

will bring him or her up to date in areas where his or her reading has lapsed.

In short, *Social Cogniton* is timely, balanced, and comprehensive. It may not supplant more general social psychology textbooks, but it will surely be reflected in many a lecture note, with or without acknowledgement of the source. This may not be what the authors and publishers had in mind, but it will be a tribute both to the book's substance and to its style.

EDWARD E. JONES

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## Books Received

**Adhesive Joints.** Formation, Characteristics, and Testing. K. L. Mittal, Ed. Plenum, New York, 1984. xiv, 931 pp., illus. \$125. From a symposium, Kansas City, Mo., Sept. 1982.

**Adrenal Diseases in Childhood.** Maria I. New and Lenore S. Levine, Eds. Karger, Basel, 1984. viii, 235 pp., illus. \$99. Pediatric and Adolescent Endocrinology, vol. 13.

**Advanced Organic Chemistry.** Part A, Structure and Mechanisms. Francis A. Carey and Richard J. Sundberg, 2nd ed. Plenum, New York, 1984. xviii, 726 pp., illus. \$59.50; paper, \$16.95.

**Advances in Analytical Toxicology.** Vol. 1. Randall C. Baselt, Ed. Biomedical Publications, Foster City, Calif., 1984. x, 275 pp., illus. \$26.

**Advances in Cancer Control.** Epidemiology and Research. Paul F. Engstrom, Paul N. Anderson, and Lee E. Mortenson, Eds. Liss, New York, 1984. xxii, 460 pp., illus. \$58. Progress in Clinical and Biological Research, vol. 156. From two meetings, Denver, June 1983, and Washington, D.C., March 1983.

**Advances in Cell Culture.** Vol. 3. Karl Maramorosch, Ed. Academic Press, Orlando, Fla., 1984. xxii, 319 pp., illus. \$55.

**Advances in Cellular Neurobiology.** Vol. 5. Sergey Federoff, Ed. Academic Press, Orlando, Fla., 1984. xviii, 375 pp., illus. \$89.

**Advances in Child Development and Behavior.** Vol. 18. Hayne W. Reese, Ed. Academic Press, Orlando, Fla., 1984. xiv, 314 pp. \$34.

**Advances in Computers.** Vol. 23. Marshall C. Yovits, Ed. Academic Press, Orlando, Fla., 1984. xvi, 377 pp., illus. \$48.

**Advances in Cryogenic Engineering.** Vol. 29. R. W. Fast, Ed. Plenum, New York, 1984. xxii, 1049 pp., illus. \$95. From a conference, Colorado Springs, Aug. 1983.

**Advances in Cyclic Nucleotide and Protein Phosphorylation Research.** Vol. 17A. Paul Greengard *et al.*, Eds. Raven, New York, 1984. x, 182 pp. Paper, \$17.50. From a conference, Milan, June 1983.

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**Advances in Inflammation Research.** Vol. 8. Gerald Weissmann, Ed. Raven, New York, 1984. xii, 251 pp., illus. \$52.

**Advances in Protein Chemistry.** Vol. 36. C. B. Anfinsen, John T. Edsall, and Frederic M. Richards, Eds. Academic Press, Orlando, Fla., 1984. x, 395 pp., illus. \$52.

**Advances in Test Anxiety Research.** Vol. 3. Henk M. van der Ploeg, Ralf Schwarzer, and Charles D. Spielberger, Eds. Published for the International Society for Text Anxiety Research by Swets and Zeitlinger, Lisse, and Erlbaum, Hillsdale, N.J., 1984. xii, 285 pp., illus. Paper, \$29.95. From a meeting, Louvain, Belgium, 1983.

**Advances in World Archaeology.** Vol. 3. Fred Wendorf and Angela E. Close, Eds. Academic Press, Orlando, Fla., 1984. xxxii, 394 pp., illus. \$65.50.

**Advances in X-Ray Analysis.** Vol. 27. Jerome B. Cohen *et al.*, Eds. Plenum, New York, 1984. xviii, 579 pp. \$69.50. From a conference, Snowmass, Colo. Aug. 1983.

**Artificial Intelligence.** Patrick Henry Winston. 2nd ed. Addison-Wesley, Reading, Mass., 1984. xvi, 527 pp., illus. \$29.95.

