis. 53201**

*An Equal Opportunity/Affirmative Action Employer*

**BIOCHEMIST:** an immediate postdoctoral opening is available for a Ph.D. biochemist with experience in the field of protein synthesis, protein phosphorylation, or regulation of animal cell growth in culture. Interested candidates should send a résumé and three names of references to: **Dr. George Thomas, Friedrich Miescher-Institut, P.O. Box 273, CH-4002 Basel, Switzerland.**

## TWO ASSISTANT PROFESSORSHIPS IN BIOLOGY

**DEVELOPMENTAL BIOLOGIST.** Primary responsibilities: teach courses in embryology, histology, cell biology, microtechnique and/or electron microscopy; direct graduate (M.S.) student research; advise undergraduates specializing in biotechnology or premedical specializations; supervise teaching assistants; conduct graduate seminar in special topics in developmental biology. Qualifications: Ph.D. in developmental biology required; formal course work and/or practical experience in above subject areas desired; demonstrated teaching proficiency required; experience with tissue culture desired.

**MICROBIOLOGIST.** Primary responsibilities: teach undergraduate courses in general microbiology, pathogenic microbiology, and/or food microbiology; graduate course in public health microbiology; direct graduate (M.S.) student research; advise undergraduates specializing in microbiology; conduct graduate seminar in special topics in microbiology; coordinate and supervise teaching assistants and laboratory assistant staff. Qualifications: Ph.D. in microbiology required; formal course work and/or practical experience in above subject areas desired; demonstrated teaching proficiency required.

Both positions subject to availability of funds and position. Full-time, academic year 1980-1981, with possibility of renewal. Minimum salary for assistant professors: \$15,250.

Send résumé, publication list, summary of teaching and research objectives, and three letters of reference before 15 May 1980 to:

**Dr. H. Q. Stevenson, Chairperson  
Department of Biology  
Southern Connecticut State College  
501 Crescent Street  
New Haven, Connecticut 06515**

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

## POSITIONS OPEN

Job opportunity. **ASSISTANT PROFESSOR IN ZOOLOGY.** To teach introductory biology, introductory animal physiology, and invertebrate physiology; conduct and supervise graduate student research on anaerobic metabolism of molluscs. Candidates must have a Ph.D. in zoology with a minimum of 3 years of teaching at university level, including preparation and delivery of lectures, postdoctoral research, and publications. Salary: \$17,000 to \$19,000 per academic year. Working conditions: standard university. Send curriculum vitae and names of three referees to: **Chairman, Department of Zoology, University of Washington, NJ-15, Seattle, Washington 98195.** Closing date for applications: 15 May 1980. *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

The University of California, Irvine, College of Medicine, offers a position for an **ASSISTANT RESEARCH NEUROPHYSIOLOGIST**, Ph.D., to direct study of clinical uses of evoked potentials in neurological disorders with particular attention to electrophysiological correlates of cognitive disorders. Knowledge of digital computer use and programming, and prior experience in human evoked potentials required. Position available 1 July 1980. Deadline for receipt of applications is 2 May 1980. Send curriculum vitae and request three referees to send letters of reference to: **Arnold Starr, M.D., Department of Neurology, University of California, Irvine, Calif. 92717.** Appointment is for 3 years duration, contingent on grant funding. *Affirmative Action Employer.*

### BIOCHEMIST/MOLECULAR BIOLOGIST POSTDOCTORAL FELLOW Department of Pathology

A 2-year postdoctoral fellow position is available to study the molecular biology and biochemistry of trypanosomes. There also will be an opening for a new graduate student in fall 1980. African trypanosomes are the causative agents of human sleeping sickness and nagana in cattle. This is an opportunity to apply biochemical techniques to an organism of major health and economic importance. Our interests include the mechanism by which bloodstream organisms differentiate in vitro, mitochondrial biogenesis and electron transport, antigenic variation in tissue culture, and the mechanism of action of chemotherapeutic drugs. Future work may involve recombinant DNA techniques. The fellow must have a Ph.D. in biochemistry or molecular biology. Salary: \$13,000 to \$14,000. Send curriculum vitae and names of references by 1 May to: **Dr. George C. Hill, Associate Professor, Department of Pathology, Colorado State University, Fort Collins, Colo. 80523.** Telephone: 303-491-7086. *Colorado State University, is an Equal Opportunity/Title IX Employer; Equal Opportunity Office: 314 Student Services Building.*

### UNIVERSITY OF SHERBROOKE DEPARTMENT OF BIOLOGY

Applications are invited for two full-time faculty positions (effective 1 August 1980) to assume teaching responsibilities (in French) in the following fields:

- 1) Fresh water biology, and
- 2) Plant ecology.

Duties also include research within current programs in the department. A Ph.D. degree with, preferably, postdoctorate training is required. Salary and rank depending on qualifications and experience and established according to the present professors collective agreement. Applicants should send résumés and references before 16 May 1980 to:

Dean, Faculty of Science  
University of Sherbrooke  
Sherbrooke, Quebec  
Canada J1K 2R1

**BIOLOGY/BIOCHEMISTRY:** assistant professor with a strong background in physiology and biochemistry for a 9-month, tenure-track position. Doctorate is required. Teaching experience and published research desirable. Responsibilities include teaching biochemistry, physiology, anatomy, histology, and possibly genetics. Salary is dependent on training and experience. Starting date: 15 August 1980. Application deadline: 30 April 1980. Address inquiries to: **Dr. Ronald O. Champagne, Dean, Salem College, Salem, W. Va. 26426.** *Salem College is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**BOTANIST**—Competitive Civil Service position, GS-430-11/12 (entrance level \$20,611), with Office of the Scientific Authority, U.S. Fish and Wildlife Service, Washington, D.C. Primary responsibilities: survey status of plants in international trade, review permit applications under Convention on International Trade in Endangered Species (CITES), prepare U.S. proposals and review foreign proposals to amend list of plants protected by CITES, assist in formulating policies and procedures to implement CITES. Position requires doctoral degree or 3 years of graduate education or 3 years of professional experience beyond bachelor's degree in botany.

Write to: **Joanne Martin, Personnel Management and Organization, U.S. Fish and Wildlife Service, Washington, D.C. 20240** (or telephone collect: 202-343-7742) for information on application requirements and details of vacancy announcement. Refer to Vacancy Number 80-13a. Closing date: 28 April 1980.

**BOTANIST.** Rollins College anticipates a faculty opening in botany for September 1980. Teaching responsibilities include plant kingdom, general biology, and may include courses in environmental studies as well as other appropriate courses for non-majors. The candidate should possess the Ph.D. and have strong interest in both teaching and interaction with undergraduate students. Interested persons should send curriculum vitae, statement of interest in teaching, and three letters of recommendation to:

**Dr. James W. Small, Head  
Department of Biology  
Box 2493  
Rollins College  
Winter Park, Florida 32789**

*An Equal Opportunity/Affirmative Action Employer*

### CELL SURFACE BIOCHEMISTRY IMPERIAL CANCER RESEARCH FUND

Imperial Cancer Research Fund intends to appoint an independent scientist in the field of cell surface biochemistry at its Mill Hill Laboratories. The appointee will be required to establish a small research group within this area. It is anticipated that the group will move to the Fund's laboratories in Lincoln's Inn Fields prior to closure of the Mill Hill Laboratories in 1986.

The Mill Hill Laboratories currently include two groups working on cell differentiation in *Drosophila* and during embryonic development. The new group would be expected to establish close interactions with the present groups. The prospective research programme can be in any area of the cell surface although preference may be given to the role of the cell surface in development or in cell-cell recognition. Previous experience in cell surface biochemistry is essential.

The initial appointment is for 5 years, with a possibility of eventual transfer to the permanent staff. It will be in MRC nonclinical Grade 1 (current salary range: £727 to £8992 a year, plus London allowance: £740 a year). Applicants should send curriculum vitae, the names of three referees, and a résumé of their proposed programme to: **The Secretary, Imperial Cancer Research Fund, Lincoln's Inn Fields, London, W.C.2., England.**

**CHIEF OF NEUROSURGERY.** Department of Surgery, University of Texas Medical Branch, Galveston, Texas. Nominations and applicants are invited for this position. Applicants should possess nationally recognized capability in clinical neurosurgery, teaching, and neuroscientific investigation. Letter of application and curriculum vitae should be sent to: **James C. Thompson, M.D., Chairman, Department of Surgery, P.O. Box 146, University of Texas Medical Branch, Galveston, Texas 77550.** *We are an Equal Opportunity/Affirmative Action Employer, M/F.*

**TWO FACULTY POSITIONS,** September 1980. **Biochemistry.** Assistant professor. Teach lecture and laboratory courses. Could lead to permanent appointment. Candidates should have doctoral degree in biochemistry. **General Chemistry.** Lecturer. To teach general chemistry and possibly in other areas as need may arise. Applicants with masters or doctoral degree will be considered. Position available for 1 year. Candidates should have a strong interest in teaching. Excellent opportunities exist for research. Send curriculum vitae, including a description of teaching and research experience, and make arrangements for three letters of recommendation to be sent to: **Dr. Paul V. Koehn, Chairman, Chemistry Department, State University College at Oneonta, Oneonta, New York 13820.** Closing date for applications: 25 April 1980. *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### CHAIRPERSON, DEPARTMENT OF PSYCHOLOGY, SKIDMORE COLLEGE

