

to \$34.85. The average prices per page for the natural science books for the years covered in Table 1 were 6.8¢, 7.8¢, 8.6¢, and 9.0¢.

The figures given in Table 1 for technical books in the natural sciences are on average about 30 percent higher than the comparable figures from the frequently cited annual tabulations published by the R. R. Bowker Company (see, for example, *Publishers Weekly* 26 Sept. 1980 and the yearly volumes of the *Bowker Annual of Library and Book Trade Information*). The principal reason for the difference no doubt is that the Bowker tabulation headed "science" includes books intended for general audiences, whereas the *Science* tabulation represents professional-level books almost exclusively.

If documentation were needed that the price of books has been increasing, Table 1 provides some. For the period covered the total increase in the average price of books reviewed in *Science* was 27.5 percent and the increase in the average price of the natural science books was 30.3 percent. Year by year, the rate of increase in the price of natural science books as represented in Table 1 (10.2 percent, 8.7 percent, and 8.8 percent) was relatively steady by comparison with rates of increase as indicated by the overall data from *Science* or by the Bowker data for books in science or for books generally. Over the years covered in Table 1 the increase in the (annual average) Consumer Price Index was 36.1 percent, and the increase in average faculty salaries as reported by the American Association of University Professors (1976-77 to 1979-80) was 20.6 percent.

KATHERINE LIVINGSTON

## Science

## Books Received

**Alternative Methods of Agriculture.** R. Boeringa, Ed. Elsevier, New York, 1980. vi, 200 pp. \$48.75. Developments in Agricultural and Managed-Forest Ecology, vol. 10.

**Amber.** The Golden Gem of the Ages. Patty C. Rice. Van Nostrand Reinhold, New York, 1980. xii, 290 pp., illus. + plates. \$26.95.

**Animals, Feed, Food and People.** An Analysis of the Role of Animals in Food Production. Papers from a AAAS symposium, Houston, Jan. 1979. R. L. Baldwin, Ed. Published for the American Association for the Advancement of Science by Westview Press, Boulder, Colo., 1980. xxii, 150 pp., illus. \$15. AAAS Selected Symposia Series, vol. 42.

**Annual Review of Earth and Planetary Sciences.** Vol. 8. Fred A. Donath, Francis G. Stehli, and George W. Wetherill, Eds. Annual Reviews, Palo Alto, Calif., 1980. x, 626 pp. illus. \$17.

**Anthracyclines.** Proceedings of a workshop, Norfolk, Va., June 1979. Stanley T. Crooke and Steven D. Reich, Eds. Academic Press, New York, 1980. xiv, 444 pp., illus. \$27.50.

**Biochemistry of Dementia.** Papers from a workshop, Southampton, Mar. 1979. P. J. Roberts, Ed. Wiley-Interscience, New York, 1980. xiv, 272 pp., illus. \$46.

**The Biocultural Basis of Health.** Expanding Views of Medical Anthropology. Lorna G. Moore, Peter

W. Van Arsdale, JoAnn E. Glittenberg, and Robert A. Aldrich. Mosby, St. Louis, 1980. x, 278 pp., illus. Paper, \$11.95.

**Climatic Change in Canada.** National Museums of Natural Sciences Project on Climatic Change in Canada during the Past 20,000 Years, 1977-78. C. R. Harrington, Ed. National Museum of Natural Sciences, Ottawa, 1980. 246 pp., illus. Paper. *Syllogeus*, No. 26.

**Climatic Races and Descent Groups.** Grover S. Krantz. Christopher Publishing House, North Quincy, Mass., 1980. 272 pp., illus. \$14.95.

**COBOL Programming.** A Structured Approach. Peter Abel. Reston (Prentice-Hall), Reston, Va., 1980. xvi, 408 pp., illus. Paper, \$12.95.

**Cocaine Users.** A Representative Case Approach. James V. Spotts and Franklin C. Shontz. Free Press (Macmillan), New York, and Collier Macmillan, London, 1980. x, 518 pp., illus. \$19.95.

**Current Topics in Eye Research.** Vol. 2. Jose A. Zadunaisky and Hugh Davson, Eds. Academic Press, New York, 1980. xiv, 308 pp., illus. \$35.

**Currents in Alcoholism.** Vol. 7, Recent Advances in Research and Treatment. Marc Glanater, Ed. Grune and Stratton, New York, 1980. xxii, 548 pp., illus. \$48.

**Drafting and Manual Programming for Numerical Control.** Harold L. Chambers and Caryl Ann Chacey. Prentice-Hall, Englewood Cliffs, N.J., 1980. xxviii, 532 pp., illus. \$28.95.

**Drug-Induced Sufferings.** Medical, Pharmaceutical and Legal Aspects. Proceedings of a conference, Kyoto, Japan, Apr. 1979. T. Soda, Ed. Excerpta Medica, Amsterdam, 1980 (U.S. distributor, Elsevier/North-Holland, New York), xxii, 516 pp., illus. \$97.50.

**Educating Medical Teachers.** George E. Miller, Harvard University Press, Cambridge, Mass., 1980. xii, 236 pp. \$15. A Commonwealth Fund Book.

**The Effect of Air Ionization, Electric Fields, Atmospheres and Other Electric Phenomena on Man and Animal.** Felix Gad Sulman. Thomas, Springfield, Ill., 1980. xx, 398 pp., illus. Cloth, \$24.75; paper, \$18.75. American Lecture Series Publication No. 1029.

**The 8080-8085 Microprocessor Book.** Intel Marketing Communications. Wiley-Interscience, New York, 1980. xvi, 604 pp., illus. Paper, \$19.50.

**Elkkaos. A History.** John J. Stanley. Vantage, New York, 1979. xviii, 158 pp. \$6.95.

**Elementary Computer Programming in FORTRAN IV.** Boris W. Boguslavsky. Reston (Prentice-Hall), Reston, Va., ed. 2, 1980. xii, 482 pp. Paper, \$17.95.

**The Embryogenesis of the Human Skull.** An Anatomical and Radiographic Atlas. Robert Shapiro and Franklin Robinson. Harvard University Press, Cambridge, Mass., 1980. xiv, 102 pp. \$45. A Commonwealth Fund Book.

**Encouraging Girls in Mathematics.** The Problem and the Solution. Lorelei R. Brush with the assistance of Cynthia Char, Nancy Irwin, and Glen Takata. Abt Books, Cambridge, Mass., 1980. xvi, 164 pp. \$16.

**Fungal Polysaccharides.** Papers from a symposium, Honolulu, Apr. 1979. Paul A. Sanford and Kazuo Matsuda, Eds. American Chemical Society, Washington, D.C., 1980. x, 284 pp., illus. \$31.50. ACS Symposium Series, 126.

**Gastrointestinal Hormones.** George B. Jerzy Glass, Ed. Raven, New York, 1980. xxii, 1008 pp., illus. \$85.

**General Chemistry.** Principles and Structure. James E. Brady and Gerard E. Humiston. SI Version Prepared by Henry Hinkinen. Wiley, New York, ed. 2, 1980. xvi, 780 pp., illus. \$21.50.

**The Geometry of Biological Time.** Arthur T. Winfree. Springer-Verlag, New York, 1980. xiv, 530 pp., illus. \$32. Biomathematics, vol. 8.

**Glass. Science and Technology.** Vol. 5, Elasticity and Strength in Glasses. D. R. Uhlmann and N. J. Kreidl, Eds. Academic Press, New York, 1980. xii, 282 pp., illus. \$35.

**Handbook of Stopping Cross-Sections for Energetic Ions in All Elements.** J. F. Ziegler. Pergamon, New York, 1980. iv, 432 pp. \$50. The Stopping and Ranges of Ions in Matter, vol. 5.

**Handbuch zur Bestimmung der europäischen Borkenkäfer.** Brief Illustrated Key to European Bark Beetles. Sabine Grüne. Schaper, Hannover, Germany, 1979. 182 pp. DM 38.40.

**The Hawaiian Goose.** An Experiment in Conservation. Janet Kear and A. J. Berger. Buteo Books, Vermillion, S.D., 1980. 156 pp., illus. + plates. \$30.

**Herculine Barbin.** Being the Recently Discovered Memoirs of a Nineteenth-Century French Hermaphrodite. Introduced by Michael Foucault. Translated from the French edition (1978) by Richard McDougall. Pantheon, New York, 1980. xviii, 202 pp. Cloth, \$8.95; paper, \$4.95.

**The Herders of Cyrenaica.** Ecology, Economy, and Kinship among the Bedouin of Eastern Libya. Roy H. Behnke, Jr. University of Illinois Press, Urbana, 1980. xii, 198 pp., illus. + plates. Paper,

\$11.95. Illinois Studies in Anthropology, No. 12.

**Immune Complexes in Clinical and Experimental Medicine.** Ralph C. Williams, Jr. Harvard University Press, Cambridge, Mass., 1980. x, 566 pp., illus. \$50. A Commonwealth Fund Book.

**Indian Hill Birds.** S9ALIM Ali. Illustrated by G. M. Henry. Oxford University Press, New York, 1980. lvi, 188 pp. \$24.95. Reprint of the 1949 edition.

**Integration in the Nervous System.** A Symposium in Honor of David P. C. Lloyd and Rafael Lorente de N6. New York, May 1978. Hiroshi Asanuma and Victor J. Wilson, Eds. Igaku-Shoin, New York, 1979. x, 358 pp., illus. \$52.50.

**Modern Trends in the Theory of Condensed Matter.** Proceedings of a school, Karpacz, Poland, Feb. 1979. A. Pekalski and J. Przystawa, Eds. Springer-Verlag, New York, 1980. x, 598 pp., illus. Paper, \$40.20. Lecture Notes in Physics, vol. 115.

**Modification of Polymers.** Papers from a symposium, Honolulu, Apr. 1979. Charles E. Carraher, Jr., and Minoru Tsuda, Eds. American Chemical Society, Washington, D.C., 1980. xii, 500 pp., illus. \$39.50. ACS Symposium Series, 121.

**Multiple Criteria Decision Making Theory and Application.** Proceedings of a conference, Hagen/Königswinter, Germany, Aug. 1979. G. Fandel and T. Gal, Eds. Springer-Verlag, New York, 1980. xvi, 570 pp., illus. Paper, \$44.90. Lecture Notes in Economics and Mathematical Systems, vol. 177.

**Natural Convection.** Heat and Mass Transfer. Yogesh Jaluria. Pergamon, New York, 1980. x, 326 pp., illus. \$51. HMT: The Science and Applications of Heat and Mass Transfer.

**New Anticancer Drugs.** Papers from a symposium, Tokyo, June 1978. Stephen K. Carter and Yoshio Sakurai, Eds. Springer-Verlag, New York, 1980. xii, 232 pp., illus. \$49. Recent Results in Cancer Research, 70.

**Paleoanthropology.** Milford H. Wolpoff. Knopf, New York, 1980. xxxii, 384 pp., illus. \$19.95.

**Pavlovian Second-Order Conditioning.** Studies in Associative Learning. Robert A. Rescorla. Erlbaum, Hillsdale, N.J., 1980 (distributor, Halsted [Wiley], New York. viii, 120 pp., illus. \$14.95.

**Psychotherapy and Training in Clinical Social Work.** Judith Mishne, Ed. Gardner Press, New York, 1980 (distributor, Halsted [Wiley], New York). xvi, 288 pp. \$22.95.

**Purification of Laboratory Chemicals.** D. D. Perrin, W. L. F. Armarego, and D. R. Perrin. Pergamon, New York, ed. 2, 1980. x, 568 pp. \$72.

**Recent Advances in Ultrasound Diagnosis 2.** Proceedings of a symposium, Dubrovnik, Oct. 1979. Asim Kurjak, Ed. Excerpta Medica, Amsterdam, 1980 (U.S. distributor, Elsevier/North-Holland, New York). x, 560 pp., illus. \$97.50.

**Recent Perspectives on American Sign Language.** Harlan Lane and François Grosjean, Eds. Erlbaum, Hillsdale, N.J., 1980. vi, 170 pp. \$16.50.

**Rehabilitation of the Visually Disabled and the Blind at Different Ages.** Papers from a symposium, Basel, June 1980. Balder Gloor and Roland Brückner, Eds. University Park Press, Baltimore, 1980. 164 pp., illus. Paper, \$29.50.

**Research Animals and Experimental Design in Nephrology.** Papers from a symposium, Hannover, Dec. 1978. H. Stoltz and J. Alt, Eds. Karger, Basel, 1980. x, 250 pp., illus. Paper, \$53.50.

**The Sounds of Speech Communication.** A Primer of Acoustic Phonetics and Speech Perception. J. M. Pickett. University Park Press, Baltimore, 1980. xiv, 250 pp., illus. \$19.95. Perspectives in Audiology Series.

**Spacetime, Geometry, Cosmology.** William L. Burke. University Science Books, Mill Valley, Calif., 1980. xxii, 330 pp., illus. \$22.50.

**Speaking of Apes.** A Critical Anthology of Two-Way Communication with Man. Thomas A. Sebeok and Jean Umiker-Sebeok, Eds. Plenum, New York, 1980. xx, 480 pp., illus. \$37.50. Topics in Contemporary Semiotics.

**Surges in High-Voltage Networks.** Proceedings of a symposium, Baden, Switzerland, Sept. 1979. Klaus Ragaller, Ed. Plenum, New York, 1980. xxiv, 424 pp., illus. \$47.50. Brown Boveri Symposia.

**Teaching Linguistically Handicapped Children.** Mildred Freburg Berry. Prentice-Hall, Englewood Cliffs, N.J., 1980. xiv, 318 pp., illus. \$16.95.

**Text Anxiety.** Theory, Research, and Applications. Irwin Ag. Sarason, Ed. Erlbaum, Hillsdale, N.J., 1980. x, 406 pp. \$24.95.

**Text, Discourse, and Process.** Toward a Multidisciplinary Science of Texts. Robert de Beaufrand. Ablex, Norwood, N.J., 1980. xvi, 352 pp., illus. \$27.50. Advances in Discourse Processes Series, vol. 4.

**The Virial Coefficients of Pure Gases and Mixtures.** A Critical Compilation. J. H. Dymond and E. B. Smith. Clarendon (Oxford University Press), New York, 1980. xvi, 518 pp. \$69.