**Astronomical Experiments.** Vincent Icke. 3rd ed.

Burgess, Minneapolis, 1984. 197 pp., illus. Paper, \$6.95.

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**Asymmetric Synthesis.** James D. Morrison, Ed. Academic Press, Orlando, Fla., 1983. Vol. 1, Analytical Methods. xiv, 201 pp., illus. \$32. Vol. 2, Stereodifferentiating Addition Reactions, Part A. xiv, 278 pp., illus. \$45.

**Asymptotic Methods in Queuing Theory.** A. A. Borovkov. Wiley, New York, 1984. xii, 292 pp. \$47.95. Wiley Series in Probability and Mathematical Statistics. Translated from the Russian edition (Moscow, 1980) by D. Newton.

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**Biology and Chemistry of the Carbonic Anhydrases.** Richard E. Tashian and David Hewett-Emmett, Eds. New York Academy of Sciences, New York, 1984. xiv, 640 pp., illus. Paper, \$140. Annals of the New York Academy of Sciences, vol. 429. From a conference, New York, Sept. 1983.

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**Bone Marrow Biopsies Updated.** New Prospects for Clinical Diagnostics. B. Frisch, Ed. Karger, Basel, 1984. viii, 132 pp., illus. \$58.75. Bibliotheca Haematologica, No. 50. From a symposium, Barcelona, Sept. 1983.

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**Cell Separation.** Methods and Selected Applications. Thomas G. Pretlow II and Theresa P. Pretlow, Eds. Academic Press, Orlando, Fla., 1983. Vol. 2, xvi, 327 pp., illus. \$39.50. Vol. 3, xviii, 317 pp., illus. \$47.50.

**Cellular Ageing.** H. W. Sauer, Ed. Karger, Basel, 1984. x, 276 pp., illus. \$88.75. Monographs in Developmental Biology, vol. 17.

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**Chemistry and Crime.** From Sherlock Holmes to Today's Courtroom. Samuel M. Gerber, Ed. American Chemical Society, Washington, D.C., 1983. xiv, 136 pp., illus. \$19.95.

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**Comparative Neurology of the Optic Tectum.** Horacio Vanegas, Ed. Plenum, New York, 1984. xx, 850 pp., illus. \$125.

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**Continuity and Change in Art.** The Development of Modes of Representation. Sidney J. Blatt, with Ethel S. Blatt. Erlbaum, Hillsdale, N.J., 1984. xx, 411 pp., illus. \$45.

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**Cries of the Wolf Man.** Patrick J. Mahony. International Universities Press, New York, 1984. xii, 185 pp. \$25.

**Crime, Madness, and Politics in Modern France.** The Medical Concept of National Decline. Robert A. Nye. Princeton University Press, Princeton, N.J., 1984. xvi, 368 pp. \$35.

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**Disease Resistance in Plants.** J. E. Vanderplank. 2nd ed. Academic Press, Orlando, Fla., 1984. xiv, 194 pp., illus. \$34.50.

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**The Doctors' Anti-Breast Cancer Diet.** Sherwood L. Gorbach, David R. Zimmerman, and Margo N. Woods, with recipes by Jean Kressy. Simon and Schuster, New York, 1984. 221 pp. \$15.95.

**Doppler Radar and Weather Observations.** Richard J. Doviak and Dušan S. Zrnić. Academic Press, Orlando, Fla., 1984. xviii, 458 pp., illus. \$60.

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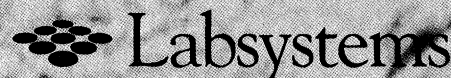
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L. Virtanen et al., J. Cell Sci 50, 45-63 (1981)



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(Continued from page 434)

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**Evolution. The History of an Idea.** Peter J. Bowler. University of California Press, Berkeley, 1984. xiv, 412 pp., illus. \$29.95; paper, \$10.95.

**Exercise Medicine.** Physiological Principles and Clinical Applications. Alfred A. Bove and David T. Lowenthal, Eds. Academic Press, Orlando, Fla., 1983. xvi, 400 pp., illus. \$42.50.

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**Forest Entomology.** Ecology and Management. Robert N. Coulson and John A. Witter. Wiley-Interscience, New York, 1984. xii, 669 pp., illus. \$37.50.