Responsibilities include chairing an undergraduate department of eight full-time faculty and 80 majors. We seek a chairperson who has been a productive scholar-teacher in a liberal arts setting with administrative experience. Teaching interests in human experimental psychology preferred. Salary is based on a 9-month year. Salary and rank will be commensurate with experience. Starting date is 1 September 1980. Applications will be reviewed beginning 1 May and will continue to be received until the position is filled. Send curriculum vitae and three letters of reference to: **Dr. Eric Weller, Dean of Faculty, Skidmore College, Saratoga Springs, New York 12866.** Skidmore, a liberal arts college with 2000 men and women undergraduates, is located in northeastern New York. *It is an Affirmative Action/Equal Opportunity Employer.*

**CLINICAL CHEMIST.** Doctoral degree and experience in general clinical chemistry, toxicology, and endocrinology is required for position as assistant head of Clinical Chemistry Laboratory, with a faculty appointment in the Department of Pathology. Responsibilities will be for service work within the Clinical Laboratories, teaching residents and graduate students, and the performing of research. *Applicants will be reviewed without regard to race, color, sex, or creed. We encourage applications from women and minorities. The University of California is an Equal Opportunity Employer.* Send curriculum vitae to: **Denis O. Rodgerson, Ph.D., Professor of Pathology, Center for the Health Sciences, University of California, Los Angeles, Calif. 90024.**

### DIRECTOR DIVISION OF MEDICAL PHYSICS COMPREHENSIVE CANCER CENTRE

Applications are invited for the post of director of the Division of Medical Physics. This division provides services in radiotherapy physics, diagnostic radiology, nuclear medicine, and radiation protection. The division has six full-time physicists involved in service and research, as well as technical sections of electronics, treatment planning, and machine shop with a total staff of 30 housed in approximately 14,000 feet of space, including large modern research laboratories. The division is part of a comprehensive cancer treatment and research centre which includes radiation oncology, medical and surgical oncology, epidemiology and biological and clinical research. The centre is located within the campus of the University of Manitoba Medical School and the Primary Teaching Hospitals. Academic appointment, rank, and salary appropriate to appointee.

Application, including curriculum vitae, should be forwarded to: **Dr. L. G. Isaacs, Executive Director, Manitoba Cancer Treatment and Research Foundation, 700 Bannatyne Avenue, Winnipeg, Manitoba, Canada R3E 0V9.**

### ENTOMOLOGIST AND CURATOR

The Biology Department and Museum of Comparative Zoology of Harvard University are seeking to fill a joint position: the Sidney A. and John H. Hessel Professorship of Biology and Curatorship of Lepidoptera. The incumbent of this position will be expected to assume responsibility for the care, maintenance, use and growth of the Lepidoptera collection. Preference will be given to candidates with a strong research program in the biology of Lepidoptera and the ability to offer instruction in entomology and related disciplines at both the graduate and undergraduate level.

Applicants should send curriculum vitae and statement of research interests to: **Director, Museum of Comparative Zoology, 26 Oxford Street, Cambridge, Mass. 02138.** Applications should be submitted by 12 May 1980. *Harvard is an Equal Opportunity/Affirmative Action Employer.*

**FACULTY POSITION IN PATHOLOGY.** The Department of Pathology at University of California, Los Angeles (UCLA) School of Medicine invites applications for the position of **ASSISTANT PROFESSOR.** Candidates must be Board-eligible or Board-certified in anatomic pathology or anatomic and clinical pathology and must have an active interest in research. *Qualified women and minority candidates are encouraged to apply.* Send curriculum vitae, publication list, brief résumé of research program, and names of four referees to: **Julien L. Van Lancker, M.D., Department of Pathology, UCLA School of Medicine, Los Angeles, California 90024.** *An Equal Opportunity/Affirmative Action Employer.*



## MOLECULAR BIOLOGISTS

Openings are available at New England Biolabs' new laboratory in Beverly, Massachusetts, USA.

*Ph.D. level:* Experience in cloning eukaryotic DNA, *in vitro* translation and other recombinant DNA techniques is essential.

*MS or BS level:* Minimum of two years experience in the isolation and purification of proteins, enzymology and quantitative biochemistry.

New England Biolabs, Inc. is a small group of microbiologists and molecular biologists involved in the production of restriction endonucleases and other enzymes useful for DNA research. New programs are being initiated to use genetic engineering for the production of proteins applicable to world health problems.

Send curriculum vitae to N.E. Biolabs, Inc., 283 Cabot Street, Beverly, MA 01915, USA.



283 Cabot Street  
Beverly, MA 01915

## UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applicants are solicited for **FACULTY POSITIONS** in the following departments:

**GYNECOLOGY-OBSTETRICS** (Number 220): **Assistant professor**, patient care supervision. Research in reproductive biology. Education of gynecology and obstetrics students and residents, and residents from other services. Approved residency and completion of written examinations of the American Board of Obstetrics and Gynecology, Inc. **MEDICINE** (Number 230): **Professor**, Chief of Immunology Section, Department of Medicine and Arthritis Section, Oklahoma Medical Research Foundation. Individual must have an established clinical and investigative record and be eligible for professorial rank. **PEDIATRICS** (Number 213): **Assistant professor**, Infectious Diseases Program. Supervise the diagnostic laboratory in a large children's hospital and participate in teaching and research. Experience in electron microscopy, fluorescence, RIA and ELISA required. M.D. or Ph.D. **PHYSIOLOGY** (Number 228): **Research associate**, instrument and conduct experiments on primates. This will include experimental design, data acquisition, and analysis. Scientific papers will be prepared from the results to submit to refereed journals. Ph.D. degree is required with emphasis on physiology. **PSYCHIATRY** (Number 209): **Clinical instructor/assistant professor**, consult with pediatricians regarding psychological problems of patients and family who have been assigned to the Neonatal Unit. Responsibilities will include educating staff in child management techniques. Ph.D. in psychology. Experience in child assessment and family counseling required. (Number 222): **Clinical assistant professor**, clinical social worker. Responsibilities will include coordination of admissions, treatment planning, and assistance in supervising those trainees who are assigned to the unit. Ph.D. or master's degree in social work. (Number 223) **Clinical assistant professor**, provide liaison service to the Orthopaedic Service and provide individual patient oriented consultation as requested by the staff; will be responsible to the Chief, Mental Health Services and Chief of Orthopaedic Services at Oklahoma Children's Memorial Hospital. Ph.D. clinical psychologist. (Number 224) **Clinical assistant professor**, Chronic Care Unit at Oklahoma Children's Memorial Hospital. Administer and/or supervise psychological testing as required on an individual basis, provide therapy, individual and group. Supervision of trainees assigned to the Department of Psychiatry and Behavioral Sciences.

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



The International Atomic Energy Agency seeks for the International Laboratory of Marine Radioactivity in Monaco a

## MARINE BIOLOGIST

at the Assistant Officer's level (P-1) to perform laboratory and field research on the bioavailability, transfer and behaviour of long-lived radionuclides and heavy metal pollutants in marine organisms. Knowledge of radiotracer levels is particularly desirable. Ph.D. or equivalent in biological oceanography, marine biology or marine ecology necessary. Initial contract two years, total annual emoluments US\$24,000. Additional allowances, if married. Send curriculum vitae under VN 13/80 to the Division of Personnel, International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna, Austria.

# Mobil

## ANALYTICAL CHEMISTS

Mobil Oil Corporation has openings for two analytical chemists at its Environmental Health and Toxicology Research Laboratory in Princeton, New Jersey.

### Ph.D. Analytical Separations Scientist -

- contribute analytical expertise to Metabolism/Pharmacokinetics and Toxicology Groups with primary emphasis on methods development with HPLC, GC/MS techniques.
- develop new analytical procedures for test materials and their metabolites in a variety of biological matrices including feed, tissue, excreta, blood and water.
- A strong background in analytical chemistry, separations theory and in-depth familiarity with chromatographic and spectroscopic instrumentation is required.

### B.S. or M.S. Mass Spectroscopist -

- develop and apply GC/MS/DS techniques to the identification and quantitation of a wide variety of materials and biological systems.
- A strong background in organic chemistry and instrument performance and maintenance, and experience in the application of computer techniques to mass spectral data is required.