**Visual Coding and Adaptability.** Charles S. Harris, Ed. Erlbaum, Hillsdale, N.J., 1980. viii, 392 pp., illus. \$24.95.

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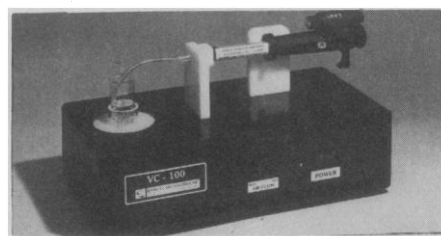
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## Literature

*New Titles* is a catalog of references, textbooks, handbooks, and monographs for the laboratory and classroom. CRC Press. Circle 817.

*Planetarium System* is devoted to the model 7700, a portable unit for teaching astronomy. MMI. Circle 818.

*Clartuf Fact Sheet* describes a wood substitute reconstituted from disposable polyester containers. Goodyear Chemical Division. Circle 819.

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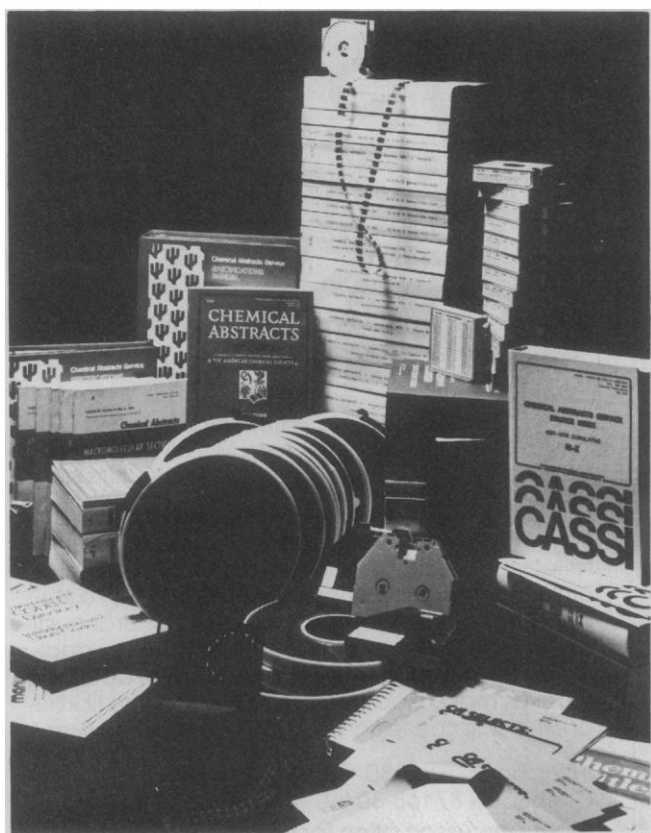
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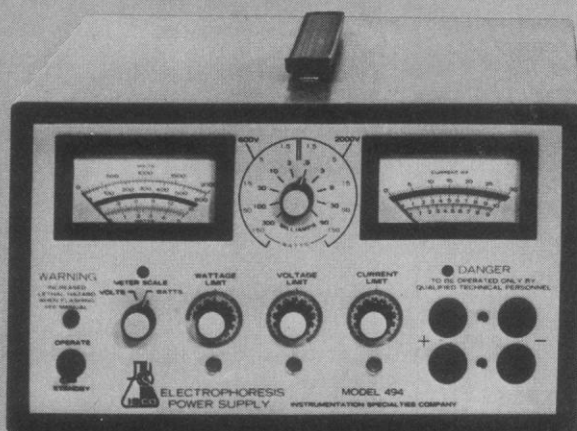
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Benedict, Md. 20612

### QUEEN'S UNIVERSITY DEPARTMENT OF BIOCHEMISTRY ASSISTANT PROFESSOR OF BIOCHEMISTRY

Applications are invited from molecular biologists carrying out research in areas eligible for funding by the National Cancer Institute of Canada. The appointment will be as an assistant professor in the Department of Biochemistry, Queen's University. The successful candidate would be nominated by Queen's University for a NCI Scholarship in the competition in 1981-1982. These awards are tenable for 6 years. Scholars are then eligible for career appointments as research associates of the National Cancer Institute of Canada. The salary will depend on qualifications and experience and will include all the benefits of a tenured staff member. Curriculum vitae, a brief description of the proposed research, and the names of three references should be sent to:

Dr. J. H. Spencer  
Department of Biochemistry  
Queen's University  
Kingston, Ontario, Canada K7L 3N6

### VIROLOGISTS

Genentech, Inc., a highly innovative company engaged in recombinant DNA research, is seeking to expand its scientific staff at both the scientist and senior scientist levels.

Positions now exist in the Biology Department for individuals with backgrounds in animal virology and/or the biochemistry of viral polypeptides.

Ideal candidates will have a doctorate degree and a minimum of 2 years of postdoctoral experience in virology or comparable industrial experience in vaccine delivery systems.

Genentech offers competitive salaries and an excellent benefit package. Interested applicants should send curriculum vitae and the names of three references to: **J. M. Robertson,**

GENENTECH, INC.  
460 Point San Bruno Boulevard  
South San Francisco, Calif. 94080

## POSITIONS OPEN

**ASSISTANT PROFESSOR.** The Division of Biological Control, Department of Entomology, University of California, Riverside, announces a tenure-track position, available 1 July 1981, in biological control/applied insect ecology, involving fundamental and applied studies on biological control and IPM of citrus and other subtropical orchard crops. The appointment is on an 11-month basis, 90 percent research and 10 percent teaching. Applicants must have a Ph.D. degree and should have extensive training or experience in applied insect ecology/entomology and related areas such as biological control, insect population ecology, plant sciences, biology of natural enemies, and integrated pest management. Send curriculum vitae, names and addresses of five referees, dissertation summary, bibliography, reprints and manuscripts in press, and statement of research interests to: **Dr. James A. McMurtry, Search Committee Chairman, Department of Entomology, University of California, Riverside, Calif. 92521.** Applications will be accepted until 1 April 1981, or later if a suitable candidate has not been selected. *An Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT PROFESSOR.** A tenure-track (12 months) opening is anticipated in July 1981. This is a different position from the opening advertised in 1980. An individual with a strong background in microbiology or bacteriology who will develop an active research program is desired. Potential research areas include physiology, organismal microbiology, biotechnology, host-parasite relationships, ecology, or molecular taxonomy. Ability and willingness to teach in our undergraduate and graduate program are necessary. Individuals with postdoctoral training are invited to send their curriculum vitae, most significant reprints, a short statement of projected research plans, and letters from three references to: **Dr. T. D. Brock, Chairman, Department of Bacteriology, University of Wisconsin, 1550 Linden Drive, Madison, Wis. 53706. The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer in compliance with Titles VI and IX.** Deadline: 1 June 1981.

### Faculty Position Department of Forestry and Resource Management and Forest Products Laboratory University of California, Berkeley ASSISTANT PROFESSOR AND ASSISTANT WOOD TECHNOLOGIST (WOOD PHYSICS)

**Responsibilities:** (i) Teach an undergraduate course on the physical properties of wood and a graduate level course in advanced wood physics on an alternate year basis. Share teaching responsibilities for general course on the role of wood in today's society or teach a course on wood as a fuel source; (ii) guide graduate students' research in wood physics; and (iii) plan and carry forward research in the physics of wood as related to energy production and conservation and other wood physics problem areas.

**Qualifications:** Ph.D. completed or nearly completed; background in wood science with strong emphasis on wood physics.

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

Write: **D. G. Arganbright, Chairman  
Search Committee  
University of California  
Forest Products Laboratory  
47th and Hoffman Streets  
Richmond, Calif. 94804**

Closing date for applications: 15 May 1981.  
Starting date for position: 1 July 1981.

**BIOCHEMIST**—Position for Ph.D. with postdoctoral experience in quantitative analyses of proteins; background in two-dimensional gel electrophoresis with computer utilization desirable. Salary commensurate with experience. Address replies to: **Dr. E. Zuckerkandl, Linus Pauling Institute, 440 Page Mill Road, Palo Alto, Calif. 94306. Linus Pauling Institute is an Equal Opportunity Employer.**

**BIOCHEMIST FOR RADIOIMMUNOASSAY**  
Experienced in the optimization of reagents for kits. Salary commensurate with education and experience. Grow with a dynamic young company. Contact:

Dr. Arden Kelton, President  
Immuron, Inc.  
1531 Monrovia Avenue  
Newport Beach, California 92663  
Telephone: 714-645-7051



## POSITIONS OPEN

Opening is a tenure-track position for **ASSISTANT PROFESSOR OF BIOLOGY** effective 1 September 1981. Ph.D., strong background in microbiology and cell biology, an inquiry approach to teaching, and a commitment to church-related liberal arts education are required. Must be able to teach introductory biology for majors and nonmajors, microbiology and cell biology, and supervise senior research projects. Teaching experience and special training in plant physiology are desirable.

Send curriculum vitae and three reference letters to: **Philip E. Ode, Chairman, Department of Biology, Thiel College, Greenville, Pennsylvania 16125.**

Application deadline is 31 March 1981. *Thiel College is an Equal Opportunity/Affirmative Action Employer.*

**BIOCHEMIST.** Postdoctoral position in lipids, protein chemistry, glycoproteins, biochemistry of plant pathogen interaction. Send application and three letters of recommendation by 1 April 1981 to: **P. E. Kolattukudy, Institute of Biological Chemistry, Washington State University, Pullman, Washington 99164.** An Affirmative Action/Equal Opportunity Employer.

University of Michigan Medical School, Department of Psychiatry, has a full-time academic appointment as **DIRECTOR, Outpatient Program, Clinical Studies Unit (CSU).** The CSU is a research unit with ten inpatient beds and accompanying outpatient clinic, specializing in research evaluation and treatment of patients with affective disorders. Emphasis on developing biological markers of depression and mania, especially neuroendocrine, sleep, and psychomotor parameters. Excellent research support and resources already established. Tenure-track appointments at academic rank appropriate to qualifications and experience. Send curriculum vitae and names and addresses of three references to: **John F. Greden, M.D., Department of Psychiatry, University of Michigan Medical Center, Ann Arbor, Michigan 48109; telephone: 313-763-4382.** A nondiscriminatory, Affirmative Action Employer. Code 105HO.

## POSITIONS OPEN

**ASSISTANT PROFESSOR, ENVIRONMENTAL ENGINEER,** tenure-track, in interdisciplinary Environmental Science Department. Diverse problem-oriented research, undergraduate/graduate courses, training in environmental/pollution engineering. Emphasis: wastewater, industrial waste, advanced waste treatment; engineering approaches to pollution problems. Ph.D. required.

Begin September 1981 or earlier. Respond by 1 May to: **Dr. P. F. Strom, Department of Environmental Science, Cook Campus, Rutgers University, New Brunswick, N.J. 08903; telephone: 201-932-9571.** Affirmative Action/Equal Opportunity Employer.

University of Michigan Medical School has a position available for an **ASSISTANT PROFESSOR, CARDIOVASCULAR PHYSIOLOGIST** to become Director of Thoracic Surgery Research in the Department of Surgery and to assume a tenure-track faculty position in the Department of Physiology. Duties include: establishing an outstanding cardiovascular research program in the Section of Thoracic Surgery; teaching physiology to medical, other health professional students, and graduate students. Necessary qualifications include Ph.D. or M.D. degree, at least 2 years of postdoctoral research training, and record of published work in cardiovascular physiology. Reply to: **Dr. Jack L. Kostyo, Chairman, Department of Physiology, University of Michigan Medical School, Ann Arbor, Mich. 48109.** A nondiscriminatory, Affirmative Action Employer. Code 31FO.

University of Michigan Medical School, Department of Internal Medicine, has a position available at the rank of **INSTRUCTOR TO PROFESSOR** to work in the Division of Ambulatory Care. The individual will have patient care and teaching activities in both ambulatory care and inpatient settings. Candidates should be Board-eligible in internal medicine and have an interest in health services and research. Address inquiries, including curriculum vitae, to: **Jeffrey K. Stross, M.D., Department of Internal Medicine, The University of Michigan Medical School, Ann Arbor, Michigan 48109.** A nondiscriminatory, Affirmative Action Employer. Code 25BO.

## POSITIONS OPEN

University of Michigan Medical School, Department of Psychiatry, has a full-time appointment available as **MEDICAL DIRECTOR, Inpatient Program, Clinical Studies Unit (CSU).** The CSU is a research unit with ten inpatient beds and accompanying outpatient clinic, specializing in research evaluation and treatment of patients with affective disorders. Emphasis on developing biological markers of depression and mania, especially neuroendocrine, sleep, and psychomotor parameters. Excellent research support and resources already established. Tenure-track appointments at academic rank appropriate to qualifications and experience. Send curriculum vitae and names and addresses of three references to: **John F. Greden, M.D., Department of Psychiatry, University of Michigan Medical Center, Ann Arbor, Michigan 48109; telephone: 313-763-4382.** A nondiscriminatory, Affirmative Action Employer. Code 154EO.

The **DEPARTMENT OF BIOLOGY** at **IDAHO STATE UNIVERSITY** is accepting applications for two new faculty for renewable 9-month appointments, to begin 20 August 1981, as follows:

- 1) **HUMAN PATHOLOGIST/PHYSIOLOGIST**, with expertise in descriptive pathology, pathophysiology, and mammalian physiology;
- 2) **HUMAN ANATOMIST**, with expertise in head and central nervous system anatomy and microscopic anatomy desired.

These are grant-funded positions which carry a starting salary of \$18,000 plus benefits. A doctorate is required. The successful applicants will be expected to participate in the department's graduate, undergraduate, research, and public service programs. Aspirants should send transcripts, curriculum vitae, evidence of instructional experience and research potentials (including a one-page statement of educational philosophy), and the names and telephone numbers of at least three references to: **Chairman, Pathologist OR Anatomist Search Committee (whichever applies), Department of Biology, Idaho State University, Pocatello, Idaho 83209.** The closing date for receipt of application materials is 20 March 1981. *Idaho State is an Affirmative Action/Equal Opportunity Employer; applications from women and minorities are urged.*

### UNIVERSITY OF ALASKA CHANCELLOR, UNIVERSITY OF ALASKA, FAIRBANKS

The University of Alaska seeks applications and nominations for the position of **Chancellor** of its Fairbanks campus. The chancellor is responsible for developing and implementing all instructional, research, and public service programs, and for planning, organizing, and directing all operations of the Fairbanks campus. One of four divisions of the University of Alaska Statewide System, the Fairbanks campus is a residential campus with 3800 students, a broad range of academic programs leading to degrees from associate to doctoral, and a group of nationally and internationally recognized research institutes.