**Foundation of Sensory Science.** W. W. Dawson and J. M. Enoch, Eds. Springer-Verlag, New York, 1984. x, 577 pp., illus. \$108.

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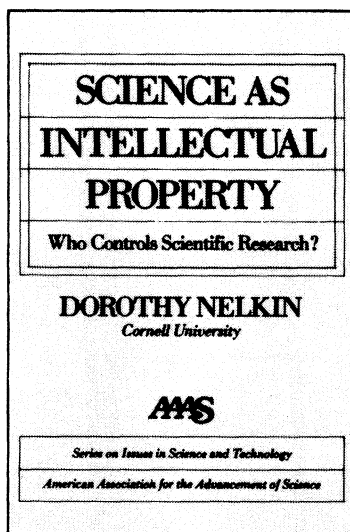
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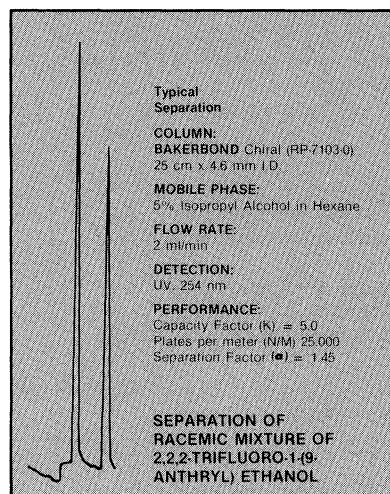
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(Molecular biology/biochemistry, neurobiology, toxicology, or immunology). Applications are invited for a tenure-track position (teaching/research) in a 17-member department at a state university with 21,000 students, beginning September 1985. Competitive salary. A seed grant of \$10,000. Office and laboratory (27 feet by 39 feet) already equipped with a Beckman L5-50B ultracentrifuge, a Sorvall RC-5C superspeed centrifuge, a Beckman DU-8B spectrophotometer, and a Sartorius balance. Many other items of departmental equipment available. Teaching duties of two courses a year. Expected to develop externally funded research program and to participate in the graduate program (M.S./Ph.D.). Ph.D. and postdoctoral training required. Submit curriculum vitae (with a statement of future research plans, and a list of courses you can and would like to teach), and have three letters of recommendation sent to: **Dr. Woon H. Jyung, Chairman, Department of Biology, University of Toledo, Toledo, Ohio 43606.** *Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR IN PHYSICAL BIOCHEMISTRY—JOINT APPOINTMENT IN THE AGRICULTURAL EXPERIMENT STATION

The Department of Biochemistry, University of California, Riverside, invites recent Ph.D.'s with backgrounds in physical biochemistry to apply for a tenure-track faculty position with joint appointment to the Agricultural Experiment Station in the area of physical biochemistry to begin after 1 January 1985. Candidates in all areas of physical biochemistry (for example, various areas of laser spectroscopy, NMR, EPR, fluorescence) will be considered. Those with research and teaching interests in the application of NMR and/or other types of spectroscopy to the study of the biophysical/chemical properties of plant macromolecular systems are particularly encouraged to apply. Application deadline is 1 January 1985 or until a suitable candidate is found. Send résumé, list of publications, transcripts of all university academic records, and names and addresses of at least three references to: **M. F. Dunn, Search Committee Chair, Department of Biochemistry, University of California, Riverside, Riverside, Calif. 92521.** *The University of California, Riverside, is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are urged to apply.*

### DEPARTMENT OF PSYCHOLOGY CORNELL UNIVERSITY

#### Tenure-track, Assistant Professor in Personality-Social Psychology

The Department of Psychology of the College of Arts and Sciences at Cornell University anticipates an opening for a tenure-track position at the assistant professor level in personality or social psychology, beginning September 1985. People with developmental interests in these fields are also encouraged to apply. Interested applicants should submit complete curriculum vitae, reprints or preprints of completed research, and letters of recommendation sent directly from three referees to:

**Tom Gilovich, Chair  
Personality/Social Psychology Search Committee  
Department of Psychology  
Uris Hall  
Cornell University  
Ithaca, N.Y. 14853**

Review of applications will begin 15 January 1985. *Cornell University is an Equal Opportunity/Affirmative Action Employer.*