Salaries commensurate with education and experience. Qualified candidates should send their resumes and salary requirements to:

D.L. Loveless, Mobil Oil Corporation,  
P.O. Box 1025, Princeton, NJ 08540

An Equal Opportunity Employer

## POSITIONS OPEN

**CHIEF OF PEDIATRIC SURGERY**—Position available at the Children's Hospital of Philadelphia with professorial appointment at the University of Pennsylvania School of Medicine. Selection criteria include national reputation for demonstrated clinical eminence, leadership and administrative abilities, broad interest in teaching, and scientific accomplishments as shown by contributions to the field. Please contact: **Leonard D. Miller, M.D., Professor and Chairman, Department of Surgery, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, Pa. 19104. An Equal Opportunity Employer.**

**DEVELOPMENTAL BIOLOGISTS** are invited to submit their curriculum vitae for consideration for an appointment as assistant or associate professor of anatomy at the University of California, San Francisco. Requirements include demonstrated capabilities in instruction of health professions and graduate students, a funded independent research program, a Ph.D. or M.D. degree, and appropriate postdoctoral experience. Preference will be given to applicants with research experience in immunological, biochemical, and morphological approaches to problems of early mammalian development. *The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority persons.* Applications or nominations together with the names of three references should be forwarded to: **Professor L. E. Glass, Chair, Developmental Biology Search Committee, Department of Anatomy, University of California Medical School, San Francisco, California 94143.** Deadline for these applications is 30 May 1980.

**DIRECTOR OF ENVIRONMENTAL HEALTH LABORATORIES.** This division provides laboratory support for milk, food, toxicology, pesticide residue, heavy metals, and metabolic disorders programs. A doctorate degree in a chemical or biological science and 3 years of technical and administrative experience are required. Technical experience should include the use of a variety of laboratory instrumentation. Salary range: \$22,000 to \$32,000, plus fringe benefits. Send curriculum vitae to: **Arthur F. DiSalvo, M.D., Chief, Bureau of Laboratories, South Carolina Department of Health and Environmental Control, P.O. Box 2202, Columbia, South Carolina 29202. Telephone: 803-758-4491.**

### FACULTY POSITION IN PLANT BIOLOGY UNIVERSITY OF CHICAGO

The Department of Biology invites applications for a faculty position in plant biology. We are seeking an individual who is preferably working in part at the whole organism level, and with research and teaching interests that will complement the existing program. Areas of interest include, but are not limited to, ecology and physiology. Applicants must have demonstrated potential for development of an independent research program and excellence in teaching. Curriculum vitae, bibliography, and the names and addresses of references may be sent to:

**Chairman  
Plant Biology Search Committee  
Department of Biology  
The University of Chicago  
5630 South Ingleside Avenue  
Chicago, Illinois 60637**

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

**INSTRUCTOR, ASSISTANT PROFESSOR,** animal physiology, tenure-track position. To teach a course in general zoology, upper division sequence in physiology, and direct undergraduate research. Send curriculum vitae and three letters of recommendation to: **R. M. Chute, Department of Biology, Bates College, Lewiston, Maine 04240.** Representative at FASEB Meeting, 14 to 16 April. *An Equal Opportunity/Affirmative Action Employer.*

**MICROBIOLOGY/ASSISTANT PROFESSOR.** Tenure-track position; teach microbiology courses, animal physiology or parasitology, and develop graduate specialty courses. Research—graduate program activity required; preference for pathogenic microbiology. Ph.D. required; minimum salary: \$13,000; effective date: August 1980. Résumé, transcripts, and three letters of reference by 21 April 1980. Address inquiries to: **Dr. G. F. Larkin, Box 1, Department of Biological Sciences, Kent State University, Kent, Ohio 44242. Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

**FACULTY POSITION IN BIOLOGY**, assistant professor, Ph.D. required. Position open, beginning fall 1980. Wesleyan College is seeking a broadly trained biologist with teaching capabilities in microbiology, cell biology, immunology, developmental biology, microtechnique, and a course in the applicant's area of specialty within the special topics curriculum. Salary competitive. Those applicants with a commitment to teaching in a small college environment will be preferred. *Applications from women encouraged. Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae, transcripts, and three letters of recommendation by 15 May 1980 to: **Biology Search Committee, c/o Pat H. Lewis, Wesleyan College, Macon, Georgia 31201.**

### FACULTY POSITION Pharmacognosy (Microbiology/Immunology)

The Oregon State University School of Pharmacy seeks to fill an assistant professor position in the area of pharmacognosy. Candidates should possess a Ph.D. and experience or a demonstrated interest in microbiology, immunology, and the isolation and characterization of natural products. Preference will be given to candidates who have had postdoctoral experience in any of the above areas.

The candidate will be expected to share teaching efforts within the school's professional pharmacy program. The candidate will participate in the graduate program and will be expected to develop cooperative and independent research programs and to guide and advise graduate students.

This is a state-funded, tenure-track position beginning 16 September 1980. Applications must be received by 1 May 1980. Applicants should send a personal letter outlining their interests in the position together with curriculum vitae and the names of at least three references to:

**Richard A. Ohvall, Ph.D.  
Dean, School of Pharmacy  
Oregon State University  
Corvallis, Oregon 97331**

*Oregon State University is an Equal Opportunity/Affirmative Action Employer and complies with Section 504 of the Rehabilitation Act of 1973.*

### FACULTY POSITION—ANATOMY

A tenure-track faculty position at the junior faculty level is now open in the Department of Anatomy of the University of Colorado Medical School, 4200 East Ninth Avenue, Denver, Colorado 80262. Excellence in research and teaching is expected. Strength in new areas of investigation in molecular and cellular biology preferred. Closing date for receipt of applications for this position will be 30 April 1980. Write to:

**Chairman, Department of Anatomy  
University of Colorado Health Sciences Center  
School of Medicine  
Box B-111  
4200 East Ninth Avenue  
Denver, Colorado 80262**

*This school is an Affirmative Action/Equal Opportunity Employer. We are keenly interested in attracting women and/or minority scientists for this position.*

### FACULTY POSITION IN MEDICAL BIOCHEMISTRY

Texas A & M University, College of Medicine, has a faculty position open in the Department of Medical Biochemistry. Renovated laboratory space available pending completion of new Basic Medical Sciences Building. Senior candidates must have an established research program with ongoing major funding. Junior candidates must have appropriate postdoctoral experience. Send curriculum vitae and a description of research plans to: **Search Committee, Department of Medical Biochemistry, College of Medicine, 110 Herman Heep Building, Texas A & M University, College Station, Texas 77843. Equal Opportunity through Affirmative Action.**

**JUNIOR FACULTY or POSTDOCTORAL FELLOW.** Neuroscience. To participate in research program utilizing computer-assisted three-dimensional reconstruction techniques to define archetonic and quantitative aspects of developing and mature mammalian nervous tissue. Background in computer graphics essential and in neuroanatomy highly desirable. Please send curriculum vitae and references to: **Dr. Richard L. Sidman, Department of Neuroscience, Children's Hospital Medical Center, 300 Longwood Avenue, Boston, Mass. 02115. An Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

### UNIVERSITY OF ALABAMA IN BIRMINGHAM

The Department of Nutrition Sciences at the University of Alabama in Birmingham is accepting applications for a faculty position as **INSTRUCTOR** in the Division of Nutritional Biochemistry. A Ph.D. in biochemistry is required. Expertise in folate metabolism and purine biosynthesis is needed to continue ongoing research in these areas. Must be able to teach nutritional biochemistry at the graduate level. Send curriculum vitae before 11 May 1980 to: **Dr. Carlos L. Krumdieck, Vice-Chairman, Department of Nutrition Sciences, University of Alabama in Birmingham, University Station, Birmingham, Ala. 35294. The University of Alabama in Birmingham is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.**

The Department of Biology invites applications for a **LABORATORY LECTURER IN HUMAN PHYSIOLOGY** to teach and coordinate human physiology laboratories for health science students. The successful applicant will also be expected to teach laboratories in elementary human anatomy. This is a non-tenure-track, full-time position, beginning in August 1980, at a salary of \$12,750 on a 10-month appointment. The potential candidate should hold at least a master's degree or equivalent. Applicants should forward curriculum vitae, three letters of reference, and official undergraduate and graduate transcripts before 1 May 1980 to: **Dr. Richard Pfanzer, Department of Biology, Indiana University-Purdue University at Indianapolis, CA 325, 925 West Michigan Street, Indianapolis, Indiana 46202.**

*An Affirmative Action/Equal Opportunity Employer*

### THE CHINESE UNIVERSITY OF HONG KONG LECTURER IN BIOCHEMISTRY

Tenable from August 1980. Applicants should have a Ph.D. or equivalent with demonstrable research ability. Experience in physical biochemistry, membrane biochemistry, or nucleic acids will be an asset. **Annual salary (currently under review): HK\$67,920 to HK\$77,040 by 2 increments BAR 81,600-113,520 by 7 increments (exchange rate U.S.\$1 = HK\$5 approximately).** Starting salary and the grade to which the appointment is made will depend on qualifications and experience. Benefits include superannuation (university: 15 percent, appointee: 5 percent), medical benefits, education allowance for children, long paid leave, housing benefits (for local appointees at salary points above the bar on the lecturer scale) and, for appointments on overseas terms, housing accommodation and air passage as well. **Application forms** and further information are obtainable from: **Personnel Section, The Chinese University of Hong Kong, Shatin, N.T. Hong Kong.** Completed forms together with copies of recent testimonials and one set of major publications should be returned before 30 April 1980. Please mark "Application" on cover.