The University of Alaska is both a land-grant and a sea-grant university with centers at Fairbanks, Anchorage, and Juneau, and a community college division that provides educational opportunities throughout the state.

Academic experience, demonstrated skill in executive management of higher education, and an earned doctorate are required. Salary is competitive and appropriate to the Alaskan economy.

Letters of application and/or nomination, accompanied by a current résumé and four letters of reference, should be sent to:

**Chancellor Search Committee  
Office of Human Resource Development  
Room 113, Bunnell Building  
University of Alaska  
Fairbanks, Alaska 99701**

Closing date is 15 March 1981; appointment may begin as soon as 1 July 1981. Applications may be subject to public disclosure.

*The University of Alaska is an Affirmative Action/Equal Opportunity Employer and Educational Institution.*

### KING FAISAL UNIVERSITY COLLEGE OF VETERINARY MEDICINE AND ANIMAL HEALTH Hofuf, Saudi Arabia

Faculty positions are presently open for the 1981-1982 academic year in the following fields:

<b>Biology</b>	<b>Veterinary Medicine</b>
<b>Mathematics</b>	<b>and Therapeutics</b>
<b>Veterinary Surgery</b>	<b>Veterinary Anatomy</b>
<b>Veterinary Ob/Gyn</b>	<b>and Histology</b>
<b>Clinical Parasitology</b>	<b>Veterinary Clinical</b>
<b>Animal Production</b>	<b>Pathology</b>
<b>Genetics and Breeding</b>	<b>Food Hygiene and</b>
<b>Veterinary Bacteriology</b>	<b>Meat Inspection</b>
<b>Forensic Medicine</b>	<b>Toxicology and</b>
<b>Veterinarian</b>	<b>Forensic Medicine</b>
<b>Fish Diseases</b>	

**PREREQUISITES:** Advanced degrees (B.A., Ph.D., or D.V.M.) with both practical and teaching experience.

Language of instruction is English. Positions open in September 1981. Interview dates to be announced.

**BENEFITS:** Free furnished apartments (two-bedroom), educational allowance for up to four children, annual air tickets to and from Saudi Arabia for up to four persons, 60-day paid vacation each summer, baggage allowance of one-half of one month's salary one time only. No Saudi income tax. Contracts for 1 year, renewable.

**SEND** curriculum vitae, copies of certificates, and names, addresses, and telephone numbers of three references to:

**Dr. Ibrahim El Desourgi Mustafa  
Dean, College of Veterinary Medicine  
King Faisal University  
c/o Saudi Arabian Educational Mission  
2425 West Loop South  
Houston, Texas 77027**

OR

**c/o P.O. Box 2  
Sudbury-on-Thames  
Middlesex TW16 5JP, England**

### Director, Institute for the Medical Humanities The University of Texas Medical Branch (UTMB) Galveston, Texas

The director is in charge of staff and programs and has the responsibility of designing and promoting the structure and the programs of the Institute and relating them to other elements of the Medical Center.

Candidates should be learned and experienced in the humanities and the social and behavioral sciences, particularly as regards professional training, teaching, and practice, and should be recognized as persons of sound medical understanding and experience. Candidates should show evidence of substantial scholarly accomplishments.

The director must be able to recruit persons of scholarly and pedagogic achievements or promise, attract fellows and graduate students, and guide, assist, stimulate, and support their work. The candidate will be expected to develop and maintain support from internal sources and appropriate state, federal, and foundation sources through local, regional, national, or international agencies, programs, and organizations. The director prepares and manages the Institute's budget and other fiscal matters.

The director must have or be qualified for tenure and full professorship, and have sound skills in writing and teaching students in various branches and stages of development throughout the University Medical Center. Commitment to and participation in community, state, and national affairs as they relate to the work and mission of the Institute are vital.

Interested persons should contact: **Melvyn H. Schreiber, M.D., Chairman, Medical Humanities Search, Department of Radiology, University of Texas Medical Branch, Galveston, Texas 77550.**

*UTMB is an Affirmative Action Employer*

## POSITIONS OPEN

**ASSISTANT PROFESSORSHIP** for **psychologist** with Ph.D. degree or **physician** with interest and experience in the area of alcoholism. Must be well versed in the various theoretical models of alcoholism and experienced in their clinical application to drinking and abstinence as well as experienced in the teaching and supervision of residents and medical students and with the development of professional seminars. Research ability will be taken into account in the selection process. Evidence of administrative proficiency, including that utilized in staff supervision and budget preparation, as well as an understanding of state and federally funded programs, is required.

*Stanford University is an Equal Opportunity Employer and we are especially interested in considering both minority and women candidates and welcome applications from them.* Prospective candidates please contact: **Raymond B. Clayton, Ph.D., Chairman of the Search Committee, Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, California 94305; telephone: 415-497-5761.**

### ASSISTANT RESEARCH BIOCHEMIST

Applications are invited for an assistant research biochemist in a large, active laboratory in the Department of Biochemistry and Biophysics at the University of California, San Francisco. Candidates should have at least 3 years of relevant postdoctoral experience in the areas of cell tissue culture, recombinant DNA techniques, use of SV40 as an eukaryotic vector, cell transformation, use of teratocarcinoma cells in studying differentiation, and DNA sequencing. The successful candidate should be able to carry out a substantially independent research program in the area of eukaryotic gene expression and differentiation.

Candidates should submit curriculum vitae (including a list of references), the names (only) of at least three persons willing to write letters of reference, and any other relevant material by 31 March to: **Search Committee, Department of Biochemistry and Biophysics, University of California, San Francisco, San Francisco, Calif. 94143.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

### BACTERIOLOGIST

Academic appointment in tenure track is available for individual with either a Ph.D. or M.D. degree with training and research experience in bacteriology, preferably in the immunological or molecular aspects of bacterial diseases. Responsibilities include teaching bacteriology to medical students.

Assistant professor sought. Rank and salary dependent on qualifications.

Curriculum vitae, references, and list of publications should be sent to:

**Dr. James Miller**  
Department of Microbiology and Immunology  
University of California, Los Angeles  
School of Medicine  
Los Angeles, California 90024

*An Equal Opportunity/Affirmative Action Employer*

**BIOLOGIST.** Sarah Lawrence College seeks a biologist with broad interests for a 3-year, renewable, tenure-track appointment. A doctorate and teaching experience are required. Responsibilities include teaching general biology and courses in at least two of the following areas: embryology, histology, physiology, botany, and comparative anatomy. Sarah Lawrence is a small liberal arts college dedicated to quality teaching through individual contact. *We welcome applications from all qualified individuals, especially women and members of minorities.* Send curriculum vitae and three letters of recommendation by 15 March to: **Dr. R. D. Clarke, Biology Department, Sarah Lawrence College, Bronxville, N.Y. 10708.**

### CELL AND MOLECULAR BIOLOGY

Faculty positions at junior and senior levels are available in the Cell Biology Group of the Worcester Foundation for Experimental Biology. Research in this group focuses on eukaryotic genes, viruses, cell surfaces, and the cytoskeleton. Demonstrated research excellence is a prerequisite for these positions. Send curriculum vitae, a brief synopsis of research plans, and names of references to: **Dr. Thoru Pederson, Co-Director, Cell Biology Group, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.**

*An Equal Opportunity/Affirmative Action Employer*

## RIYADH UNIVERSITY KINGDOM OF SAUDI ARABIA

The University of Riyadh invites applications for the following vacancies in its **COLLEGE OF PHARMACY** for the academic year 1981-82 with the requisites indicated:

- Consultants:** Ph.D. in Natural Products with 4 years experience. Ph.D. in Biological Screening with 4 years experience.
- Medical Plants Taxonomist:** Ph.D. with 4 years experience.
- Research Assistants:** M.S. in Pharmaceutical Chemistry. B.S. in Pharmacy or Chemistry with experience in Instrumentation. M.S. in Pharmacognosy. M.S. in Natural Products.
- Computer Programmer:** A degree in Computer Programming with 3-5 years experience.
- Teaching Assistants:** B.S. in Pharmacy with experience.
- Qualified Laboratory Technicians:** HND or HNC in Chemistry. HND or HNC in Phytochemistry. Higher diploma with experience in student laboratories. HND or HNC in Biology.
- Instructional Aids Technician:** University degree and experience in Instructional Aids.
- Laboratory Technicians:** Diploma or experience in Pharmaceutical Chemistry. Diploma or experience in Phytochemistry. B.S. in Pharmacy with 3 years experience.
- Veterinary Technician:** B.S. Veterinary Medicine.
- Technical Laborers:** Experience in Animal Breeding and Animal Housing.
- English Typists:** Intermediate with diploma in typing and shorthand with experience.

Facilities provided by the University include attractive taxfree salaries, accommodation allowance, furniture allowance, round trip air tickets for self and family and free medical treatment in government hospitals.

Curriculum vitae and non-returnable copies of academic and experience credentials, together with two recent passport size photographs should be sent to:

Dean  
College of Pharmacy  
University of Riyadh  
P. O. Box 2457  
Riyadh, Saudi Arabia

A second copy of the applicants' papers should be sent to:

University of Riyadh  
Recruitment Office  
c/o Saudi Arabian Educational Mission  
2425 West Loop South  
Houston, Texas 77027 USA

## POSITIONS OPEN

**BIOCHEMISTRY.** Applications are invited for a tenure-track position at the level of assistant professor which will be filled on 1 July 1981. Applicants should have a Ph.D. degree in biochemistry and postdoctoral training. Candidates must demonstrate potential for outstanding teaching ability and excellence in research in membrane biochemistry. The successful candidate is expected to develop a research program dealing with membranes and to teach biochemical subjects to medical and graduate students. Send curriculum vitae, summary of present research, summary of proposed research, and names and addresses of three people who may be contacted for reference to: **Dr. F. P. Inman, Department of Biochemistry, Box 19930A, College of Medicine, East Tennessee State University, Johnson City, Tennessee 37614.** *An Affirmative Action/Equal Opportunity Employer.*

**BIOCHEMISTRY POSTDOCTORAL RESEARCH ASSOCIATE** to participate in research on biochemical mechanisms involved in blood clotting and fibrinolysis. Actively pursued areas are: (i) characterization of protein binding sites, (ii) molecular phenomenon occurring during blood clot lysis, and (iii) development of new fibrinolytic agents. Experience in protein chemistry required. Position available immediately. Salary: \$14,500. Send curriculum vitae and names of three references to: **Dr. Andrei Z. Budzynski, Temple University School of Medicine, Thrombosis Research Center, 3400 North Broad Street, Philadelphia, Pa. 19140.** *Equal Opportunity/Affirmative Action Employer.*

**BIOLOGIST, Ph.D.,** to teach applied entomology and introductory anatomy and physiology. Tenure-track position beginning September 1981. Send letter of application, résumé, and transcripts to: **Dr. Mary R. Murnik, Head, Department of Biological Sciences, Ferris State College, Big Rapids, Michigan 49307.** Deadline for receipt of application is 20 March 1981. *Ferris State College is an Equal Opportunity/Affirmative Action Employer.*

**BLOOD BANK DIRECTOR**—Pathologist certified or eligible in clinical pathology and immunohematology and experienced in research, teaching, and blood-bank management to direct Blood Bank and Los Angeles County (LAC)—University of Southern California (USC) Medical Center and section of immunohematology at USC School of Medicine. California license required. Salary and rank commensurate with qualifications. Reply by telephone or mail to: **S. T. Shaw, Jr., M.D., Room 2900, LAC/USC Medical Center, 1200 North State Street, Los Angeles, Calif. 90033.** Telephone: 213-226-7148. *Equal Opportunity/Affirmative Action Employer.*

### CELL CYTOSKELETON/MOTILITY

The Department of Developmental and Cell Biology at the University of California, Irvine, anticipates recruiting to fill a position in the area of the cell cytoskeleton and cell motility. We are particularly interested in finding an individual whose research is in one or more of the following areas: cell organelle movement, cell division, cytology and molecular biology of the cytoskeleton, axonal transport, or calmodulin in motile and cytoskeletal systems. We expect to be recruiting at the assistant professor level, though senior individuals may wish to apply. This position will involve graduate and undergraduate teaching, as well as the establishment of a high-quality research program. At least 1 year of postdoctoral experience is desired. Send curriculum vitae, names of three referees, and reprints to: **Michael W. Berns, Ph.D., Chair, Department of Developmental and Cell Biology, University of California, Irvine, California 92717.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

### CHIEF OF CHEMICAL PATHOLOGY ASSOCIATE OR FULL PROFESSOR

University of California, Irvine, Department of Pathology, is recruiting for a faculty position at associate or full professor level. Required: M.D., clinical Board-eligible/qualified, service experience in clinical chemistry, demonstrated success in independent research and teaching. Duties: to direct Division of Chemical Pathology and to be responsible for medical students and house staff teaching in this area. Position effective 1 July 1981. *An Affirmative Action Employer.* Send curriculum vitae and references to: **H. Simpkins, M.D., Ph.D., University of California, Irvine, Department of Pathology, 101 City Drive South, Orange, Calif. 92804,** by 27 March 1981.

## POSITIONS OPEN

### BIOCHEMISTRY CHAIRPERSON

The Ohio State University is reopening its search for a chairperson for its new, unified Department of Biochemistry. This department, combining the departments of biochemistry and physiological chemistry, will comprise approximately 70 graduate students and 30 faculty and will have the responsibility for graduate programs in biochemistry and for all undergraduate and professional biochemistry instruction. The new chairperson will be expected to provide leadership in the development of this newly combined department and to foster an atmosphere conducive to excellent research and teaching in biochemistry. The individual sought will qualify for the rank of professor, have a distinguished record of research and teaching, and be pursuing an active, ongoing research program which would be continued at Ohio State.