### DEPARTMENT OF PSYCHOLOGY CORNELL UNIVERSITY

The Department of Psychology of the College of Arts and Sciences of Cornell University has an opening in either 1985 or 1986 for an **experimental psychologist** interested in cognition, language, and/or perception. We invite applicants with a variety of interests in experimental psychology including those with a developmental perspective. This is a tenure-track position. Candidates should submit curriculum vitae, reprints or preprints of recent research, and arrange that at least three letters of recommendation be sent to:

**Experimental Psychology Search Committee  
Psychology Department  
Uris Hall  
Cornell University  
Ithaca, N.Y. 14853**

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

## POSITIONS OPEN

**ASSISTANT DIRECTOR OF DRUG-LIVER UNIT** (research assistant professor) in Department of Pharmacology required to conduct research on mechanisms of drug hepatotoxicity at both clinical and experimental levels as well as other aspects of drug metabolism. Candidate should have a Ph.D. in pharmacology or biochemistry, and should have conducted research on drug hepatotoxicity or cytochrome P-450 system. Salary is competitive and fringe benefits are excellent. Send curriculum vitae and references to: **Dr. Martin Black, Head Liver Unit, Director of Clinical Pharmacology, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, Pa. 19140.** *Equal Opportunity/Affirmative Action Employer.*

### DEPARTMENT OF BIOLOGY UNIVERSITY OF CALIFORNIA, LOS ANGELES

Applications are invited for a position as a tenure-track **ASSISTANT PROFESSOR** beginning 1 February 1985. We are seeking a person who studies the behavioral biology of vertebrates. Preference will be given to a candidate who emphasizes physiological or evolutionary mechanisms.

Candidates should submit curriculum vitae (including a list of publications, a summary of research and teaching objectives), and names and addresses of at least three references. Send materials to:

**Chair, Behavioral Search Committee  
Department of Biology  
University of California, Los Angeles  
Los Angeles, California 90024**

Deadline for receipt of applications is 1 January 1985.

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

**ASSISTANT PROFESSOR**—Tenure-track position in Anatomy Department. Candidates should have a Ph.D. with postdoctoral research experience and ability to obtain extramural grant support. Research interest in cell biology desired, especially in areas such as membrane structure and function, cell adhesion, cytoskeleton, and extracellular matrix. Individuals will participate in teaching in one of the areas of anatomy. Superb research facilities available in new building. Send curriculum vitae, brief statement of research interest, and names of three references by 15 December 1984 to:

**Gary E. Wise, Ph.D.  
Chairman, Department of Anatomy  
Texas College of Osteopathic Medicine  
Camp Bowie at Montgomery  
Fort Worth, Texas 76107-2690**

*An Equal Opportunity/Affirmative Action Employer*

### ASSISTANT PROFESSOR—ANATOMIST

The Department of Surgery, Section of Gross Anatomy, has two faculty positions available immediately. The successful applicants will have a research program in the metabolic response to trauma or the molecular biology of the immune response. Extramural funding or the strong potential of extramural funding is required. Teaching responsibility will be in medical gross anatomy. Prior experience is desirable but not required. Send a résumé, a description of research plans, and the names of three references to: **William B. Stewart, Chief, Section of Gross Anatomy, Yale University School of Medicine, P.O. Box 3333, New Haven, Conn. 06510.** Application deadline: 31 December 1984. *Yale University is an Equal Opportunity/Affirmative Action Employer, and all women and members of minority groups are encouraged to apply.*

### ASSISTANT PROFESSOR

The Department of Pharmacology, Toxicology, and Therapeutics at the University of Kansas College of Health Sciences has available a tenure-track position. The candidate should have training and experience in neuropharmacology and/or neurotoxicology. Applicants should have an M.D. or Ph.D. degree and have a strong commitment to teaching and research. The successful candidate will be expected to develop an independent research program and participate in all teaching activities (medical and graduate students) of the department. Applications will be accepted until the position is filled but prefer submission by 15 December 1984. Those interested in applying should send an up-to-date curriculum vitae to: **Dr. Alan Poisner, Department of Pharmacology, Toxicology, and Therapeutics, University of Kansas Medical Center, 39th and Rainbow, Kansas City, Kansas 66103.**