### MICROBIOLOGY FACULTY

The College of Osteopathic Medicine and Surgery, Des Moines, Iowa, is accepting applications for two microbiology faculty available in August 1980. Applicants must have the Ph.D. or equivalent degree. One position requires teaching and research competency in clinical microbiology. The second position requires teaching competency in all areas of medical microbiology; research interest open. Rank and salary dependent upon experience and qualifications. Send curriculum vitae to: **William J. Dyche, Ph.D., Assistant Dean of Preclinical Affairs, College of Osteopathic Medicine and Surgery, 3200 Grand Avenue, Des Moines, Iowa 50312. Equal Opportunity Employer.**

**NATURAL RESOURCES CONSERVATION**—Assistant/associate/full professor. Salary: negotiable. Undergraduate and graduate teaching, cooperative extension, and research in natural resources conservation. Principal teaching duties will be in the field of forest management. Ph.D. in forestry or closely related land management discipline. Evidence of productive research and teaching experience at the university level. Reply by 1 May 1980 to: **James Bethune, U-87, University of Connecticut, Storrs, Conn. 06268. Equal Opportunity Employer.**

## POSITIONS OPEN

### ILLINOIS LEGISLATIVE SCIENCE INTERN

Sangamon State University invites applications from recent graduates (B.S., M.S., Ph.D.) of natural science or engineering programs for a 9.5-month **science internship** as a part of the Illinois Legislative Staff Internship Program. The science intern will be assigned to the Illinois Legislative Council's Science Unit and will respond to legislators' requests for information and research about policy issues that involve science and technology. Applicants should be mature, self-motivated scientists or engineers with interest in public service. Send curriculum vitae by 16 May 1980 to: **Dr. Kent Redfield, Coordinator, Illinois Legislative Staff Internship Program, Sangamon State University, Springfield, Illinois 62708. An Equal Opportunity/Affirmative Action Employer.**

### MICROBIOLOGIST/PARASITOLOGIST/ IMMUNOPARASITOLOGIST

The Kirksville College of Osteopathic Medicine anticipates an opening for the 1980-1981 academic year of a tenure-track position for a Ph.D. with a strong commitment to medical education and the teaching of medical parasitology and microbiology. Development of an active research program is expected and supported. Position will be filled at the assistant professor level. Excellent salary, fringe benefits, and working conditions. Send letter of application, curriculum vitae, and names of three references to: **Gerald J. Tritz, Department of Microbiology and Immunology, KIRKSVILLE COLLEGE OF OSTEOPATHIC MEDICINE, Kirksville, Missouri 63501. An Equal Opportunity/Affirmative Action Employer.**

The Department of Biology at Georgia State University invites applications for an anticipated tenure-track position (assistant professor level) with expertise in **MOLECULAR GENETICS**. Preference will be given to candidates with postdoctoral experience who have demonstrated outstanding potential for independent research. Salary will be commensurate with qualifications. The successful candidate will be expected to teach undergraduate and graduate courses in general genetics and in area of specialization. Applications, including curriculum vitae, reprints, a statement of research plans, and names of three references, should be sent to: **Faculty Search Committee, Department of Biology, Georgia State University, University Plaza, Atlanta, Georgia 30303. Deadline for receipt of applications is 1 July 1980. Georgia State University is an Equal Educational Opportunity Institution and is an Equal Opportunity/Affirmative Action Employer in compliance with Title IX and other Civil Rights laws.**

### NEUROPHYSIOLOGIST

**ASSISTANT PROFESSOR, Ph.D.,** tenure-track. At least 2 years of postdoctoral. Teaching in medical and graduate programs. Research interest in neural control of circulation preferred. Candidates should send curriculum vitae and names of three references by 1 May 1980 to: **Dr. Charles D. Barnes, Ph.D., Department of Physiology, Texas Tech University Health Sciences Center, Lubbock, Texas 79430.**

*An Equal Opportunity/Affirmative Action Employer*

Position: **Ph.D.** for 1 to 3 years. Salary corresponding to \$18,000 to \$24,000 per year. Available at: **INRA Immunology Department, Thiverval-Grignon, France.** The project will be: (i) tumor growth inhibition of plasmacytomas and thymomas by peptides and (ii) the modulation of membrane bound enzyme by the same peptides. The work will be done in connection with Dr. Chedid, Pasteur Institute.

**POSTDOCTORAL FELLOW** to study structural dynamics of myosin and actin in solution, in gels, and in contractile cells. Salary: \$14,000 to \$16,000. Knowledge of protein chemistry required. Opportunity to learn photon correlation spectroscopy. Send résumé to: **Dr. F. D. Carlson, Department of Biophysics, The Johns Hopkins University, Baltimore, Maryland 21218. Equal Opportunity Employer, M/F.**

**POSTDOCTORAL FELLOW:** available 1 July 1980 to investigate cation transport and phospholipid metabolism in lens. Primary training in biochemistry is desirable. Previous training in ocular studies would be valuable but not necessary. Salary is approximately \$15,000. Send curriculum vitae and three letters of recommendation to: **Dr. Douglas R. Pfeiffer, The Hormel Institute, University of Minnesota, 801 16th Avenue, NE, Austin, Minn. 55912. An Equal Opportunity Educator and Employer.**

11 APRIL 1980

# Patent Chemist

**Live and work in JAPAN  
with PFIZER TAITO, Ltd.**

**Management position reports to  
Director of Patents in New York.**

Pfizer, a worldwide research-based company, has unique opportunity for a qualified chemist. After several months of training at our headquarters in New York, at Central Research in Groton, Connecticut, and at Pfizer Taito Company Limited in Tokyo and Nagoya, your primary duty will be to provide essential assistance ensuring that Pfizer inventions are protected to the fullest extent in Japan.

Candidates must have a sound technical background in organic chemistry or chemical engineering, with an advanced degree, and at least two years experience in research or development in a university or industrial laboratory. An interest in patent law would certainly be helpful, as would Japanese citizenship. Complete fluency in oral and written Japanese and English is required.

We offer an attractive salary, comprehensive benefit package and relocation allowance. Please reply in confidence to: **Mr. R. J. Taylor, Pfizer Inc., 235 East 42nd Street, New York, NY 10017.**



An equal opportunity employer

## MANAGER, BIOCHEMICAL RESEARCH

Monsanto Company has an immediate opening for a biochemist or biologist to manage the Bioevaluation Section of its Biomed Program. Responsibilities include conducting in-depth studies of the biology and pharmacology of new drugs and developing structure/activity correlations. This manager will be expected to maintain an active, personal research program as well as supervise the efforts of 6-8 people. In addition, he/she will serve as the program's scientific liaison to outside groups, such as universities and the National Cancer Institute.

The successful candidate will have a PhD degree and 5-10 years of laboratory experience, including the supervision of professional technical employees.

Please submit your resume in confidence to: **Dr. Philip R. Schenkenberg, G4EA, CL-728-D, Monsanto Company, 800 North Lindbergh Boulevard, St. Louis, Missouri 63166.**

# Monsanto

*An Equal Opportunity Employer M/F*

## POSITIONS OPEN

**PLANKTON BIOLOGIST.** The Chesapeake Biological Laboratory of the University of Maryland's Center for Environmental and Estuarine Studies is seeking an individual with a well-developed research program who has field and laboratory experimental interests in secondary productivity, trophic dynamics, and community structure of estuarine/marine ecosystems. Rank and salary are open for this tenured or tenure-track position, but preference will be given to individuals who qualify at the rank of professor or associate professor. The successful candidate will be eager to interact with graduate students and to collaborate in cognate programs. Contact: **Chairman, Search Committee, Chesapeake Biological Laboratory, P.O. Box 38, Solomons, Maryland 20688.** The University of Maryland is an Equal Opportunity/Affirmative Action Employer.

**PLANT TAXONOMY/GENETICS—Assistant professor,** tenure-track position beginning 15 August 1980. Successful candidate must be committed to undergraduate science education. Teaching responsibilities include plant taxonomy, plant pathology, genetics, and core courses in botany. Ph.D. required. **Application deadline: 1 May 1980.** Send curriculum vitae, transcripts, three letters of recommendation, and other supportive material to: **Dr. Albert L. Etheridge, Head, Department of Biology, University of Arkansas at Monticello, Monticello, Ark. 71655.** An Equal Opportunity/Affirmative Action Employer

A **POSTDOCTORAL FELLOW** is sought to join a group working on the mechanism of transduction in photoreceptors. The principal goal will be to improve upon a technique of internal dialysis already developed for invertebrate photoreceptors and to apply the technique to vertebrate rod outer segments. Appointment is for 2 years starting 1 June 1980. Experience in electrophysiology and/or biochemistry is desirable. Send curriculum vitae and three letters of reference to: **John Lisman, Department of Biology, Brandeis University, Waltham, Mass. 02254.** An Affirmative Action/Equal Opportunity Employer.