Applications and nominations should be sent by 15 March 1981 to: **Chairman, Biochemistry Search Committee, The Ohio State University, 203 Administration Building, 190 North Oval Mall, Columbus, Ohio 43210.**

*The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women and minorities are encouraged to apply.*

### CHAIRMAN DEPARTMENT OF ANATOMY

Applications are invited for the position of professor and chairman of the Department of Anatomy, Texas College of Osteopathic Medicine (TCOM), Fort Worth, Texas. Applications are sought from individuals with an acknowledged history of providing quality education to medical and graduate students and who have demonstrated research productivity. Candidates should show evidence of a commitment to academic excellence, leadership, administrative skills, and ability to obtain extramural funding. Interested individuals should submit complete curriculum vitae and the names of three references to: **James B. Reeves, Ph.D., Chairman, Anatomy Search Committee, TCOM, Camp Bowie at Montgomery, Fort Worth, Texas 76107.** Texas College of Osteopathic Medicine is a state-supported medical school under the Board of Regents of North Texas State University and is dedicated to academic and research excellence. *An Equal Opportunity/Affirmative Action Employer.*

### THE UNIVERSITY OF CHICAGO DIVISION OF THE BIOLOGICAL SCIENCES

The Department of Pharmacological and Physiological Sciences is considering applications for faculty appointments in **CLINICAL PHARMACOLOGY.** Candidates must have the M.D. or Ph.D. degree and a research background applicable to clinical pharmacology. M.D. candidates with appropriate clinical training will have the opportunity to obtain a joint appointment in relevant clinical departments. *From the time of its original charter, the principle of the University of Chicago has been to appoint scholars without regard to race, color, religion, sex, or national origin.* Please have three professional persons write us concerning you, and send your résumé together with your most significant publications to:

**Dr. Leon I. Goldberg  
Chairman, Committee on Clinical Pharmacology  
Department of Pharmacological and  
Physiological Sciences  
The University of Chicago  
947 East 58 Street  
Chicago, Illinois 60637**

### UNIVERSITY OF LOUISVILLE FACULTY POSITION DEVELOPMENTAL ZOOLOGIST

Tenure-track position to be filled during the 1981-1982 academic year at the assistant professor level in the Department of Biology, University of Louisville. Ph.D. required. Teaching responsibilities will include undergraduate courses in vertebrate embryology and vertebrate histology in addition to development of undergraduate and graduate courses in the field of specialty, with contributions also to the general curriculum and research capabilities of the Biology Department. Applications must be received by 15 April 1981. Submit curriculum vitae, list of publications, and names, addresses, and telephone numbers of six persons from whom letters of reference may be obtained to: **Search Committee, Developmental Zoologist, Dr. Thane S. Robinson, Chairperson, Department of Biology, University of Louisville, Louisville, Kentucky 40292.** *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### DEAN OF THE GRADUATE SCHOOL Rutgers University, Newark Campus

The Dean reports to the Campus Provost and provides leadership and direction to the faculty and staff in the creation and implementation of effective programs on instruction, research, service, and student life. The Graduate School currently offers five Ph.D. programs, 12 master's programs, and an M.P.A. program.

Responsibilities include review of academic programs, development and administration of budget; planning and implementation of curricula and schedules; and, in cooperation with the administrative officers of the schools and colleges, direction of support personnel and faculty within the goals of the Graduate School and Rutgers University.

Doctorate degree required and ability to qualify for tenure full professorship. Appointment begins 1 July 1981; the salary is negotiable based upon qualifications. *Rutgers encourages minority candidates.* Curriculum vitae and supporting documents should be sent before 15 March to:

**Sylvia B. Wolkstein  
Rutgers, The State University  
15 Washington Street  
Newark, New Jersey 07102**

*An Affirmative Action/Equal Opportunity Employer*

**DEPUTY DIRECTOR** for the New York State Research Institute on Alcoholism in Buffalo. This is the second highest position in the Institute and requires an individual with both administrative and research experience in the alcoholism area. The deputy will be responsible for the formulation and execution of policy regarding the scope, direction, and character of the state's research programs in the field of alcoholism under the policy guidelines set by the director. Qualifications include a Ph.D. in an appropriate health-related field and a minimum of 5 years of experience in governmental administration and research which should include directing, coordinating, and advising a large diversified staff. Position is permanent with a starting salary of \$41,541. Potential for an academic appointment. Closing date for applications is 13 March 1981, with position available immediately. Curriculum vitae with relevant publications should be addressed to:

**Director of Personnel  
Office of Alcoholism and Substance Abuse  
P.O. Box 8200  
Albany, N.Y. 12203**

*Affirmative Action/Equal Opportunity Employer*

### DIRECTOR OF RESEARCH

University-wide Institute on Aging seeks a Director of Research. The successful candidate will be an experienced researcher in any of the social, behavioral, or biomedical sciences; possess the demonstrated ability to obtain grant support; and qualify for an academic appointment as full professor. Preference will be given to individuals who can document sensitivity to the needs of low-income minority urban elderly. The selected individual will coordinate all research programs in aging, direct personal research, serve on the Executive Committee of the Institute, and report to the executive director who in turn reports to a university vice president. Starting date and salary are negotiable. Please send letter of application, plus résumé with salary history, in confidence to:

**F-42, P.O. Box 2066  
Philadelphia, Pa. 19103**

*Equal Opportunity Employer*

**IMMUNOLOGIST**—Challenging position for Ph.D. with minimum of 2 years of postdoctoral experience. Must have working knowledge of modern molecular techniques in RIA, electrophoresis, purification, hybridoma, and monoclonal antibody preparation. Familiarity with virology, bacteriology, and normal tissue culture is desirable. Interested candidates should send curriculum vitae, including present salary, to: **D. H. Gattone, Personnel Director, THE SALK INSTITUTE, Government Services Division, Swiftwater, Pa. 18370.** *Equal Opportunity Employer, M/F.*



## POSITIONS OPEN

### DEVELOPMENTAL NEUROBIOLOGY COLUMBIA UNIVERSITY

The Department of Biological Sciences at Columbia University is increasing the number of faculty members within the department whose research interests lie in various complementary areas of developmental neurobiology. Space and modern facilities are available for two or three new faculty in the recently completed Sherman Fairchild Center for the Life Sciences. The appointments will be made at a level appropriate to the qualifications of the successful candidates. The search committee seeks individuals who demonstrate a high level of scientific accomplishment along with superior teaching ability and commitment to teaching at both undergraduate and graduate levels. Areas of particular interest to the department include: neural differentiation and synaptogenesis in cell culture, development of the vertebrate CNS, and *Drosophila* neurogenetics. Applications should include curriculum vitae, copies of most significant publications, and a summary of research goals. Junior applicants should also request that three referees send letters in support of their application. Send inquiries by 15 March 1981 to:

Dr. John G. Hildebrand  
Neurobiology Search Committee  
Department of Biological Sciences  
913 Sherman Fairchild Center  
Columbia University  
New York, New York 10027

*Equal Opportunity/Affirmative Action Employer*

### DIRECTOR, INSTITUTE FOR SOCIAL SCIENCE RESEARCH (ISSR) UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)

Applications and nominations are invited for the position of Director of ISSR at UCLA, effective 1 July 1981. The Institute supports faculty research in a broad range of disciplines. The current staff is more than 30 and the budget (including extramural funds) is in excess of \$1 million.

Candidates must qualify for a tenured, senior professorial appointment on the UCLA faculty.

Please send curriculum vitae and references by 13 March 1981 to: ISSR Search Committee, Office of the Chancellor, University of California, Los Angeles, Calif. 90024.

*UCLA is an Affirmative Action Employer.*

### ECOLOGIST

The Ecology Section of the Biological Sciences Group at the University of Connecticut invites applications for a tenure-track appointment at the rank of assistant professor in the area of physiological ecology (plant or animal) or vertebrate terrestrial ecology. The applicant should have a Ph.D. degree and be prepared to teach at both the undergraduate and graduate levels as well as carry out a well-developed research program. Send curriculum vitae and the names of three references to: Dr. R. Jack Schultz, Head, Ecology Section, Biological Sciences Group, The University of Connecticut, Storrs, Conn. 06268. Closing date: 13 March 1981. *An Equal Opportunity/Affirmative Action Employer.*

The Albert Einstein College of Medicine in New York City is looking for a **qualified person to run a FACSII**. Applicants should have interest and experience in the biological sciences. Experience with the FACSII, computer training, or training in biomedical engineering preferred but not required. Position is at associate rank with all faculty benefits and privileges. Duties include helping investigators with their runs on the cell sorter, teaching others the use of the cell sorter and computerized analysis of the data, and maintenance of the equipment. **Box 47, SCIENCE.** *Equal Opportunity/Affirmative Action Employer.*

**FACULTY POSITION.** Williams College has an opening for fall 1981 for a 3-year assistant professor position (with reappointment possible and consideration for tenure) in physical chemistry or inorganic chemistry or bioinorganic chemistry (Ph.D. required). Applicants should have a strong commitment to both research and teaching. Teaching duties each semester include complete responsibility for one course with laboratory and supervision of senior research projects. Send résumé, description of research interests for undergraduates, and names of three references to: Dr. James F. Skinner, Chairman, Chemistry Department, Williams College, Williamstown, Mass. 01267, by 30 March 1981.

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## MEMBRANE BIOLOGIST— BIOCHEMIST

Assistant professor, tenure-track position, available September 1981. Candidates must have active research program in membrane biochemistry. Interest in the effects of toxic substances and postdoctoral experience are desirable. Teaching responsibilities at the undergraduate and graduate levels. Interested individuals should respond with a letter of application, a résumé, and three letters of recommendation by 13 March 1981 to: **Dr. John Freeberg, Chairman, Search Committee, Biology Department,**



University of  
Massachusetts  
at Boston

Harbor Campus  
Boston, Mass. 02125

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Title IX Employer*

## FACULTY POSITIONS

The College of Veterinary Medicine of the University of Florida is seeking applications and/or nominations for several faculty positions. Detailed position descriptions are available upon request.

### DEPARTMENT OF METABOLISM:

Associate/Assistant Professor in **Veterinary Gross Anatomy**; application deadline is 15 April 1981. Position Number VM-8105. **Dr. JoAnn Eurell,** Search Committee Chairperson.

### DEPARTMENT OF PREVENTIVE MEDICINE:

Associate/Assistant Professor in **Poultry Diseases (reopened)**; application deadline is 15 April 1981. Position Number VM-7924. **Dr. Charles F. Simpson,** Search Committee Chairperson.

### DEPARTMENT OF SURGICAL SCIENCES:

Instructor in **Small Animal Surgery**; application deadline is 1 May 1981. Position Number VM-8104. **Dr. Mark S. Bloomberg,** Search Committee Chairperson.

### DEPARTMENT OF COMPARATIVE AND EXPERIMENTAL PATHOLOGY:

Associate/Assistant Professor in **Pharmacology**; application deadline is 1 April 1981. Position Number VM-8103. **Dr. Stephen W. Russell,** Search Committee Chairperson.

Associate/Assistant Professor in **Laboratory Animal Pathology**; application deadline is 1 April 1981. Position Number VM-8106. **Dr. Stephen W. Russell,** Search Committee Chairperson.

Associate/Assistant Professor in **Wildlife Medical Pathology**; application deadline is 1 April 1981. Position Number VM-8107. **Dr. Stephen W. Russell,** Search Committee Chairperson.

Letters of application or nomination should include curriculum vitae outlining citizenship, academic training, teaching and practice experience, present professional activities, and Board-certification. Also needed are a list of publications, a statement of professional goals, and the names of three persons who can provide letters of reference. Salary will be commensurate with training and experience (and the academic rank) of the successful applicant. Correspondence should be addressed to the appropriate **Search Committee Chairperson** at: College of Veterinary Medicine, Box J-125, JHMHC, University of Florida, Gainesville, Florida 32610.

## The Transportation and Traffic Science Department of the General Motors Research Laboratories

Has openings in career research positions for Ph.D. Transportation Engineers, Transportation System Engineers, Planners, Economists, Statisticians, and Physical Scientists with backgrounds and interests in transportation system and policy analysis, traffic flow theory, microeconomics, econometrics, operations research or applied statistics.

Successful candidates would contribute to on-going projects on automobile usage, transportation economics, freight transportation, traffic safety and efficiency, energy consumption, and driver behavior. The department is interdisciplinary, offering opportunities for collaborative work with engineers, physical scientists, planners, social scientists, economists, and statisticians. The positions are available immediately; salary and benefits competitive. Applicants must demonstrate the ability to conduct quantitative research and communicate results effectively.

The General Motors Research Laboratories' staff consists of about 380 Ph.D., 240 MS, and 190 BS professional employees and 800 supporting employees.

Applicants must have U.S. citizenship or visa status which permits them legally to accept permanent employment under U.S. Immigration laws. Interested professionals should submit a letter of application, vita and transcripts to:

Mr. William M. Spreitzer  
Head, Transportation & Traffic Science Department

**General Motors  
Research Laboratories**  
Warren, MI 48090



**GENERAL MOTORS  
TECHNICAL CENTER**  
WARREN, MICHIGAN 48090

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## POSITIONS OPEN

### FACULTY POSITION

The Gray Freshwater Biological Institute/University of Minnesota is soliciting applications for a faculty position (assistant professor level; tenure track) for September 1981. Salary negotiable. Applicants must have a Ph.D. degree; postdoctoral training is desirable. The successful candidate will be expected to initiate a high-quality research program and to participate in teaching at the University of Minnesota. We are searching for candidates who are interested in answering fundamental questions in freshwater biology (such as molecular studies of microbial ecology; genetics, biochemistry, or molecular biology of photosynthetic organisms; protein chemistry; biophysical studies of whole organisms; structure and function of freshwater organisms; environmental toxicology). Interested persons should send a résumé, including graduate and undergraduate transcripts, a list of publications, references, and a statement of research and teaching interests, by 15 May 1981 to: Dr. Richard S. Hanson, c/o Dr. E. Muenck, Gray Freshwater Biological Institute, P.O. Box 100, Navarre, Minn. 55392.