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

## POSITIONS OPEN

The Department of Biochemistry, Duke University Medical Center, invites applications for the position of **ASSISTANT PROFESSOR**. This is a tenure-track position. The person will be expected to establish a strong independent research program and to teach at the graduate level. The field of interest is open, although some preference may be given to candidates interested in the molecular aspects of cell biology. Send résumé, summary of research interest, and names of three references by 15 December 1984 to: **Robert L. Hill, Department of Biochemistry, Duke University Medical Center, Durham, North Carolina 27710.** *Duke University is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR Biological Oceanography

The College of Marine Studies, University of Delaware, invites applications for a faculty position in biological oceanography. The position is available immediately with the possibility of renewal after an initial 2-year period. We are looking for candidates with interests in any area of benthic ecology. The successful applicant will be required to teach a graduate course in coastal and estuarine biology as well as a specialty course in his/her own area. The position will also afford the opportunity to develop independent and cooperative research within existing interdisciplinary estuarine and coastal research programs. Send curriculum vitae and three letters of reference to:

**Dr. Charles E. Epifanio  
College of Marine Studies  
University of Delaware  
Lewes, Del. 19958**

Closing date is 1 December 1984.

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

### ASSISTANT PROFESSOR—TOXICOLOGY

Candidates with a Ph.D. in pharmacology or related field or an M.D. and two or more years of relevant postdoctoral experience in toxicology are invited to apply for this tenure-track position. The successful candidate should show promise of developing an independent research program and will be expected to teach and advise graduate and health professional students. Applications will be accepted until the position is filled but prefer submission by 1 December 1984. Send curriculum vitae to: **Dr. Curtis D. Klaassen, Department of Pharmacology, Toxicology, and Therapeutics, University of Kansas Medical Center, Kansas City, Kansas 66103.**

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

**ASSISTANT PROFESSOR IN WEED SCIENCE.** Individual will conduct research on herbicide efficacy in major Louisiana crops and develop a research program in weed biology/ecology or weed/crop interaction. Participate in teaching weed science courses and advising graduate students. Ph.D. in a plant science with emphasis in weed science or physiological or applied ecology is required. Knowledge or experience in herbicide evaluation is desirable. Send curriculum vitae and academic transcripts and have at least three letters of recommendation sent to: **Chairman, Weed Science Search Committee, Department of Plant Pathology and Crop Physiology, Louisiana State University, Baton Rouge, La. 70803.** Telephone: 504-388-1464. *An Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT RESEARCH PHYSIOLOGIST

The Departments of Physiology and Anatomy, University of California, Los Angeles (UCLA), require a postdoctoral trainee in cardiovascular research with special emphasis on studies of basic cellular and subcellular mechanisms such as muscle excitation-contraction coupling, cellular energetics and chemomechanical transduction, and Na/K transport and gap junction connections. The purpose of this training is to equip applicants (with medical or doctoral degrees) with a critical scientific approach, and state of the art technical skills in any of these areas of research. The group consists of Drs. J. Vergara and E. Homsher, Department of Physiology, and Dr. G. Zampighi, Department of Anatomy. Position available 15 November 1984. Stipend: \$16,000 to \$17,000 per year. Applicants should send curriculum vitae, including names of those who may be contacted for reference, to: **Dr. Julio Vergara, Department of Physiology, UCLA, 1439-A Jerry Lewis Neuromuscular Research Center, Los Angeles, Calif. 90024.**

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

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF BIOLOGY

Department of Biology, Saint Louis University, has a tenure-track position open, beginning fall semester 1985. Successful applicant is expected to teach undergraduate and graduate courses and to establish a strong research program. Research should be in an area relevant to systematic botany. Preference will be given to applicants with a biochemical or molecular approach. Send résumé, reprints, and names and addresses of three references to: **Dr. Dorothy Feir, Chairperson Search Committee, Biology Department, Saint Louis University, St. Louis, Mo. 63103.** Review of applications will begin 30 November 1984.