The University of California, Irvine, College of Medicine, offers a **POSTDOCTORAL POSITION IN NEUROPHYSIOLOGY** of evoked potentials beginning July through 1 September 1980. Experience in auditory and/or somatosensory physiology in experimental animals required. Projects to be investigated are the neural mechanisms of evoked potentials. Deadline for receipt of applications is 2 May 1980. Send curriculum vitae and request three referees to send letters of reference to: **Arnold Starr, Department of Neurology, University of California, Irvine, Calif. 92717.** Affirmative Action Employer.

**POSTDOCTORAL POSITION.** Chemical carcinogenesis; metabolism and mechanism of action of nitrosamines carcinogenic for urinary bladder. Project involves radiochemical syntheses, in vivo and in vitro metabolism DNA alkylation. Salary competitive; position available immediately. Send résumé, transcripts, and references to: **Dr. Charles C. Irving, Department of Urology, University of Tennessee, Coleman Building, Room 2H13, 956 Court Avenue, Memphis, Tennessee 38105.** An Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION

**SRI INTERNATIONAL,** on the SAN FRANCISCO PENINSULA, has an immediate opportunity in biochemistry to work on a 2-year, NIH-sponsored grant on closed-loop, bioerodible drug delivery systems. Experience in enzymology is highly desirable. Please send résumé, including three professional references, to: **Dr. Jorge Heller, Polymer Sciences Department, SRI INTERNATIONAL, 333 Ravenswood Avenue, Menlo Park, Calif. 04025,** or telephone: 415-326-6200, extension 2215. An Equal Opportunity Employer.

The Department of Neurosciences, School of Medicine, University of California, San Diego, is seeking qualified candidates (Ph.D. in biochemistry) for **TWO POSTDOCTORAL POSITIONS** (postgraduate researcher) to work in a Laboratory of Human Biochemical Genetics, available on or before 1 July 1980. Positions require background in: (i) Enzymology and protein chemistry or (ii) nucleic acid biochemistry. Salary is competitive nationally. Send curriculum vitae and names of three referees to: **John S. O'Brien, M.D., Department of Neurosciences, M008, University of California, San Diego, La Jolla, Calif. 92093.** The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

**POSTDOCTORAL POSITION** for study of calmodulin-calcium and cyclic nucleotide-induced phosphorylation of purified intestinal epithelial cell proteins. Candidate should have a strong background in biochemistry with experience in purification of cell organelles. Position is in Departments of Physiology and Gastroenterology; it is available immediately and for a minimum of 1 year. Please send curriculum vitae to: **Dr. G. W. G. Sharp, Chairman, Physiology Department, Tufts University School of Medicine, 136 Harrison Avenue, Boston, Mass. 02111.**

### POSTDOCTORAL POSITION

Examination of expression of cloned DNA sequences during sea urchin development. Background in developmental biology and nucleic acid biochemistry preferred. Send curriculum vitae and names of three references to: **Dr. William R. Crain, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.**

An Equal Opportunity/Affirmative Action Employer

**POSTDOCTORAL POSITION** available on or after 1 July 1980 for research in nervous control of cardiovascular and respiratory responses to submergence in birds and mammals. Salary negotiable. Curriculum vitae and references should be sent to: **Dr. D. R. Jones, University of British Columbia, Department of Zoology, 2354-6270 University Boulevard, University Campus, Vancouver, British Columbia, Canada V6T 2A9.**

**POSTDOCTORAL POSITION** available July 1980 in area of membrane biosynthesis and assembly in prokaryotic organisms. Ph.D. in biochemistry or related field. Please send curriculum vitae and names of three references to: **Dr. C. H. MacGregor, Department of Microbiology, Georgetown University Medical School, Washington, D.C. 20007.**

Equal Opportunity/Affirmative Action Employer

**POSTDOCTORAL POSITION** available 1 September 1980 to study the biochemical basis of DNA repair, with emphasis on the identification and characterization of repair enzymes from *D. discoideum*. Strong background in enzyme and DNA techniques desirable. Competitive stipend plus benefits. Send curriculum vitae and names of three references by 2 June 1980 to: **Dr. R. A. Deering, 618 Mueller Laboratory, Department of Microbiology, Cell Biology, Biochemistry and Biophysics, The Pennsylvania State University, University Park, Pa. 16802.** An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** available 1 July 1980. Research involving the behavioral pharmacology of opiates and opioid peptides. Strong background in this area preferred. The initial appointment will be for 1 year with the possibility of renewal. Please send curriculum vitae, the names and addresses of three references, and a description of career goals by 1 May 1980 to: **Search Committee K, Psychiatry Department (M-003), University of California, San Diego, La Jolla, California 92093.** The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** is available immediately. Research involves a genetic analysis of cytochrome P450 and other enzymes of polycyclic aromatic hydrocarbon carcinogen activation in cultured mammalian cells. Experience in the field of carcinogen or drug metabolism is essential. Experience with cell culture advantageous. Please submit curriculum vitae and names of three references to: **Laboratory Personnel Officer, Laboratory of Nuclear Medicine and Radiation Biology, University of California, Los Angeles, 900 Veteran Avenue, Los Angeles, Calif. 90024.** An Equal Opportunity/Affirmative Action Employer.

**TWO POSTDOCTORAL POSITIONS.** Biochemist or bioanalytical chemist; neurochemist or neuroanatomist. Individuals will work in well-equipped laboratory on molecular aspects of sensory neurotransmission in auditory and lateral-line systems. Candidates should have a working knowledge in any of the following areas: separation chemistry, protein isolation, immunocytochemistry, neurotransmitters, receptors. Salary: \$13,000. Send curriculum vitae and names of three references to: **Dr. Dennis G. Drescher, Director, Bio-otology Laboratory, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, Michigan 48201.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** in vision biochemistry available July 1980. Research on the role of environmental light in photoreceptor development and retinal membrane integrity. Opportunity to gain teaching experience for interested individual. Experience with membrane techniques useful. Salary: \$13,000. Send curriculum vitae and names of references to: **D. T. Organisciak, Biochemistry Department, Wright State University, School of Medicine, Dayton, Ohio 45435.**

**POSTDOCTORAL POSITIONS** available for biophysicists and biochemists to study: (i) the mechanism and regulation of gene expression, (ii) nucleic acid-protein interactions, and (iii) chemical carcinogenesis. Excellent facilities. Experience in fluorescence spectroscopy, fast kinetics, molecular biology, or genetic engineering is desirable, but not essential. Send curriculum vitae and three letters of recommendation to: **Professor C. W. Wu, Department of Pharmacological Sciences, State University of New York at Stony Brook, Long Island, N.Y. 11794.** An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** to work on the hormonal control of glycogen metabolism, protein phosphorylation, and protein kinases. Projects could range from studies with purified proteins to hormone action in whole tissue systems. Please send curriculum vitae and the names of three referees to: **Dr. Peter J. Roach, Department of Biochemistry, Indiana University School of Medicine, Indianapolis, Indiana 46223.** Telephone: 317-264-2931. An Equal Opportunity/Affirmative Action Employer, M/F.

### POSTDOCTORAL POSITION

Postdoctoral position available 1 June 1980 to study mechanisms of hormone action. Background in biochemistry or cell biology is essential and experience in hormone/drug receptor research is preferable. Send curriculum vitae, bibliography, and letters of recommendation to: **Keith R. Latham, Ph.D., c/o Personnel Office, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Maryland 20014.** An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** in one of several areas including chemical carcinogenesis, hormone receptors, recombinant DNA, cell proliferation, virology, and aging at Fels Research Institute, Temple University School of Medicine. Send inquiries and résumés to: **Dr. Renato Baserga, Fels Research Institute, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, Pa. 19140.** Equal Opportunity/Affirmative Action Employer.

Two positions at the **Postdoctoral-Research Associate** level are presently available in the Laboratories of Connective Tissue Research of the **Department of Biochemistry, Baylor College of Medicine, Houston, Texas 77030,** for the study of macromolecular components of cell membranes. Ph.D. degree in biochemistry or cell biology and expertise in the field of glycoproteins or proteoglycans are required. Annual salary: \$12,000 to \$14,000, depending on qualifications and previous experience. Send curriculum vitae and two letters of reference to: **Dr. Nicola Di Ferrante.** An Equal Opportunity Employer.

### POSTDOCTORAL RESEARCH ASSOCIATE

Position now available for recent Ph.D. to conduct research on the behavioral pharmacology of drugs of abuse. Send résumé and names of two references by 30 April 1980 to: **Dr. Stephen G. Holtzman, Department of Pharmacology, Emory University School of Medicine, Atlanta, Georgia 30322.**

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The Department of Pediatrics of the University of California, San Diego (UCSD), is seeking applications for a **POSTGRADUATE RESEARCH BIOCHEMIST.** This position to be filled as soon as possible. Salary at the university is determined by the level of academic rank. Candidates must have a Ph.D. or M.D. with recent research experience in biochemistry to work in the area of purine metabolism in leukemia cells and tumor immunology. Interested persons should forward curriculum vitae and names of three references to: **Alice Yu, M.D., Ph.D., Department of Pediatrics, Division of Hematology/Oncology, T-008C, UCSD, La Jolla, Calif. 92093.** The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.