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

### FACULTY POSITION IN PHARMACOLOGY

A tenure-track position at the assistant/associate professor level in cardiovascular pharmacology. The successful candidate will be expected to participate in the teaching of medical, graduate, and postdoctoral students in this area. The candidate should have experience and an active interest in applying molecular, cellular, or morphological approaches to the elucidation of drug action on the circulation of normal animals or experimental models of cardiovascular disease. Interested candidates should forward their curriculum vitae and a summary of their research interests to: Cardiovascular Search Committee, Department of Pharmacology, University of California, Los Angeles, School of Medicine, Los Angeles, California 90024. *An Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITIONS IN CELL BIOLOGY

Applications are invited for two tenure-track associate professor positions in the newly reorganized Department of Cell Biology and Anatomy at the Northwestern University Medical and Dental Schools. Applicants must have a Ph.D., M.D., or D.D.S. degree with research experience in cell biology, biochemistry, or related areas. Applicants should have 8 to 10 years of research experience past the awarding date of their advanced degree, in areas emphasizing quantitative aspects of eukaryotic cell behavior or the structure and chemical properties of major proteins comprising the cytoskeleton. Applicants should be able to demonstrate excellence in their respective fields based on their contributions to the literature and should have established their own independent research projects. Successful applicants will be expected to carry on vigorous research programs and to participate in the teaching of graduate, medical, and dental students. Send complete curriculum vitae, brief description of previous and future research and teaching interests (three to four pages), and recommendations from at least three references by 15 March 1981 to: Dr. Robert D. Goldman, Chairman, Cell Biology and Anatomy Search Committee, Northwestern University Medical and Dental Schools, 303 East Chicago Avenue, Chicago, Illinois 60611. *Northwestern University is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

### MONTANA STATE UNIVERSITY (MSU) FACULTY POSITION ANNOUNCEMENT

Tenure-track faculty position with rank and salary negotiable. This person would teach in the Physics Department and serve as director of a newly established program for the public understanding of science. Ph.D. in physics required. Must have demonstrated outstanding ability and experience in physics teaching; interest in problems of learning; and ability, expertise, and production experience in conveying science to the general public using the electronic media. Also must have a broad range of science interests and the ability to interact well with faculty from a variety of disciplines on instructional and outreach programs. Résumés are due by 31 March 1981. Send to: Search Committee, Physics Department, MSU, Bozeman, Montana 59717.

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## POSITIONS OPEN

**FACULTY POSITION**—Ph.D. to assume tenure-track assistant professorship in organic chemistry. Will be expected to develop an outstanding research program and maintain excellent teaching. State-of-the-art equipment includes XL-200 (solid sample capability), FT-80 (multinuclear capability), and EM-390 NMR spectrometers. A ZAB-2F high-resolution mass spectrometer, an E-109 ESR spectrometer, and a CADF-4 single-crystal x-ray diffractometer are also available. Send résumé, statement of research plans, and three letters of recommendation to: Dr. Robert D. Guthrie, Chairman, Search Committee, Department of Chemistry, University of Kentucky, Lexington, Kentucky 40506.

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### TWO FACULTY POSITIONS

Biology Department, Hamline University  
Saint Paul, Minn. 55104

**POSITION ONE:** This is a regular one-half time position, 1981-1982 fall semester, teach lecture and laboratories in a junior-senior-level course in biochemistry, help with one laboratory section of a non-major course; 1982-1983 fall, biochemistry laboratories and lecture and laboratory of a junior-senior-level plant physiology course; 1983-1984 biochemistry laboratories and nonmajor course laboratories.

**POSITION TWO:** Sabbatical replacement, fall semester 1981 only, lecture and laboratories of a general physiology course to sophomore biology majors.

Please send a letter of application, curriculum vitae, transcripts, and three letters of recommendation by 1 April 1981 to: Dr. Ellis J. Wyatt, Chairman, Department of Biology, Hamline University, St. Paul, Minn. 55104.

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

**INSTRUCTOR, CELLULAR AND MOLECULAR PHARMACOLOGY.** Applications are invited for a faculty-rank position (annually renewable for a 3-year period) to participate in research on cellular functions and molecular events related to cyclic nucleotides and calcium. Send curriculum vitae and names of three references to: Dr. Bruce McL. Breckenridge, Department of Pharmacology, COLLEGE OF MEDICINE AND DENTISTRY OF NEW JERSEY, Rutgers Medical School, P.O. Box 101, Piscataway, New Jersey 08854. *An Equal Opportunity/Affirmative Action Employer, M/F.*

### INSTRUCTOR—BOTANY/BIOLOGY

Full-time instructor will teach plant science, microbiology, and general biology and participate in curriculum development and evaluation. Position begins September 1981.

Must have: master's degree in botany (or biology emphasizing botany) completed by 1 September 1981; 12 or more upper-division units in microbiology and lower plant courses with laboratories; eligibility for a California community college instructor credential.

Request application from:

Affirmative Action/Equal Opportunity Programs  
Chaffey Community College  
5885 Haven Avenue  
Alta Loma, Calif. 91701

Application deadline: 1 April 1981.

### UNIVERSITY OF TORONTO DEPARTMENT OF BOTANY MICROBIOLOGY POSITION

The Department of Botany at the University of Toronto invites applications for a contractually limited position at the level of assistant professor, tenable from 1 July 1981 at the Erindale Campus. The initial appointment will be for no more than 3 years with the possibility that it may be extended to a maximum of 5 years. This position is subject to budgetary approval. A Ph.D. in microbiology or related area is required. The successful candidate is expected to participate in undergraduate courses in cell biology, lower protists, and microbiology, to develop an active research programme, and to participate in the graduate programme. Preference will be given to individuals with postdoctoral and teaching experience. Complete curriculum vitae and three letters of reference should be sent to: Professor P. A. Horgen, Chairman Search Committee, Department of Botany, University of Toronto, Erindale Campus, Mississauga, Ontario, Canada L5L 1C6. Deadline for receipt of applications is 30 March 1981.

## POSITIONS OPEN

University of Michigan Medical School, Department of Radiology, has a position available immediately at the **INSTRUCTOR THROUGH PROFESSOR** level. The physician will take part in the program of patient care, teaching, and research carried on in the Division of Radiation Therapy. He/she will supervise the activities of the resident staff and aid in the teaching of residents and medical students. Applicant must be Board-eligible or Board-certified in radiation therapy. Entering level commensurate with qualifications and experience. Residence training in an academically oriented institution. Reply to: Box 48, SCIENCE. *A nondiscriminatory, Affirmative Action Employer. Code 37FO.*

University of Michigan Medical School, Department of Anesthesiology, has four positions available at the level of **INSTRUCTOR TO PROFESSOR** for July 1981. Board-certified or -eligible anesthesiologist with Michigan licensure. Research, clinical, and didactic experience. Reply to: Box 49, SCIENCE. *A nondiscriminatory, Affirmative Action Employer. Code 18FO, 23HO, 27HO, 31HO.*

### ILLINOIS LEGISLATIVE SCIENCE INTERN

Sangamon State University invites applications from graduates (B.S., M.S., Ph.D.) of natural science or engineering programs for a 9.5-month science internship beginning 1 October 1981, as 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 interests in public service. Send curriculum vitae by 1 April 1980 to: Dr. Kent Redfield, Coordinator, Illinois Legislative Staff Internship Program, Sangamon State University, Springfield, Illinois 62708. *An Equal Opportunity/Affirmative Action Employer.*

The Deep Sea Drilling Project, Scripps Institution of Oceanography, University of California, San Diego, is currently seeking to fill position for **MARINE SEDIMENTOLOGIST**, **MICROPALAEONTOLOGIST**, or **PHYSICAL PROPERTIES SPECIALIST**, Ph.D. level. Strong background in mineralogy and sedimentary petrology, micropaleontology, or physical properties is required. This position is for a project staff scientist who will engage in project-related and independent scientific research for a period of at least 1 year.

Appointment anticipated in assistant through associate professional research series; salary commensurate with experience. Please send complete résumé and names of at least three references to: Dr. Yves Lancelot, Deep Sea Drilling Project, Mail Code A-031, University of California, La Jolla, California 92093.

*The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.*

**METEOROLOGIST** to perform mathematical calculations for developing meteorological software packages at NASA; design and implement software on the VAX 11/780 and PDP 11/70 computers; provide expertise in other technologically important areas involving solid-state physics, medical physics, nuclear engineering; 40 hours per week; \$22,000 per year. Ph.D. in meteorology/theoretical physics required. Telephone: Dr. J. C. Chen at 301-577-8775. General Software Corporation, 8401 Corporate Drive, Landover, Maryland 20785.

### POSTDOCTORAL FELLOW

Ph.D. position available for tumor biology research involving cell kinetics, drugs, radiation, and immunobiology. NIH stipend. Available immediately. Send curriculum vitae and names of references to: Lewis M. Schiffer, M.D., Director, Cancer Research Laboratories, Allegheny-Singer Research Corporation, 320 East North Avenue, Pittsburgh, Pa. 15212. *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION: Cell Biology.** Available 1 July 1981 for study of regulation of DNA replication and functions of tumor antigens in mammalian cells. Background in cell culture required. Training in molecular biology of nucleic acids, animal virology, or somatic cell genetics helpful. Recent Ph.D. preferred. Group includes other postdoctoral fellows and graduate students. Opportunity available for interaction with other groups interested in nucleic acids research. Send curriculum vitae and references to: Dr. Roger Hand, Director, McGill Cancer Centre, 3655 Drummond, Montreal, Quebec, Canada H3G 1Y6.

# Biochemical/ Cardiovascular Pharmacologist

We have an excellent opportunity for a Pharmacologist with a minimum of 2 years experience beyond the Ph.D. level. Specific interest and experience in calcium transport/metabolism is required.

The successful applicant will be given appropriate facilities and technical staff to actively participate in drug development research within our well established cardiotonic program.

Located near Albany, N.Y., with equal access to urban and rural environments, we offer an attractive salary and benefits and the opportunity for professional growth.

Send resume with salary requirements to: Personnel Administrator



**STERLING-WINTHROP  
RESEARCH INSTITUTE**  
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Columbia Turnpike  
Rensselaer, New York 12144  
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## President

### PHILADELPHIA COLLEGE OF PHARMACY & SCIENCE

The Phila. College of Pharmacy & Science invites nominations and applications for the position of President, with appointment effective July 1, 1981.

PCPS is a private, independent college specializing in the health and basic sciences. Working relationships for clinical education exist with most major medical education facilities in the Phila. area.

The College offers Bachelor of Science degree programs in biology, chemistry, medical technology, pharmacy and toxicology (a pioneering program inaugurated in 1979); an advanced professional program in pharmacy leading to the Doctor of Pharmacy degree; and graduate degree programs in medicinal chemistry, pharmaceuticals, pharmacognosy and pharmacology. The enrollment is approximately 1100 students.

The College is located in the University City area of Phila., and the campus presently includes nine buildings on a ten-acre site.

The president is the chief executive officer of the institution and reports to the Board of Trustees. Attributes which will be considered important are:

- leadership with demonstrated ability in program development;
- recognized academic credentials;
- established success in institutional development; and
- ability to relate well to the community, industry, and government.

Letters of application or nomination with supporting documentation should be submitted no later than March 1, 1981 to:

DR. EDGAR C. SMITH  
Chairman, Presidential Screening Committee  
111 Glenn Road  
Ardmore, PA 19003  
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Affirmative Action Employer

## Group Leader/ Oncology

American Dade Division of American Hospital Supply Corporation seeks a Group Leader for our new Oncology R&D section. The individual we seek will have an advanced degree and a minimum of five years experience in Oncology research.

This position is responsible for directing the efforts of several scientists toward the development of cancer marker test kits. This opening requires strong managerial potential.

We are a leading manufacturer of diagnostic products for medical laboratories, and a division of a major NYSE Corporation. We offer excellent compensation benefits, including company paid health, life and dental insurance, profit sharing, retirement, tuition reimbursement and more. For confidential consideration please submit resume including salary history to:

M. L. Jones  
Personnel Manager

**American Dade**

Division of  
American Hospital Supply Corporation  
P.O. Box 520672  
Miami, Florida 33152

We are an equal opportunity employer.

## MONOCLONAL ANTIBODY RESEARCH & DEVELOPMENT BIOLOGISTS

Becton Dickinson and Company, a major developer of monoclonal reagents, seeks a highly skilled and creative PhD level Biologist to manage our Monoclonal Antibody Development Laboratories at our Corporate Research Center in Research Triangle Park, N.C.

Applicants should be experienced in the technology relating to the generation and characterization of specific antibody secreting hybridomas and be familiar with the technology for purification and characterization of macromolecules. Experience with hybridoma development relating to immunoreagents for microbial and clinically significant ligand assays and an interest in working with advanced instrumentation for fluorescence-activated cell sorting preferred.