*Saint Louis University is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT PROFESSOR-PLANT MOLECULAR GENETICS.** Tenure-track position, research and teaching, available 16 August 1985. Preference will be given to applicants with at least 2 years of research experience in recombinant DNA technology or somatic cell genetics as applied to plant-plant or plant-microbial genome interaction. Postdoctoral training is required. The successful candidate will be expected to establish a vigorous research program and direct graduate students. Teaching will include plant genetics and specialty areas. Send curriculum vitae, statement of research interests, and names of three references to: **Dr. J. M. Aronson, Department of Botany and Microbiology, Arizona State University, Tempe, Ariz. 85287,** by 17 December 1984. *An Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR OF PSYCHOLOGY

A tenure-track teaching-research appointment in experimental psychology is available starting 1 July 1985. Applicants are encouraged from all basic and applied areas who would be comfortable in a program with a biopsychological orientation. Résumés, selected publications, and four references should be sent to: **Marcus B. Waller, Experimental Psychology Search Committee Chairman, Department of Psychology, Davie Hall, University of North Carolina, Chapel Hill, N.C. 27514; telephone: 919-962-2130;** before 11 January 1985. *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### BIOCHEMISTS—MOLECULAR BIOLOGISTS

Tenure-track faculty positions at assistant and associate professor levels. Candidates should be interested in developing strong and independent research with long-term growth potential on the mechanisms of gene expression at the molecular level in either prokaryotic or eukaryotic systems which may be interpreted broadly. Teaching includes medical, dental, and graduate students at sizable medical complex. Biochemistry department with excellent new facilities is undergoing substantial expansion. Salary commensurate with experience and competitive. Curriculum vitae, brief statement of present and future research interests, and three letters of recommendation should be sent to: **Dr. Robert D. Wells, Chairman, Department of Biochemistry, University of Alabama in Birmingham Schools of Medicine and Dentistry, University Station, Birmingham, Alabama 35294.** *An Equal Opportunity/Affirmative Action Employer.*

### CHAIRMAN, DEPARTMENT OF PHYSIOLOGY

The Eastern Virginia Medical School (EVMS) invites applications for the position of chairman of the Department of Physiology. EVMS is a 10-year-old community supported medical school, located in Norfolk, Virginia. The Physiology Department has received national recognition for its efforts in reproductive physiology and is collaborating with other EVMS departments in various neuroendocrine and reproductive investigations.

Candidates for this position should have a strong research background as evidenced by appropriate publications and current active grant support. Experience in undergraduate medical student and graduate education, curriculum development, and administration are considered prerequisites.

Letters of application should include complete curriculum vitae, bibliography, and a list of references, and should be addressed to: **James P. Baker, M.D., Chairman Physiology Search Committee, EVMS, P.O. Box 1980, Norfolk, Virginia 23501.** Applications should be received no later than 30 November 1984.

*An Affirmative Action/Equal Opportunity Employer*

## POSITIONS OPEN

**ASSISTANT PROFESSOR, BIOCHEMISTRY.** Applications are invited for a position at the assistant professor level (tenure-track) in the Department of Biochemistry, New York University School of Medicine. Duties will include teaching medical and graduate students. Applicants must be strongly motivated toward research. Preference will be given to those interested in genetic recombination, chromosome structure, molecular genetics, and mechanisms of gene expression at the genetic and molecular level in prokaryotic or eukaryotic systems. In applying, please send curriculum vitae, a brief statement of research interest (one to two pages only), and names of four referees to: **Dr. Peter D'Eustachio, Department of Biochemistry, New York University Medical Center, 550 First Avenue, New York, N.Y. 10016.** Please reply before 15 December 1984. *Equal Opportunity/Affirmative Action Employer.*

### EUKARYOTIC MOLECULAR BIOLOGIST/BIOCHEMIST

A tenure-track position is open in the Department of Microbiology, University of Notre Dame, at the assistant professor level starting 1 September 1985. We seek an outstanding individual with postdoctoral experience and strong funding prospects to conduct an active research program in developmental genetics and/or gene expression in higher eukaryotes such as *Drosophila*, *Xenopus*, plants, or animal cells. However, qualified individuals in any area of eukaryotic molecular biology-biochemistry are also encouraged to apply. Responsibilities include the direction of graduate students and formal teaching at both the undergraduate and graduate levels. We offer the successful candidate adequate seed money, a modern research laboratory, a competitive salary, and colleagues with direct and complementary research interests. Submit curriculum vitae, names of three references, and a statement of research and teaching interests by 1 February 1985 to:

**Dr. Charles F. Kulpa, Jr.  
Department of Microbiology  
University of Notre Dame  
Notre Dame, Indiana 46556**

*Qualified women and minority group candidates are urged to apply.*

## AMERICAN MUSEUM OF NATURAL HISTORY

The Department of Mineral Sciences is seeking to fill a tenure-track position for **ASSISTANT CURATOR** beginning July 1985. This is mainly a research position, but some time is needed for collections management and departmental activities. High-quality sample-oriented research and publication is the prime responsibility. The field of specialization is mineralogy, broadly defined, and may include and combine aspects of petrologic mineralogy, ore mineralogy, mineral geochemistry, crystal and thermochemistry, mineral physics, x-ray crystallography, ultrastructure analysis, crystal growth, spectroscopy, or gemology. Major research facilities include a fully automated ARL-SEMO electron microprobe, x-ray laboratory, minicomputer, and vast mineral and other collections. The opportunity exists for research and/or teaching collaboration with nearby institutions such as Columbia (LaMont-Doherty Geological Observatory).

Requirements are a Ph.D. in hand by the time of appointment and an ability to carry out a research program. It is expected that some research support will be sought outside the museum. Applications should include: (i) curriculum vitae, (ii) names of three persons familiar with your work, and (iii) a statement of research interests and specific projects to be carried out within the next 5 years.

These must be submitted by 15 November 1984 to:

**Martin Prinz  
Chairman, Search Committee  
Department of Mineral Sciences  
American Museum of Natural History  
New York, N.Y. 10024**

*An Equal Opportunity/Affirmative Action Employer, M/F/H.*

## LA TROBE UNIVERSITY MELBOURNE, AUSTRALIA

### SCHOOL OF BIOLOGICAL SCIENCES

#### DEPARTMENT OF ZOOLOGY POSTDOCTORAL RESEARCH FELLOW (PHYSICS OR PHYSIOLOGY), READVERTISED

Appointee to work in the Analytical Electron Microscopy Laboratory under the direction of Dr. A. T. Marshall either on the development and application of methods of analytical electron microscopy to problems of ion and water transport in animals, or on physiological mechanisms of ion and water transport.

The laboratory is well equipped for analytical electron microscopy of frozen samples and has four electron microscopes, including a JEOL JSM35 SEM with low-temperature stage, standard and windowless x-ray detectors, a JEOL JEM 1200EX STEM with x-ray and EELS facilities and a low-temperature stage.

Applicants should have a background in either electron microscopy and/or electron probe x-ray microanalysis or physiology. This ARGS appointment is until December 1985, with the possibility of renewal.

Telephone enquiries can be made to: **Dr. A. T. Marshall, telephone: (03) 478 3122, extension 2250/2279.**

Travel and re-settlement expenses are payable for an appointment of 1 year or more.

**Closing date:** 16 November 1984. Reference Number A0/267/000.

**Salary:** A\$21,411 to A\$24,840.

Applications (marked confidential), including reference number, names of three referees, and curriculum vitae, should be forwarded to: **The Staff Officer, La Trobe University, Bundoora, Melbourne, Australia 3083.**

## VETERINARY PATHOLOGISTS

International Research and Development Corporation (IRDC) has openings for two pathologists. Board-certification plus experience in toxicologic pathology is desired. However, Board-qualified candidates with significant experience will be considered. Responsibilities include histopathologic evaluation of slides and service as a pathology study monitor for ongoing studies. Ability to analyze data and write reports is essential.

Our pathology division is responsible for clinical and anatomic pathology for our extensive program of toxicological research for the pharmaceutical, agricultural, chemical, and consumer industries as well as governmental agencies.

IRDC is located a few miles from Kalamazoo, Michigan, midway between Chicago and Detroit, an area affording a broad range of urban or rural lifestyles with excellent cultural and recreational opportunities. We offer excellent benefit programs and a starting salary commensurate with experience. Send your résumé to:

**Dr. Ward R. Richter  
Director, Division of Pathology  
International Research and  
Development Corporation  
500 North Main Street  
Mattawan, Michigan 49071  
Equal Opportunity Employer**



## POSITIONS OPEN

**VIRGINIA COMMONWEALTH UNIVERSITY**, Richmond, Va. 23298. Dr. M. Martinez-Carrion, Chairman, Department of Biochemistry.