#### PHYSICAL SCIENCE ADMINISTRATOR.

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), Environmental Research Laboratories (ERL) in Boulder, Colorado, is seeking a senior level scientific administrator to manage its Office of Programs. The incumbent recommends policy on ERL programs, oversees development of research programs, analyzes relevance of program developments, prepares and coordinates budget initiatives, directs studies on program priorities, maintains control over financial and other administrative resources allocated to the Office of Programs, and evaluates multidisciplinary research proposals and programs. This position is in the competitive Civil Service. The grade and entrance level salary of the position are GS-15, \$40,832 per annum. Future salary adjustments are subject to the Merit Pay System. **Qualifications:** B.S. or higher degree in oceanography, meteorology, or the physical sciences. In addition, 3 years of professional experience which has equipped the candidate with the knowledge necessary to perform the above duties. **Selective factors:** applicants must have technical and administrative management experience in research and development. **To apply:** current or former federal employees should submit SF-171; two Employee Appraisals (CD-332) completed in full by the first and second level supervisors; form CD-332 may be obtained by telephoning: 303-499-1000, extension 6332 or FTS 323-6332. Applicants not employed by the federal government should submit a complete application package for "Physical Science Positions-1300." These forms may be obtained from the nearest Office of Personnel Management (OPM) which was formerly the U.S. Civil Service Commission. All applications should be submitted to: NOAA/NTIA, Personnel Services Division (R566), attention: Linda Stoll, Boulder, Colorado 80303. Reference Vacancy Number NOAA/ERL 80-84. Applications must be postmarked no later than 15 May 1980 to receive consideration. An Equal Opportunity Employer.

#### ANNOUNCEMENT

#### EIGHT-WEEK SUMMER COURSE ENTITLED "PRINCIPLES OF TOXICOLOGY" (COURSE 20.610)

#### MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

16 June through 8 August 1980

This 8-week graduate credit course will introduce the basic principles and techniques of toxicology, analytical chemistry, epidemiology, and risk assessment in the area of toxic chemicals in order to expand the knowledge of scientists and/or engineers already working in this area and for those in neighboring fields who are interested in learning more about the area. The subject matter will also include pharmacokinetics, genetic toxicology, analytical chemical methodology, epidemiological principles and methods, occupational health, and regulatory framework and environmental decision-making. Gerald N. Wogan, professor of toxicology and head of the Department of Nutrition and Food Science, is chairman of the Steering Committee. Other participating MIT departments include: Chemistry, Biology, Chemical Engineering, Economics, and the Center for Policy Alternatives. Other faculty include members of the Harvard School of Public Health and scientists from industry.

Applicants should have a background in chemistry, biology, or related science at least at the master's level. An Environmental Protection Agency Training Grant will provide stipends and tuition for 24 accepted applicants who must be U.S. citizens. Otherwise, the tuition fee is \$3,300. MIT dormitory space will be available for a fee for those interested in living on campus. The deadline for application is 15 May 1980. However, applications received subsequently will be considered. For further details and application forms, write:

Deborah L. McCoy, Program Administrator  
Department of Nutrition and Food Science  
Room 16-321  
Massachusetts Institute of Technology  
Cambridge, Mass. 02139  
Telephone: 617-253-5804



#### UNIVERSITY OF RIYADH SAUDI ARABIA

The University of Riyadh invites applications to fill the following vacancies in its College of Science for the academic year 1980-81:

#### PHYSICS DEPARTMENT

Assoc. Professors, specialized in Spectrum Analysis  
Demonstrators, holders of B.S. or M.S. in Physics  
Asst. Professors (female), specialized in Physics

#### MATHEMATICS DEPARTMENT

Professors, specialized in Group Theory, Rings Theory  
Assoc. Professors, specialized in Functional Analysis  
Asst. Professors, specialized in Real or Complex Analysis, Measure Theory, Computer Science, Numerical Analysis  
Asst. Professors (females), specialized in any branch of Pure Mathematics  
Research Assistants, specialized in Computer Science

#### CHEMISTRY DEPARTMENT

Asst. Professors, specialized in Industrial Inorganic Chemistry  
Demonstrators, holders of M.S. in Inorganic Chemistry, Electronic Spectra  
Research Assistants, specialized in Inorganic Chemistry, Inorganic and Analytical Chemistry, Analytical Chemistry, General Chemistry  
Laboratory Technicians, holders of M.S. in Organic Chemistry, Bio-Chemistry, Analytical Chemistry, General Chemistry

#### STATISTICS DEPARTMENT

Asst./Assoc. Professors, specialized in Stochastic Programming, Probabilistic Models in Operations Research, Biostatistics, Econometrics, Quality Control, Demography, Theory of Games and Decisions, Theory of Inference, Reliability and Life Testing

#### BOTANY DEPARTMENT

Assoc. Professors, specialized in Genetics, Plant Ecology, Plant Physiology, Virology  
Research Assistants for Industrial Microbiology, (to work as Demonstrators), holders of M.S. at least in Plant Ecology, Plant Physiology, General Microbiology, Anatomy, Plant Taxonomy

#### ZOOLOGY DEPARTMENT

Assoc. Professors, specialized in Animal Genetics  
Demonstrators, holders of M.S. in Fish Taxonomy  
Research Assistants, specialized in Vertebrate Morphology, Parasitology, Marine Biology, Environmental Physiology  
Assoc./Asst. Professors (female), holding Ph.D. in Zoology

#### CONDITIONS

Professor and Assoc. Professor:  
Already holds the title at an accredited university.  
Asst. Professor:  
Holder of a Ph.D. in the specialization.  
Demonstrator:  
Holder of B.S. with a general grade average no less than "Very Good" unless a higher qualification is required above.  
Research Assistant:  
Holder of B.S. with a general grade average no less than "Good" unless a higher qualification is required above.

#### GENERAL PROVISIONS

Applications accompanied by non-returnable copies of academic and experience certificates and a recent photograph should be mailed, within one month from date, to:

The Dean  
College of Science  
P. O. Box 2455  
Riyadh, Saudi Arabia

Previous applications should be renewed under the above provisions.  
Selected candidates only will be notified for personal interview.

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH ASSOCIATE** position available for EM study of mammalian muscle spindles. Experience desired in skeletal muscle ultrastructure. Salary dependent upon qualifications. Send résumé and names of three references to: **Dr. Jan Kucera, Neurology Department, Boston University School of Medicine, 750 Harrison Avenue, Boston, Mass. 02118.**

### POSTDOCTORAL RESEARCH ASSOCIATES

Applications invited from persons with backgrounds in:

- 1) Chemistry, molecular biology, or biophysics. Areas of interest include: (i) molecular mechanisms of mutagenesis, (ii) alteration of gene expression by carcinogens, and (iii) physical interactions between carcinogens and DNA. Apply to: **Dr. Thomas Meehan.**
- 2) Cell biology, biochemistry, or carbohydrate chemistry. Areas of interest include: (i) surface mucopolysaccharides of normal and transformed cells, (ii) analysis of cell surface properties by flow cytometry, and (iii) early detection of chemical transformation. Apply to: **Dr. Susan P. Hawkes.**

Send curriculum vitae and two or more letters of recommendation to: **Michigan Molecular Institute, 1910 West St. Andrews Road, Midland, Michigan 48640.** *Michigan Molecular Institute is an Equal Opportunity Institution.*

**POSTDOCTORAL RESEARCH ASSOCIATE:** cellular neurophysiologist with strong quantitative skills to collaborate in microphysiological and anatomical studies of synaptic function in normal and injured mammalian spinal cord. Starting date: fall 1980. Send statement of interests, curriculum vitae, and three letters of recommendation to: **Dr. J. B. Munson, Box J-244 JHMC, University of Florida, College of Medicine, Gainesville, Florida 32601** by 1 May 1980. *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL RESEARCH FELLOW,** for research on the anatomy and/or physiology of peripheral nerves and sensory end-organs. Salary is \$14,000 per year, plus fringe benefits. First preference will be given for experience in electrophysiology, and second preference for electron microscopy. Send curriculum vitae and names of three references to: **Dr. William R. Kennedy, 351 Space Science Center, University of Minnesota, Minneapolis, Minn. 55455.**

**POSTDOCTORAL RESEARCH POSITION.** Strong background in biochemistry, physiology, or pharmacology. Excellent research and training opportunities in the cardiovascular, renal, and endocrine areas. Send curriculum vitae and three letters of recommendation to: **Dr. A. Michelakis, Department of Pharmacology and Toxicology, Michigan State University, East Lansing, Mich. 48824.** *Michigan State University is an Affirmative Action/Equal Opportunity Institution.*

### RESEARCH ASSOCIATE

Ph.D. or equivalent with training in recombinant DNA techniques and nucleic acid biochemistry to work on research related to regulation of expression of genes in eukaryotic cells and eukaryotic cell differentiation primarily using erythropoietic cell models. Salary negotiable. Position available immediately. Send résumés to:

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**RESEARCH ASSOCIATE.** Appointee will be responsible for research in two areas: (i) characterization of ts mutants of yeasts, and (ii) heterotrophic nitrification by intestinal microorganisms. A strong background in microbiology and biochemistry, experience in working with membrane-bound enzymes, and demonstrated research ability are required. A Ph.D. in microbiology is required. Salary will be \$15,000 to \$17,000 per year; 40 hours per week. Send curriculum vitae and letters of reference to: **Dr. Steven R. Tannenbaum, Department of Nutrition and Food Science, Room 56-309, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, Mass. 02139.** *Massachusetts Institute of Technology is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**RESEARCH ASSOCIATE.** Postdoctoral position (up to 3 years) available immediately for structure determination of proteins. Background in protein chemistry or crystallography. Starting salary is \$13,668, plus fringe benefits. Send curriculum vitae and references to: **Dr. Edmund W. Czerwinski, Division of Biochemistry, The University of Texas Medical Branch, P.O. Box 146, Galveston, Texas 77550.** *The University of Texas Medical Branch is an Equal Opportunity/Affirmative Action Employer, M/F/H.*

### RESEARCH FACULTY POSITION IN DEPARTMENT OF PATHOLOGY

Opening for individual to work in collaborative projects on the pathogenesis of periodontal disease. Background in pharmacology, immunology, or pathology of inflammation desired with proven ability to publish in refereed journals. Appointment at assistant or associate professor level (nontenure-track). Salary is negotiable. Send curriculum vitae to: **Dr. N. S. Taichman, University of Pennsylvania, School of Dental Medicine, 4001 Spruce Street, Philadelphia, Pa. 19104.**

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**RESEARCH FELLOW OR ASSOCIATE—CARDIAC ELECTROPHYSIOLOGY.** Positions available for M.D. or Ph.D. (physiology or pharmacology) to conduct animal experiments. Experience in electrophysiology research desirable. Send curriculum vitae and two references to: **Jaak Han, M.D., Professor of Medicine, Albany Medical College, Albany, N.Y. 12208.**

### RESEARCH IMMUNOLOGY

The Department of Surgery at the Graduate Hospital, in affiliation with the University of Pennsylvania, has a position available as **research assistant professor of surgery** in the field of tumor immunology. Requirement: at least 5 years of research experience in tumor immunology with funding. The applicant must have an M.D. and interest in mechanisms of tumor regression in the immunotherapy system. Send curriculum vitae and reply to: **Dr. Paul Nemir, Jr., Professor of Surgery and Chief of Surgery, Graduate Hospital, One Graduate Plaza, Philadelphia, Pa. 19146.** *An Equal Opportunity Employer.*

### RESEARCH SCIENTIST IN HUMAN CYTOGENETICS

Ph.D. geneticist with research experience in cytogenetics is needed to work with cell synchronization, G-banded prophases, and gene mapping by in situ hybridization. Salary in the range of \$14,000.

Send curriculum vitae and references to: **Dr. Jorge J. Yunis, Department of Laboratory Medicine, Box 198, University of Minnesota Hospitals, Minneapolis, Minnesota 55455.**

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### RESEARCH SCIENTIST IN MOLECULAR GENETICS

Opening available for recent Ph.D. with strong background in molecular biology or biochemistry and career interest in nucleic acid research and chromosome structure. Work includes mapping of genes and mRNA sequences to G-banded human prophase chromosomes by in situ hybridization. Salary ranges between \$14,000 and \$15,000 per year.

To apply, send curriculum vitae and references to: **Dr. Jorge J. Yunis, Department of Laboratory Medicine, Box 198, University of Minnesota Hospitals, Minneapolis, Minnesota 55455.**

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One-year sabbatical replacement—**VERTEBRATE BIOLOGIST** with Ph.D. to teach a one-semester general biology course with four laboratory sections, an advanced specialty course, seminar, and a short-course during the January Winterim. Preferred areas of specialization are vertebrate ecology, developmental biology, or physiology. Rank is at assistant professor with salary commensurate with experience. Send letter of application, transcripts, curriculum vitae, and three letters of recommendation, to be received no later than 1 May 1980, to: **Search Committee, Biology Department, University of Puget Sound, P.O. Box 7297, Tacoma, Wash. 98407.** *Ethnic minority and women candidates are encouraged to apply. An Equal Opportunity/Affirmative Action Employer/Educator.*

## POSITIONS OPEN

**RESEARCH ASSOCIATES POSITIONS—Molecular biology.** Several positions available. Research involves working phages, animal viruses, yeast, nucleic acids, DNA sequencing and cloning. Stimulating projects in DNA tumor viruses, mammalian cell genetics, DNA repair, replication and new technologies for in vitro and in vivo genetic manipulations. Relevant experience desirable, but will train the right candidates. Educational requirement a Ph.D. Superbly equipped, stimulating and rapidly growing department, 10 miles from Downtown Manhattan and minutes from pleasant suburbs. Apply with résumé and references to: **Dr. G. DiMayorca, Professor and Chairman, Department of Microbiology, College of Medicine and Dentistry of New Jersey—New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103.** *Affirmative Action/Equal Opportunity Employer, M/F.*

The National Marine Fisheries Service (NMFS), *an Equal Opportunity Employer*, is seeking applicants for a **SAMPLING SURVEY STATISTICIAN** and an **ECOSYSTEM ECOLOGIST** position available through Title IV of the Intergovernmental Personnel Act of 1970. Under this act the federal government pays salaries, benefits, and travel expenses (amount allowed by federal status regulations) for professional personnel "loaned" to the government by an academic institution or state agency. The 2- to 4-year assignment for the statistician position will contribute statistical expertise and the ecologist position will involve ecosystem impact modelling and analysis. These positions will be part of a project management team at the NMFS Southeast Fisheries Center's Galveston Laboratory. This team has responsibility for managing several multi-institutional, multidisciplinary environmental impact research projects relating to energy development in the Gulf of Mexico. These projects are funded through inter-agency agreements between the National Oceanic and Atmospheric Administration, the Department of Energy, and the Environmental Protection Agency. Interested individuals, institutions, or state agencies should contact: **Dr. Edward F. Klima, Director, NMFS, SEFC Galveston Laboratory, 4700 Avenue U, Galveston, Texas 77550; telephone: 713-763-1211, extension 501.** Closing date for receipt of applications, résumés, and three letters of evaluation is 25 April 1980.

### YALE UNIVERSITY SCHOOL OF FORESTRY AND ENVIRONMENTAL STUDIES

**SOCIAL ECOLOGIST.** Applications and nominations are invited for a position as social ecologist specializing in the human dimensions of natural resource management as part of a multidisciplinary graduate program. Appointment will be at the associate professor level for a period of 3 to 5 years. Applicants must have a Ph.D. in sociology or wildlife ecology and a strong background of 5 to 10 years of successful research and teaching experience involving human perceptions and uses of natural resources with special attention to wildlife management and regulatory problems, such as endangered species, predator control, and habitat protection. The candidate must show proven ability to obtain substantial outside support for research in this area. Teaching requirements include a course in human dimensions in wildlife management for master's degree students and advanced courses at the master's and Ph.D. levels in the applicant's area of expertise. Applications must be sent by 30 April 1980 to: **Professor Albert C. Worrell, School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, Conn. 06511.**

*Yale University is an Equal Opportunity/Affirmative Action Employer.*

### YALE UNIVERSITY SCHOOL OF FORESTRY AND ENVIRONMENTAL STUDIES

**WILDLIFE ECOLOGIST.** Applications and nominations are invited for the position of wildlife ecologist at the assistant professor level. Applicants should have a Ph.D. with training in wildlife ecology and management. Teaching requirements include an introductory course in wildlife ecology for master's candidates in a multidisciplinary degree program and advanced courses at the master's and Ph.D. levels in the applicant's areas of expertise. Applications must be sent by 30 April 1980 to: **Dr. Richard S. Miller, School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, Conn. 06511.**

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## POSITIONS OPEN

**RESEARCH SCIENTIST**—Salary: \$13,325; bachelor's, plus 1 year of experience in appropriate field or 30 graduate hours. Duties: isolation and structural characterization of mucopolysaccharides and on enzymes of mucopolysaccharide catabolism. Experience in isolation and analysis of polysaccharides preferred. Send résumé with references to: **Personnel, Position Number 146, Institute for Basic Research in Mental Retardation, 1050 Forest Hill Road, Staten Island, N.Y. 10314. Affirmative Action/Equal Opportunity Employer.**

**VETERINARY PARASITOLOGIST**—The Department of Parasitology, College of Veterinary Medicine, University of Georgia, is accepting applications for a research associate position. Requirements for the position include D.V.M./M.S., Ph.D., or equivalent degree with experience in veterinary and human parasitology, laboratory maintenance of filariae, testing of anthelmintics, biochemistry of parasites, epidemiology and epizootiology, and computer programming. Duties include co-directing a filariasis drug screening program, directing anthelmintic screening projects, and developing a computer-based data management system. Deadline: 1 May 1980. Annual salary is \$16,000. Send curriculum vitae with the letter of application to: **Dr. John W. McCall, Associate Professor, College of Veterinary Medicine, University of Georgia, Athens, Georgia 30602. An Equal Opportunity/Affirmative Action Institution.**