We offer a creative work environment, excellent salary and the opportunity to be a significant contributor in the dynamic health care field. Please send resume and names of three references to: **F. R. Wilson**

**Becton Dickinson Research Center**  
P.O. Box 12016

Research Triangle Park, N.C. 27709  
An Equal Opportunity Employer M/F/H/V

**BECTON  
DICKINSON**

## POSITIONS OPEN

The Sidney Farber Cancer Institute, an affiliate of the Harvard Medical School, is seeking to appoint a **PHYSICIAN** who has completed clinical training and has substantial research training with a record of accomplishment in cell biology. The appointment will be at the level of assistant professor. It is desired that such an individual have a major research interest in the fundamental aspects of human tumor cell biology. *The Institute is an Equal Opportunity/Affirmative Action Employer.* Please send letters of inquiry, together with curriculum vitae, to: **Dr. Emil Frei, III, Physician-in-Chief, SIDNEY FARBER CANCER INSTITUTE, 44 Binney Street, Boston, Mass. 02115.**

### PLANT BIOCHEMIST or MOLECULAR BIOLOGIST

Applications are invited for a renewable 1-year term appointment available 15 August 1981 at the assistant professor level. Candidates will be expected to develop an independent research program in some area of plant biochemistry or plant molecular biology, and will be expected to collaborate with colleagues. Preference will be given to candidates with postdoctoral experience. Teaching duties include offering a graduate course in plant biochemistry and participation in the undergraduate biology program. Salary: \$19,000 to \$21,000 for 9-month appointment. Send curriculum vitae and reprints, and arrange to have three letters of recommendation sent by 1 April 1981 to:

**Dr. Craig E. Martin, Chairman  
Plant Biochemist/Molecular Biologist Search  
Department of Botany  
University of Kansas  
Lawrence, Kansas 66045  
Telephone: 913-864-3645**

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

**PLANT BIOLOGIST**, assistant professor. Applications are invited for a tenure-track teaching position in biology to begin September 1981. Candidates should have broad training in botany and zoology. The courses to be taught include plant morphology, plant physiology, histology, and general biology. The appointee should be active in plant research and encourage and direct undergraduate research. Preference will be given to candidates who can demonstrate potential for expanding the biology program and the recruitment of students. Salary depends upon qualifications and experience. Send letter of application, curriculum vitae, transcripts, and three letters of reference by 1 April 1981 to: **Dr. George C. Boone, Biology Department, Susquehanna University, Selinsgrove, Pa. 17870. An Equal Opportunity Employer.**

### PLANT PHYSIOLOGIST—GENETICIST

Assistant professor, potential tenure-track position on a nine-member staff beginning January 1982. Primary responsibilities: teaching undergraduate botany courses, assisting with general introductory courses, and supervising departmental greenhouse. Commitment to research interests is strongly encouraged. Ph.D. degree must be completed by date of appointment. St. Olaf is a private coeducational college of the American Lutheran Church and has an enrollment of 3000 with 80 senior biology majors. Submit letter of application, résumé, publication list, and names of three references by 1 April 1981 to: **Dr. Marland L. Madson, Chairman, Biology Department, St. Olaf College, Northfield, Minnesota 55057.**

*An Affirmative Action/Equal Opportunity Employer*

**POST-Ph.D. POSITION.** Analytical biochemist with mathematic, computer skills. Clinical research setting. To develop, maintain computerized analytical instrumentation, interfacing, protocols; train and supervise investigators in specimen analysis, data reduction and analysis. Chemistry, physiology, engineering backgrounds helpful. Curriculum vitae, three references, and salary range to: **Robert P. Auty, Ph.D., Beth Israel Hospital, 330 Brookline Avenue, Boston, Mass. 02215. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available. Studies of in vivo and in vitro regulation of insulin receptors and action in fat cells and tissue. Experience in biochemistry and/or physiology preferred for this basic science-oriented laboratory. Position available 1 July 1981. Contact: **Dean Lockwood, M.D., Chief, Endocrine-Metabolism Unit, Department of Medicine, University of Rochester Medical Center, Rochester, N.Y. 14642. An Equal Opportunity Employer.**

## POSITIONS OPEN

**POSTDOCTORAL POSITIONS** are available in a newly established NIMH research training program in behavioral biology of primates at Emory University, the Yerkes Primate Research Center, and the Georgia Mental Health Institute. The goal of the program is to train scientists to investigate the biological mechanisms of behavior in infrahuman primates and to foster a multidisciplinary approach. Areas of emphasis include social behavior, ethology, endocrinology, psychopharmacology, and several aspects of neurobiology. Participating faculty are from the Departments of Anatomy, Anthropology, Biochemistry, Biology, Medicine, Pharmacology, Physiology, Psychiatry, Psychology, and Sociology, as well as the Georgia Mental Health Institute and the Yerkes Regional Primate Research Center of Emory University. Eligibility is limited by federal regulations to U.S. citizens or aliens holding permanent residency visas. Send curriculum vitae, statement of research and training goals, three letters of reference, and other supporting documents to: **Dr. Frederick A. King, Yerkes Regional Primate Research Center, Emory University, Atlanta, Georgia 30322.** Deadline for applications is 30 March 1981 for fellowships beginning before 30 June 1981. *An Affirmative Action/Equal Opportunity Employer.*

**TWO POSTDOCTORAL POSITIONS** in ocular cell biology available 1 July 1981.

- 1) Studies on the role of contractile proteins in the shedding of rod outer segments and phagocytosis by pigment epithelial cells. Previous experience in immunofluorescence techniques is desirable but not essential. Preference will be given to candidates with experience in electron microscopy.
- 2) Studies on the cell surface receptors involved in the phagocytosis of rod outer segments by pigment epithelial cells. The project involves the isolation of plasma membranes and membrane proteins. Experience in these techniques is desirable but not essential. Preference will be given to candidates with experience in the production of monoclonal antibodies.

Both positions are for 2 years. Salaries in range \$13,380 to \$17,040. Send résumé and three letters of reference to: **Michael O. Hall, Ph.D., Jules Stein Eye Institute, University of California, Los Angeles, Medical Center, Los Angeles, Calif. 90024.**

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**POSTDOCTORAL POSITION—STRUCTURE AND HORMONAL REGULATION OF EUKARYOTIC GENES.** The position will be to study either the structure and regulation of the human metallothioneine gene or to join a continuing study of the regulation of the growth hormone gene, using cloned genomic sequences. The position is sponsored by an NIH Endocrinology Training Grant. Send curriculum vitae and three letters of reference to: **Dr. Stephen Spindler, Department of Biochemistry, University of California, Riverside, Calif. 92521. An Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL POSITION

Position available in the Brain Tumor Research Center and Department of Pharmaceutical Chemistry to study in vitro anticancer drug treatment and bioactivation. Pharmacology or chemistry background preferred. Salary range: \$14,000 to \$16,000. Please send résumé and two letters of reference to:

**Dr. Victor Levin  
Brain Tumor Research Center  
HSW 783  
University of California  
San Francisco, California 94143**

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

**POSTDOCTORAL POSITION** available 1 September 1981 in the College of Veterinary Medicine, University of Tennessee. Applications sought from persons interested in working with ongoing research program studying vitamin effects on lead intoxication. Research team involves personnel both at the University of Tennessee and Vanderbilt University. Ph.D. degree in biochemistry, toxicology, or related area. Personal interest and goals in heavy metal toxicology and research encouraged. Position available for 1 year with possibility for renewal through September 1983. Starting salary: \$13,900. Send curriculum vitae, a statement of research goals, and three letters of reference to: **Dr. Gerald R. Bratton, College of Veterinary Medicine, University of Tennessee, Knoxville, Tenn. 37901. Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** for studies on the secretory activity of the reproductive tract and on the interactions between the blastocyst and endometrium in large domestic animals. Studies will employ in vitro culture techniques. Candidate should have a recent Ph.D. in biochemistry, cell biology, animal science, or a related area and should send curriculum vitae and the names of three references to: **Dr. R. Michael Roberts and Dr. Fuller W. Bazwer, Department of Biochemistry, University of Florida, Gainesville, Fla. 32610.**

**POSTDOCTORAL POSITION** available (2- to 3-year duration) for research on cytoskeletal proteins with emphasis on mechanism of action of antimicrotubule inhibitors (endogenous and drug). Experience in one or more of the following areas desirable: protein isolation, electron microscopy, kinetics, and molecular spectroscopy. Salary to \$17,000. Send résumé to: **Professor Himan Sternlicht, Department of Pharmacology, School of Medicine, Case Western Reserve University, Cleveland, Ohio 44106.**

**POSTDOCTORAL POSITION(S)** in biochemistry available 1 July 1981 to conduct research in mammalian gene regulation. Experience in modern molecular biology techniques desirable. (Attention: **F. L. Yu, Ph.D.**)

**POSTDOCTORAL POSITION** for person with Ph.D. or master's degree with experience in microbiology available 15 April 1981 to study the effects of subminimum antibacterial concentrations on bacteria. Broad background in microbiology, including experience with electron microscopy and radioisotopes is desired. Studies will include effects on bacteria: adherence, morphologic changes, and leukocyte interactions. (Attention: **G. Rifkin, M.D.**)

For fullest consideration, submit curriculum vitae and three letters of reference by 15 March 1981 to: **Department of Biomedical Sciences, Rockford School of Medicine, University of Illinois College of Medicine, 1601 Parkview Avenue, Rockford, Ill. 61101. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.**

### COLD SPRING HARBOR LABORATORY POSTDOCTORAL POSITIONS

Postdoctoral positions available at Cold Spring Harbor Laboratory for research on the control of hormonally regulated genes (**David Kurtz**) and on the expression of human pituitary and hypothalamic hormones in normal and transformed cells (**John Fiddes**).

Send inquiries to the appropriate individual at: **Cold Spring Harbor Laboratory, Box 100, Cold Spring Harbor, N.Y. 11724.**

### POSTDOCTORAL RESEARCH ASSOCIATE

Applications are invited from persons with backgrounds in organic chemistry, molecular biology, or biophysics. Areas of current research interest include: (i) molecular mechanisms of mutation, (ii) alteration of gene expression by carcinogens and mutagens, including polydeoxynucleotide synthesis, and (iii) physical and covalent interactions between activated carcinogens and DNA. Send curriculum vitae and two or more letters of recommendation to: **Dr. Thomas Meehan, 1910 West St. Andrews Road, Midland, Michigan 48640. Michigan Molecular Institute is an Equal Opportunity Employer.**

**POSTDOCTORAL RESEARCH ASSOCIATE** available 1 July 1981. Research on the biochemistry of hormone-sensitive adenylate cyclase complex. Ph.D. in biochemistry/pharmacology required. Several years of research experience in purification of membrane proteins highly desirable. Salary commensurate with experience. Please send résumé and names of three references to: **Dr. Craig C. Malbon, Department of Pharmacological Sciences, Health Sciences Center, State University of New York at Stony Brook, Long Island, N.Y. 11794. Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL RESEARCH ASSOCIATE POSITION

Applications are invited for a research associate position which will be available immediately to study recognition phenomena in the interaction of bacteria with plant cells. Familiarity with techniques for isolating and characterizing polysaccharides is desirable. Send letter of interest and curriculum vitae to: **Dr. Luis Sequeira, Department of Plant Pathology, University of Wisconsin-Madison, Madison, Wisconsin 53706, by 13 March 1981.**

*The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer.*

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Incorporated

### SENIOR TOXICOLOGIST

An energetic, innovative person with a highly developed sense of integrity is required to become Senior Toxicologist in our new laboratories, at present being completed in Cambridge, Massachusetts. He or she must be prepared to devote time and energy in assisting the setting up of this contract toxicity testing facility. They must have a wide ranging experience in all aspects of the toxicological field, both practical and regulatory. A sound knowledge in the peripheral fields of pharmacology, metabolism, pharmacodynamics and biochemistry will be an advantage. Significant chances of promotion exist following an initial assessment period.

The successful candidate will join this new joint venture, recently formed by two experienced and well established companies: Toxicol Laboratories Limited, one of the leading European contract houses and Sisa Incorporated, a pharmaceutical research and development company.

The aim of the company is high quality scientific investigation leading to steady rather than mushroom growth.

Salary and fringe benefits will reflect the importance of the position.

Interested candidates, please contact—

**Dr. Paul Nicholas**  
Toxicol-Sisa Inc.  
763D Concord Avenue  
Cambridge, MA 02138  
Tel. (617) 491-2496  
Tlx. 951585 TOXSIS CAM

## Ph.D. CHEMISTS

Colgate-Palmolive, a leading consumer products company, offers the following career opportunities in our convenient Central New Jersey Research Center:

### Ph.D. CHEMISTS (Physical/Surface/Inorganic)

Industrial experience desired, but not necessary; January and June 1981 graduates are encouraged to apply. Assignments are in the basic research area of well equipped laboratories dealing with a wide variety of challenging research problems. (Position #PSI)

### Ph.D. PHYSICAL CHEMISTS (Product Development)

Openings for product development chemists for Household Products area of our research laboratory. Knowledge of surfactant chemistry and surface chemistry. Innovative ability required to work on challenging research problems. (Position #PD)

Our Research Center is ideally accessible to New York City, Philadelphia, Rutgers and Princeton University campuses. We offer competitive starting salaries coupled with comprehensive benefits.

Send résumé, including salary history, requirements and indicate position for which you are applying, to:

PERSONNEL DEPARTMENT

**COLGATE-PALMOLIVE COMPANY**

909 River Road, Piscataway, New Jersey 08854

an equal opportunity employer M/F



## TRANSGENE

TRANSGENE S.A., a new research company, has been launched by leading industrial and financial French groups.

TRANSGENE S.A. will carry out high level biological research oriented towards applications of medical and industrial importance.

The laboratory is located in

### STRASBOURG—FRANCE

TRANSGENE invites applications from:

— EXPERTS IN CHEMICAL SYNTHESIS OF DNA

- Post-doctoral level with at least 2 to 3 years of practice.

The successful applicant will be the LEADER OF THE TEAM involved in the synthesis of oligonucleotides.

Salary will be competitive and commensurate with qualification.

Initial contract duration will be 3 years.

STRASBOURG is a pleasant historical town, located in the heart of Europe, very close to GERMANY and SWITZERLAND.

The laboratory will be located next to the University and will have close contacts with well known groups in fundamental research.

For confidential consideration, send a CV, a list of publications and an indication of salary requirements to:

TRANSGENE S.A.  
Dr. J. P. LECOCQ  
B.P. 146  
STRASBOURG  
FRANCE

## Universiteit van Amsterdam

On the staff of the Department of Aquatic Ecology of the University of Amsterdam there is a vacancy to be filled as

### professor (m/f) in aquatic ecology

The candidate (Ph.D. required) should have experience in population biology with an autoecological background and preferably have experience in experimental research.

The candidate should be capable of and agree to

- participate with a team of 7 scientists
- teaching responsibilities at both the undergraduate and the graduate level
- supervision of research- and educationmanagement.

Salary min. Dfl. 6,098.- max. Dfl. 8,712.- per month (Dutch Civil Servants Code).

Candidates for this function and those who may recommend suitable candidates are requested to apply (or to advise) within two months to the chairman of the nomination committee Prof. Dr. J. Ringelberg, vakgroep Aquatische Oecologie (Department of Aquatic Ecology), Kruislaan 320, 1098 SM Amsterdam, The Netherlands, quoting number 4342.



## POSITIONS OPEN

**POSTDOCTORAL RESEARCH ASSOCIATE** sought for biophysical studies on photoreceptor and purple membranes. Experience with spectroscopic techniques such as Raman spectroscopy and Fourier-transform infrared absorption is desirable. Please send curriculum vitae and reference letters to: **Professor K. J. Rothschild, Department of Physiology and Department of Physics, Boston University Medical Center, 80 East Concord Street, Boston, Mass. 02118.** An Equal Opportunity Employer, M/F.

**POSTDOCTORAL RESEARCH POSITION** in the Department of Pharmacology and Toxicology, University of Kansas, Lawrence, Kans. 66045. This position will be available for study in neurochemistry with emphasis on studying the interaction of drugs with nerve endings in brain. Contact: **Professor Charles O. Rutledge** at the above address and send résumé. Deadline for application is 1 April 1981. *The University of Kansas is an Equal Opportunity/Affirmative Action Employer.*

### UNIVERSITY OF PAPUA NEW GUINEA (Port Moresby)

Applications are invited for the post of **PROFESSOR OF PHYSICS**. The major responsibilities of the department are in undergraduate teaching, including relatively elementary service teaching for medical and agriculture students. Applicants should have a strong interest in the problems of teaching physics in Papua New Guinea at all levels covered in the university. The department also has an increasingly important role in training graduate science teachers and a particular interest in this aspect is considered desirable. Present research in the department includes meteorology, agricultural physics, solid earth geomagnetism, and upper atmospheric physics. The interests of the professor need not be confined to these areas but should be in the general area of applications of physics to the Papua New Guinea environment. Applicants should have wide research capabilities and extensive research experience in at least one appropriate area. Previous experience of teaching and research in a developing country in a tropical environment will be considered an advantage. Applicants who wish to arrange secondment from their home institutions, possibly for a shorter period, will also be welcome. Salary: K20,225 per annum, plus gratuity (£1 sterling = K1.54). Three-year contract; support for approved research; rent-free accommodation; family passages; baggage allowance; leave fares after 18 months' service; education subsidies; salary continuation scheme to cover extended illness or disability. Detailed applications (two copies), including curriculum vitae and a recent small photograph, and naming three referees, should be sent to: **Assistant Secretary, Box 4820, University Post Office, Papua New Guinea**, to arrive no later than 13 March 1981. Applicants resident in U.K. should also send one copy to: **Inter-University Council, 90/91 Tottenham Court Road, London, W1P 0DT, England**. Further details are available from either address.

**PROFESSOR AND CHAIRMAN** of the Committee on Statistics beginning August 1981. Candidates should have strong academic and research credentials with interests in both mathematical and applied statistics. Administrative experience is desirable. Deadline for applications is 13 March or until position is filled. Send résumé and names of three references to: **Professor Jean Weber, Committee on Statistics, Mathematics Building, University of Arizona, Tucson, Ariz. 85721.** *Equal Opportunity/Affirmative Action Employer.*

**TENURE-TRACK AND VISITING POSITIONS** beginning August 1981. Responsibilities include teaching, research, consulting. Salary and rank depend on qualifications and experience. Deadline for applications is 13 March or until position is filled. Send résumé and names of three references to: **Professor Jean Weber, Committee on Statistics, Mathematics Building, University of Arizona, Tucson, Ariz. 85721.** *Equal Opportunity/Affirmative Action Employer.*

**RESEARCH ASSOCIATE.** Position available immediately for Ph.D. to work on biochemical and physiological mechanisms in the crystalline lens in relation to cataract development. Experience in membrane or protein biochemistry would be most advantageous. Salary will be commensurate with experience. Send curriculum vitae and names of two references to: **Dr. C. A. Paterson, Box B205, University of Colorado Health Sciences Center, 4200 East 9 Avenue, Denver, Colo. 80262.** *The University of Colorado is an Equal Opportunity Employer.*

## POSITIONS OPEN

**MEDICAL LABORATORY SCIENCE, PROGRAM DIRECTOR**—Principal academic administrator for the College's M.T. program (A.S. thru Ph.D.). Responsible for faculty development, curriculum design, expansion of research activities, coordination of clinical component, budget, teaching, and active participation in research. The candidate must be a certified M.T., or eligible for certification, with Ph.D. (M.S. with outstanding credentials considered). Clinical laboratory, academic teaching, and demonstrated research experience essential. Salary commensurate with qualifications and experience. Send curriculum vitae by 15 April 1981 to: **Professor E. G. Szymczak, 206 Mugar Hall, Northeastern University, Boston, Mass. 02115.** Telephone: 617-437-3664. *An Equal Opportunity/Affirmative Action/Title IX University.*

### NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF), Division of Earth Sciences, is seeking qualified applicants for **PROGRAM DIRECTOR, Petrology Program**. This position is excepted from the competitive civil service at the EC-14/EP level (equivalent to the GS-14/15); \$37,871 to \$57,912 (limited by statute to \$50,112.50) per annum; it will be filled on a rotational basis for 2 years. Candidates should have a Ph.D. in one of the earth sciences. Equivalent experience in research and in the administration of large multidisciplinary research programs may be substituted for the degree. A broad general knowledge of geologic research and familiarity with the U.S. scientific community are also required. Candidates should submit a résumé to: **National Science Foundation, Personnel Administration Branch, Room 212, 1800 G Street, NW, Washington, D.C. 20550, attention: E. Paul Broglie, EX 81-26.** For further information, telephone: 202-357-7841. This position is open until filled. *NSF is an Equal Opportunity Employer.*

**PROJECT DIRECTOR—WATERSHED STUDIES** The University of Prince Edward Island has recently been awarded a contract to carry out research on the environmental impact of forestry operations, with emphasis on effects on soil, water, and wildlife systems. Studies are to be carried out on a number of small local watersheds. The University seeks a **PROJECT DIRECTOR** for this activity; duties of the director will include research coordination, liaison with government agencies, preparation of reports, and general project supervision. The director should have had experience in interdisciplinary environmental studies and ideally will have professional qualifications in soil biology or chemistry. Salary will depend on qualifications. Applications, with names of referees, should be directed to: **I. G. MacQuarrie, Chairman, Biology Department, University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada, C1A 4P3.** Telephone inquiries welcome: 902-894-4121. This position will be filled as soon as possible, and no later than 15 March 1981.

**RESEARCH ASSISTANT PROFESSOR.** Faculty position on nontenure track is available for a Ph.D. in biochemistry. Postdoctoral experience and expertise in protein interactions with cell membranes, enzymology, and immunochemistry. The candidate with demonstrated ability for productive research and funding potential will collaborate within a multidisciplinary program on biochemistry of thrombotic disorders. The position is available immediately. The appointment is for 3 years and is renewable. Salary is commensurate with experience. Send curriculum vitae, summary of research plans, and names of three references to: **Dr. Andrei Z. Budzynski, Temple University School of Medicine, Thrombosis Research Center, 3400 North Broad Street, Philadelphia, Pa. 19140.** *Equal Opportunity/Affirmative Action Employer.*

### CENTER FOR BIOLOGICAL RESEARCH (CIB) IN LA PAZ

#### BAJA CALIFORNIA, MEXICO

#### RESEARCH POSITIONS FOR:

##### FOREST ECOLOGIST COASTAL ECOLOGIST BIOLOGIST

In currently undergoing research programs are available. For ecologists, experience in bioenergetic flow is desirable. For biologists, knowledge in cell culture techniques and halotolerant organisms is required. Applications, curriculum vitae, research experience, and/or for further information; please address correspondence to: **Dr. Jose Luis Ochoa, CIB, Box 128, La Paz, Baja California, Mexico.**

## POSITIONS OPEN

### PUBLIC INFORMATION ASSOCIATE

Arrange media relations for *SCIENCE* and *SCIENCE 81* magazines. Position requires 2 to 3 years of experience working with media, ability to evaluate newsworthiness of scientific articles, excellent writing skills, and ability to maintain good working relationships with appropriate media and magazine personnel. Duties carried out under direction of public information head. Please send replies to: **Carolyn Pruitt, American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005.**

Nontenure position open as **RESEARCH ASSISTANT PROFESSOR** for Ph.D. in biochemistry. Position is connected with long-term research projects in the Thrombosis Research Center of the Temple University School of Medicine and is specifically made to meet the needs for purification and characterization of relevant enzymes. Candidates must have broad experience in protein purification and a solid background in enzymology. It is preferred that the candidate has specific experience with enzymes participating in adenine nucleotide metabolisms and smooth cell contractile system. It is also essential that the candidate is experienced and interested in the studying of enzyme kinetics in intact cells. Please send curriculum vitae, a summary of research plans, and names of three references to: **Dr. Holm Holmes, Thrombosis Research Center, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, Pa. 19140.** *Equal Opportunity/Affirmative Action Employer.*

**RESEARCH ASSOCIATE, Ph.D./M.D.,** research and training position in amino acid metabolism, human biochemical genetics, and analytical biochemistry. Background in cell culture and computer science preferred. Send curriculum vitae and three letters of recommendation to: **Dr. George K. Sumner, Biochemistry Department, University of North Carolina, Chapel Hill, N.C. 27514.** Salary negotiable. *Equal Opportunity/Affirmative Action Employer.*

**RESEARCH ASSOCIATE** (postdoctoral) with experience in cardiac electrophysiology to study membrane properties of cultured heart cells. Available immediately. Send curriculum vitae and names of three references to: **Dr. M. Lieberman, Department of Physiology, Duke University Medical Center, Box 3709, Durham, N.C. 27710.** *Equal Opportunity Employer.*

**RESEARCH ASSOCIATE.** Position available immediately for enzymologist with Ph.D. in biochemistry and postdoctoral experience and expertise in protein purification and cell culture. Instrumentation skill essential. Previous experience in clinical enzyme chemistry is desirable. Send curriculum vitae before 27 March to: **Dr. E. C. Henshaw, University of Rochester Medical Center, P.O. Box 704, Rochester, N.Y. 14642.**

### RESEARCH MICROBIOLOGIST

Norden Laboratories, animal health industry leader in innovative, productive research, has a new position available immediately. Doctorate degree (Ph.D. or Sc.D.) preferred with study/experience in bacterial metabolism and physiology, pathogenic microbiology, and Gram-negative toxins. Must have demonstrated ability to design and conduct independent research studies in various areas of pathogenic bacteriology. Assignments will include identification and purification of toxins and manipulation of these products towards development of vaccines.

Norden Laboratories is a SmithKline Corporation company, offering top-notch benefits, including company-paid life, health, and dental insurance, pension plan, matched savings and employee stock purchase plan, and many extras. Salary is open, negotiable, and dependent on appropriateness of your credentials to our position.

Please send your résumé, in complete confidence, to:

**James P. Judt, Personnel Manager  
Norden Laboratories, Inc.  
P.O. Box 80809  
Lincoln, Nebraska 68501**

*An Equal Opportunity/Affirmative Action Employer*

## FACULTY APPOINTMENTS IN MARINE STUDIES

The Department of Marine Studies of the University of Texas at Austin invites applications for two tenure-track appointments at the Port Aransas Marine Laboratory. The positions are expected to be filled at the Assistant Professor level, although one appointment can be at the level of Professor for an exceptionally qualified person.

One appointment will be made in the area of marine chemistry, and candidates with interests and experience in nutrient chemistry, natural radioactivity, or the physical chemistry of seawater are especially encouraged to apply.

One appointment will be made in the general area of biological oceanography, and candidates with interests and experience in phytoplankton or benthic animals are encouraged to apply.

The Port Aransas Marine Laboratory has programs in mariculture and zooplankton dynamics, to which candidates will wish to relate. Successful candidates will be expected to establish independent research programs, supervise graduate students and participate in Departmental teaching programs. The positions are located in Port Aransas, Texas.

Applicants for these positions must have a Ph.D., and postdoctoral research experience is highly desirable. Qualified persons should send a letter of application, which includes research and teaching interests, a resume, and the names of three references to the address below. Early application is recommended.

Prof. J. R. Moore, Chairman  
Department of Marine Studies  
The University of Texas at Austin  
P.O. Box 7999, University Station  
Austin, Texas 78712

The University of Texas is an Affirmative Action/Equal Opportunity Employer

## PHYSICISTS, FLUID DYNAMICISTS, MATERIALS SCIENTISTS

Applications are invited from Ph-D level scientists with backgrounds in astrophysics, molecular or chemical physics, materials science and fluid dynamics to join a recognized and multi-disciplined staff in solving complex and challenging problems for government and industry.

Immediate openings are available for applicants with relevant technical experience who will expand our capabilities and interests in radiation transport, combustion, lasers and laser applications, high temperature sciences, atmospheric and aerosol sciences, reacting flows, and related areas. Applicants should be self-motivated and perform successfully in an informal, growth-oriented and highly stimulating environment.

We offer salaries commensurate with experience, excellent fringe benefits, congenial atmosphere, and an opportunity to demonstrate entrepreneurial and management skills.

Please forward resumes or requests for further information to:

Ms. Dorothy Brooks, Personnel Director

### AERODYNE RESEARCH, INC.

Bedford Research Park, Crosby Drive  
Bedford, MA 01730

An Equal Opportunity Employer

## Program For Doctor of Philosophy in Pathology

The Department of Pathology, Wayne State University School of Medicine, offers a new graduate program leading to the degree of Doctor of Philosophy in Experimental Pathology and Clinical Laboratory Sciences. It is a full three to four year program requiring students to complete a major core curriculum in modern cellular and molecular pathology, related minor courses, appropriate comprehensive examinations, and research leading to a final dissertation. The Department offers diverse research opportunities, especially in experimental cardiovascular, renal, pulmonary and neuropathology; immunopathology, cytogenetics, tumor biology and immunology, tissue culture, environmental pathology, teratology, and comparative pathology. Graduate students emphasizing the clinical laboratory sciences may investigate basic or applied problems in analytical clinical biochemistry, clinical microbiology, hematopathology, blood coagulation, immunopathology and toxicology. Students may qualify for teaching assistantships or other forms of financial aid. For consideration, applicants must have a bachelor's degree and a composite record of academic excellence; advanced standing may be given in special cases.

For detailed information about this program write: Graduate Officer

Department of Pathology  
Wayne State University School of  
Medicine  
540 East Canfield  
Detroit, MI 48201

## Environmental Medicine Department Manager \$25,104-\$33,276/yearly

The University of California, Irvine is seeking a qualified individual to assume the position of the Manager of the Department of Community and Environmental Medicine.

Under the direction of the department chair, the manager will be responsible for program development and administrative responsibilities in the area of finance, equipment and space, evaluation, and technical and support staff management.

The qualified applicant will have advanced administrative and analytical skills which preferably have been successfully applied in procurement and management of environmental biomedical research grants.

The University of California, Irvine offers excellent benefits including a comprehensive insurance package, ideal location and three weeks paid vacation.

Filing deadline: until filled. Request required application materials for Job #CP 101.