## ANNUAL MEETING

**1980 Annual Meeting of the Council of Biology Editors.** The Council of Biology Editors, an organization devoted to improving scholarly communications in the biological and medical sciences, will hold its annual meeting at The Sheraton-Palace Hotel in San Francisco, Calif., 18 to 21 May 1980. Details and registration materials may be obtained from: **Margaret Foti, Program Chairman, Cancer Research Editorial Office, Temple University School of Medicine, Philadelphia, Pa. 19140.**

## COURSE

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For information, write to:

**Professor Donald Hornig  
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Harvard School of Public Health  
665 Huntington Avenue  
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### POSTDOCTORAL FELLOWSHIP

Position available immediately for Ph.D. and/or M.D. with experience in immunogenetics, immunopathology, or cellular immunology. Participate in ongoing NIH-supported studies of experimental African trypanosomiasis. Salary of \$12,100 per year, with support for up to 3 years. Send curriculum vitae and names of three referees to:

**Dr. John M. Mansfield  
Department of Microbiology and Immunology  
School of Medicine  
University of Louisville  
Louisville, Kentucky 40292  
Telephone: 502-588-5349/5351**

University of Washington. **POSTDOCTORAL FELLOWSHIP** (2 years plus) in new research program concerned with genetic aspects of the regulation of cell proliferation and cell aging, both in vivo and in vitro. Specific project concerns testing models of the clonal attenuation of cultured vertebrate cells. Curriculum vitae and references to: **Jonathan Gallant, Genetics, SK-50, University of Washington, Seattle, Wash. 98195.**

**POSTDOCTORAL FELLOWSHIP.** One-year appointment beginning 1 July with opportunity for second year. Departmental strengths include biomedical engineering and cardiovascular physiology with active research in myocardial dynamics, coronary flow, hemorrhagic shock, lymphatic drainage, capillary permeability, hypertension, and experimental diabetes. Send curriculum vitae to: **Dr. Francis L. Abel, Chairman, Department of Physiology, University of South Carolina School of Medicine, Columbia, S.C. 29208. An Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL FELLOWSHIPS IN IMMUNOLOGY** are available 1 July 1980 through the Division of Immunology, Department of Microbiology and Immunology, Duke University Medical Center. Training is offered in cellular immunology, human immunogenetics, tumor immunology, cell surface immunochromatography, and clinical immunology. Fellowships are open to American citizens and foreign nationals with permanent U.S. resident visas holding the Ph.D., M.D., or equivalent degree who have had less than 3 years of postdoctoral experience. Send letter of inquiry to: **Dr. E. G. Reisner, Box 3010, Duke University Medical Center, Durham, N.C. 27710.**

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### CARDIAC ELECTROPHYSIOLOGY

Postdoctoral research positions (two) to study electrophysiology and pharmacology of human heart muscle and animal models of disease and dysrhythmia. Studies employ standard glass microelectrode and ion selective electrode techniques. Voltage clamp also available. Experience with glass microelectrode methodology highly desirable. Excellent facilities and environment. Send curriculum vitae and three professional references to: **Dr. D. H. Singer, Department of Pharmacology, c/o Reingold ECG Center, Northwestern University Medical School, 310 East Superior Street, Chicago, Ill. 60611.**

## FELLOWSHIPS

**POSTDOCTORAL FELLOWSHIPS IN VIRAL AND CHEMICAL CARCINOGENESIS**, NCI training grant. Fellowships starting immediately are available. University-wide research emphasis on cell culture studies of mechanisms of chemical carcinogenesis and mutagenesis; prevention of carcinogenesis; differentiation, proteases, and carcinogenesis; cytogenetics; and epidemiology and molecular biology of RNA and DNA tumor viruses. Interdisciplinary collaboration encouraged. Candidates must be U.S. citizens or permanent residents and must possess M.D., Ph.D., or equivalent degree. Send curriculum vitae, bibliography, research interests, and names of three references to: **Dr. Charles Heidelberger, University of Southern California, Comprehensive Cancer Center, 1721 Griffin Avenue, Los Angeles, California 90031. An Equal Opportunity Employer.**

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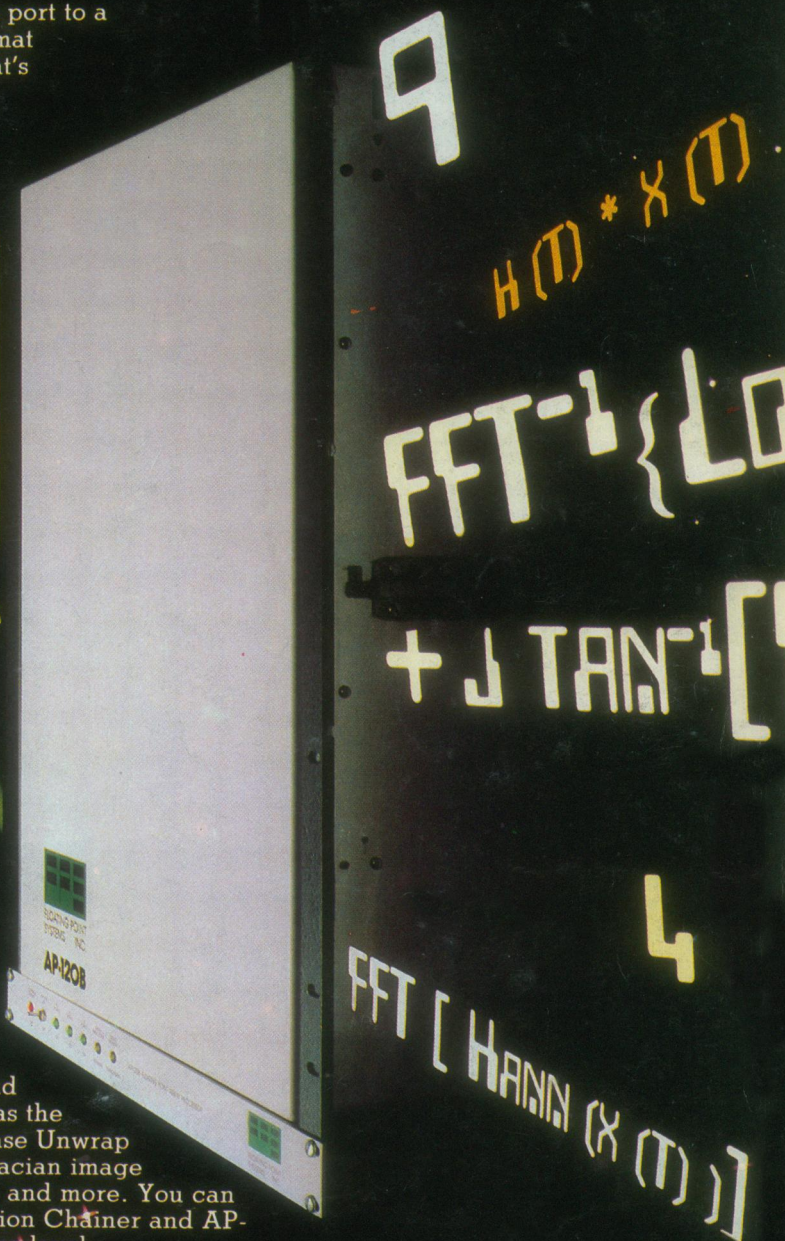
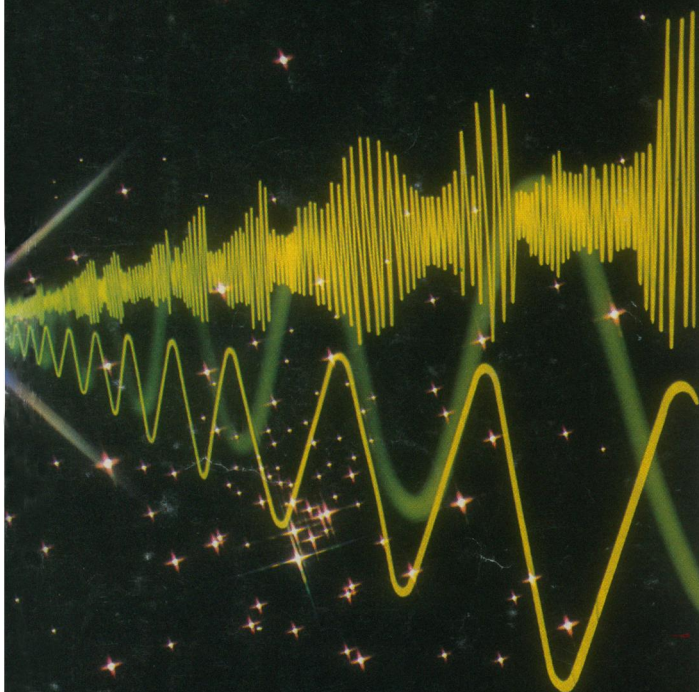
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