University of California,  
Irvine  
Campus Personnel  
152 Administrative Bldg.  
Irvine, CA 92717  
Affirmative Action Employer



## RESEARCH OPPORTUNITY IN PHYSIOLOGICAL/BIOCHEMICAL BASIS OF ALCOHOLISM

The Veterans Administration's Department of Medicine and Surgery announces the 3rd round of research awards in the field of alcoholism. Successful candidates will receive 3 years of support to conduct research in a VA Medical Center. This program will bring together new investigators and existing VA laboratories so that knowledge, facilities and skills can be shared.

Applications are sought from researchers willing to prepare a formal research proposal to investigate the physiological and/or biochemical basis of alcoholism. The applicant may be at any stage of his or her career (junior, intermediate or senior). While academic affiliations are encouraged, successful candidates must conduct their research projects in the VA. The opportunity to apply to this program is open to all scientists regardless of present employment, e.g. VA, University, commercial organization, etc.

Each application will be forwarded to a selected host VA Medical Center. Formal research proposals will be developed by the applicant in collaboration with a co-investigator from the host VA Medical Center; proposals will be reviewed for scientific merit by a multidisciplinary panel of expert researchers.

Funding will be appropriate to individual needs; the initial 3 year study may lead to a tenured career within the VA system.

Interested doctoral degreed scientists should request an application package BEFORE APRIL 30, 1981:

From:  
Dr. Robert Allen (151F)  
VA Central Office  
810 Vermont Avenue, N.E.  
Washington, D.C. 20420  
Phone: 202-389-2441

Or:  
Dr. Marcus A. Rothschild  
VA Medical Center  
First Avenue at E. 24th Street  
New York, N.Y. 10010  
Phone: 212-686-7500 ext. 663

## POSITIONS OPEN

### SENIOR PROJECT COORDINATOR

Direct the operational and financial activities of the Cancer Information Service and coordinate outpatient referral services. Requires a master's degree in nursing or health education, current Kentucky registration, plus 4 years of related experience or the equivalent combination of education and experience. Prefer 1 year of experience in public education and 3 years of experience in health care delivery. Salary range: \$16,111 to \$19,321. Excellent fringe benefits, including six credit hours per semester. Apply:

University of Louisville  
Health Sciences Center Personnel  
525 East Madison  
Louisville, Ky. 40292  
Telephone: 502-588-5821

*An Affirmative Action/Equal Opportunity Employer*

### UNIVERSITY OF CALIFORNIA SYSTEMWIDE ADMINISTRATION SPECIAL ASSISTANT TO THE PRESIDENT—LABORATORY AFFAIRS

The special assistant, who reports to the vice president, assists the president and vice president in fulfilling their oversight responsibility for the four Department of Energy (DOE) Laboratories managed by the University and in developing information useful to the Regents' Committee on Oversight of the DOE Laboratories. Responsibilities include assisting two evaluation committees through preparation of background papers, handling requests for information or studies, drafting reports, and arranging testimony from witnesses; drafting reports for the president and Regents' committee, developing agendas for the Regents' committee's meetings, and preparing background materials for these meetings. The incumbent assists in developing agendas for the president's meetings with laboratory directors, provides staff support at these meetings, provides liaison and coordination with university and government offices, assists in the contract negotiation process between the University of California (UC) and DOE, and supervises two employees. Qualifications: substantial experience with scientific and technical research; ability to write well and speak effectively; demonstrated and increasingly responsible experience in analytical work; demonstrated ability to acquire, analyze, and digest large quantities of information and make the information useful in decision-making processes. Knowledge of or ability to acquire a working knowledge of UC policies, goals, and priorities. Knowledge of federal government structure and process as they relate to the DOE laboratories is highly desirable. Security clearance required. Salary commensurate with experience. Send résumé to: Edna Coleman, 41-LA University Hall, University of California, Berkeley, California 94720. Closing date: 15 March 1981.

### STAFF ASSOCIATE

Seeking an individual with 3 or 4 years of postdoctoral experience, with a strong background in enzyme and nucleic acid chemistry, and with a strong commitment toward studying molecular evolution in vitro. Experience in the areas of virology and immunology advantageous. Salary dependent on postdoctoral level. To begin as soon as possible.

Send curriculum vitae to:

Deputy Director of Administration  
Cancer Center/Institute of Cancer Research  
701 West 168 Street  
New York, New York 10032

*Equal Opportunity/Affirmative Action Employer*

### DEPARTMENT OF ZOOLOGY UNIVERSITY OF WASHINGTON

Applications are invited for an anticipated faculty position effective September 1981. Preference will be given to applicants in physiological fields. Candidates must present evidence of strong research activity and productivity and strong potential for obtaining research funding. Although higher rank is not precluded, it is expected that appointment will be made at assistant professor level. Send curriculum vitae, list of publications, brief outline of previous and proposed research directions, and names of three references to: Donald S. Farner, Chairman, Department of Zoology, NJ-15, University of Washington, Seattle, Washington 98195, by 25 March 1981. *Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### SENIOR PLANT MOLECULAR BIOLOGIST YALE UNIVERSITY DEPARTMENT OF BIOLOGY

This department invites applications for appointment beginning in academic year 1981-1982 as a full professor from persons with interests in the cell biology, molecular genetics, and developmental biology of plants. The appointee will be expected to participate in undergraduate and graduate teaching. Send curriculum vitae and names of references to:

Chairman, Department of Biology  
Yale University  
P.O. Box 6666  
New Haven, Conn. 06511

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

### STAFF ENVIRONMENTALIST

M.S. or Ph.D. in environmental studies or closely related field. Experience with state/federal agencies, permits, EIR's, and so forth preferred. Salary commensurate with education and environmental work experience. Interested individuals should submit résumés, including salary requirements, to: David Hopper, Southern Natural Gas Company, P.O. Box 2563, Birmingham, Ala. 35202.

*An Equal Opportunity Employer*

### TECHNOLOGY AND MODERNIZATION

The Graduate School of International Studies seeks applicants to fill a tenure-track position at the assistant professor level in its interdisciplinary Technology, Modernization and International Studies Program, designed to prepare social scientists for policy analysis, management, and planning roles in corporate and government organizations which develop, control, and transfer technology, as well as for academic careers. The candidate will have some responsibilities for administration and development, as well as teaching graduate seminars in such areas as the design, management, and evaluation of technological projects and the analysis of national and international technological issues. Candidate should be familiar with social science approaches to public policy analysis. Practical experience in development activities is desirable as is an interest in natural resources.

Applications, curriculum vitae, and three letters of recommendation should be sent to:

Michael G. Fry, Dean  
Graduate School of International Studies  
University of Denver  
Denver, Colo. 80208

*Affirmative Action/Equal Opportunity Employer*

**VERTEBRATE ANATOMIST/PHYSIOLOGIST.** A tenure-track faculty position at the rank of assistant professor at Indiana University-Purdue University at Indianapolis is available beginning August 1981. Responsibilities include lecturing and coordinating laboratories in undergraduate health science oriented human anatomy or physiology courses and teaching an upper-level or graduate course in the candidate's area of expertise. The successful candidate must possess a Ph.D. or equivalent degree and will be expected to maintain an active research program. Completed applications are due by 16 March 1981. Send curriculum vitae, transcripts, and a summary of research objectives and accomplishments, and request referees to forward three letters of recommendation to: Dr. Richard Pfanzer, Department of Biology, Purdue University School of Science, 1125 East 38 Street, Indianapolis, Indiana 46205.

*An Affirmative Action/Equal Opportunity Employer*

**WILDLIFE ECOLOGIST.** Teaching and research; 12-month; tenure-track. Requires a Ph.D. in wildlife ecology and employment experience with a nonacademic agency in a wildlife position highly desirable. Teaching and research responsibilities in the general field of wildlife management techniques and wild bird ecology. Salary and rank negotiable. Submit letter of application, curriculum vitae, three letters of recommendation, and publication list to: Wallace Klusmann, Head, Wildlife and Fisheries Sciences Department, Texas A & M University, College Station, Texas 77843. Closing date: 15 March 1981 or until position is filled. *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### STAFF POSITIONS

The Public Health Research Institute is seeking applicants for several staff positions. Candidates will be considered at any career level. Emphasis will be placed on eukaryotic cell biology, virology, and developmental biology, although exceptional candidates with other interests will be considered. Appointees will be expected to pursue a vigorous full-time independent research program. Interested individuals should send curriculum vitae, the names of three references, and a brief summary of their research interests to:

Dr. David Dubnau  
Chairman, Recruitment Committee  
The Public Health Research Institute  
455 First Avenue  
New York, New York 10016

*An Equal Opportunity/Affirmative Action Employer*

## SYMPOSIUM

**NUTRITION AND CANCER UPDATE**, 27 and 28 March 1981, Louisville, Ky. AMA, 14½ credit hours category 1; AAFP, 14½ prescribed credit hours; 1.4 CEU's for dietitians, nurses, and pharmacists. Contact: Gerald D. Swim, Assistant Dean, Continuing Medical Education, University of Louisville Health Sciences Center, Louisville, Ky. 40292. Telephone: 502-588-5329.

## COURSES

### TEM:SEM:EDX Eighth annual program in ELECTRON MICROSCOPY

**STATE UNIVERSITY OF NEW YORK (SUNY)** Scanning EM with Energy Dispersive Analysis (25 to 29 May) and Transmission EM (1 to 11 June). Dr. B. L. Redmond, SUNY, principal lecturer. Lectures and laboratories of the program are designed to introduce the participant to the theoretical and practical aspects of the instruments and techniques. Enrollment limited to permit maximum individualized and "hands-on" instruction. Tuition: \$550. For further information and application form, write or telephone: Dr. B. L. Redmond, Department of Biology, SUNY, New Paltz, N.Y. 12561. Telephone: 914-257-2549 or 2175.

University of Southern California (USC)  
Catalina Marine Science Center  
Summer Neurobiology Course  
20 July to 21 August 1981

An intensive "hands-on" neurophysiology course. The major emphasis will be on the membrane properties of neurons and neuronal interactions which produce behavior patterns. Topics covered will include excitability mechanisms, synaptic transmission, neuronal correlates of behavior, and cellular aspects of neuronal development. Techniques will include intracellular and extracellular recording, voltage clamping, ionic replacement studies, intracellular staining, microiontophoresis, statistical analysis of synaptic potentials, and microelectrode recording from intact animals. Experimental animals will include the frog, *Aplysia*, leech, and lobster.

Instructor: A. Horridge (Australian National University, Canberra)

Participants: C. Goodman (Stanford University)  
K. Lukowiak (University of Calgary)  
S. Hagiwara, J. Vergara (University of California, Los Angeles)  
T. Bullock, A. Selverston (University of California, San Diego)  
L. Byerly, W. McClure, C. Platt, A. Siger (USC)  
J. Weeks (University of Washington)

Supported by grants from the Grass Foundation.

Tuition: \$708. Room and board: \$575.

Financial aid is available on a competitive basis through the generosity of the University of Southern California Oceanographic Associates. For information, contact: Dr. Alvin Siger, Course Director, Department of Biological Sciences, University of Southern California, University Park, Los Angeles, California 90007.

**FACULTY POSITIONS OPEN  
COLLEGE OF AGRICULTURAL SCIENCES  
AND FOODS**

**KING FAISAL UNIVERSITY  
HOFUF, SAUDI ARABIA  
Academic Year 1981-1982**

The expanding College of Agricultural Sciences and Foods of King Faisal University invites inquiries from qualified applicants for the 1981-1982 academic year in the following fields:

Biology	Plant Pathology
Chemistry	Agricultural
Physics	Economics
Biochemistry	Animal Science
Agronomy	Animal Ecology
Horticulture	Dairy Science
Bee Keeping	Agricultural Engineering
Poultry Science	Water Resources and
Home Economics	Climatology
Agricultural Extension	Aquatic Wealth

**PREREQUISITES:** Ph.D. or master's or equivalent degrees, practical and/or teaching experience. Knowledge of Arabic helpful, but not required.

Language of instruction is English.

Positions available September 1981; interviews scheduled with the dean in Houston and London in April/May 1981.

**SALARY RANGES** (approximate annual U.S. dollars):

Professor—\$25,469 to \$33,965  
Associate professor—\$22,779 to \$28,973  
Assistant professor—\$18,750 to \$27,487  
Lecturer—\$11,611 to \$16,035

Salaries are paid monthly in Saudi riyals.

**BENEFITS:** Free furnished accommodations; substantial education allowance for up to four children. Air tickets to and from Saudi Arabia once per year for family of four. Sixty-day paid summer holiday, overweight allowance. No Saudi income tax. Contracts are for 1 year and renewable.

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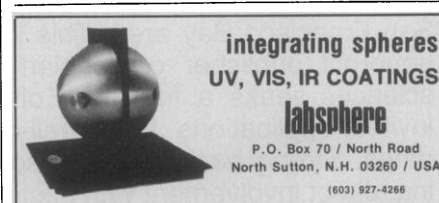
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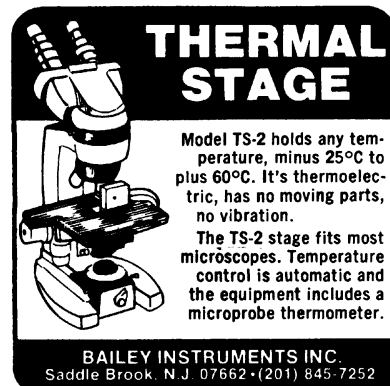
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9. Transplantation
10. Growth and differentiation factors: animals and plants
11. Induction
12. Biogenesis and function of cell membranes
13. Pattern formation
14. Development of the neural system
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16. Metamorphosis
17. Morphogenetic movements
18. Epithelial-mesenchymal interactions
19. Gonadal development and maturation of gametes
20. Congenital defects
21. Teratogenesis
22. Cell interactions and cell recognition
23. Cell junctions
24. Mitosis and meiosis
25. Regeneration: animals and plants
26. Unicellular organisms
27. Pathology
28. Other subjects

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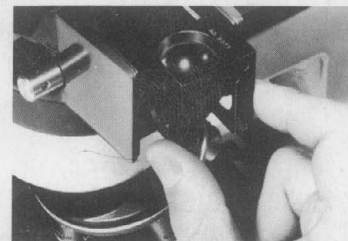
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