**ASSISTANT PROFESSOR, BIOCHEMISTRY.** Ph.D. with outstanding promise for a tenure-track position in teaching and research. Areas of expertise most desirable are (i) spectroscopy of macromolecules in whole cells and living tissue, (ii) neuroscience, with molecular, spectroscopic, or biophysical interests, (iii) supramolecular assembly including cell fusion, (iv) biocatalysis in solid supports, cell surfaces, heterogeneous media, and so forth, or (v) eukaryotic mechanisms of gene expression. At least 2 years of postdoctoral experience preferred. Candidates should submit complete curriculum vitae, a description of future research plans, and arrange to have three letters of recommendation sent. Deadline is 31 December 1984.

*Equal Opportunity/Affirmative Action Employer*

**ASSISTANT (Preferred) or ASSOCIATE PROFESSOR—IMMUNOLOGY.** Veterinary Microbiology and Immunology Department seeking person with Ph.D. in immunology; D.V.M. preferred but not required. Must be able to develop a productive research program in immunology; teach professional and graduate courses. Send curriculum vitae and names of three references to: Dr. Laurel J. Gershwin, Chairperson, Search Committee, Department of Veterinary Microbiology and Immunology, University of California, Davis, Calif. 95616. Applications accepted through 31 March 1985 or until suitable candidate is identified.

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

**ASSISTANT PROFESSOR—PHYSICAL ANTHROPOLOGY.** Tenure-track position for September 1985. Ph.D. required. Candidate will teach large introductory course in physical anthropology and develop a program of research and graduate teaching. State University of New York (SUNY) Stony Brook has a strong faculty in primate and human evolution. We seek a candidate with expertise in complementary areas, such as primate ecology or human biology. Send inquiries, samples of published work, names of three references and curriculum vitae by 1 December 1984, to: Dr. Fred Grine, Chair, Search Committee, Department of Anthropology, SUNY Stony Brook, Stony Brook, New York 11794. *SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. AK#2240-84.*

**ASSISTANT PROFESSORSHIP, tenure track.** The Psychobiology Program in the University of Pittsburgh's Center for Neuroscience has a position available at the assistant professor level to begin 1 July 1985. The program is particularly interested in someone who will establish an active research program either in (i) molecular neurobiology, (ii) the biophysical properties of nerve cell tissue, or (iii) animal models of human CNS dysfunction, that could be integrated with the program's focus on behavioral neuroscience. All candidates should have at least 2 years of postdoctoral experience. Send curriculum vitae, three letters of recommendation, and a brief description of research interests to: Search Committee, Psychobiology Program, 465 Crawford Hall, University of Pittsburgh, Pittsburgh, Pa. 15260. All applications should be submitted by January 1985.

The search has been reopened for **DIRECTOR, Center for Environmental Toxicology.** The Colleges of Agriculture and Natural Resources, Human Medicine, Osteopathic Medicine, and Veterinary Medicine, the Cooperative Extension Service, and the Agricultural Experiment Station provide joint support for the Center for Environmental Toxicology at Michigan State University (MSU). The center coordinates interdisciplinary research, Ph.D. and postdoctoral programs, develops information and technical services, and serves as an interface with state, federal, and local agencies. Candidate should hold a Ph.D. or professional degree, should have administrative and communicative skills, and be an established scientist actively engaged in toxicological research. Applications or nominations, accompanied by curriculum vitae, should be sent to: Dr. Robert Leader, Center for Environmental Toxicology, C231 Hoden Hall, Michigan State University, East Lansing, Mich. 48824. Deadline for receipt of applications is 31 December 1984. *MSU is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSORS—VIROLOGY AND PATHOGENIC MICROBIOLOGY

Applications are invited for the two positions currently available in the department. Candidates should have a Ph.D. in medical microbiology with training in the respective areas. Two to 4 years of postdoctoral experience with relevant publications is required. Send résumé, a one- to two-page description of research plans, and the names of three references to:

**Ram G. Navalkar, Ph.D.**  
Professor and Chairman

Department of Microbiology and Immunology  
Morehouse School of Medicine  
720 Westview Drive, SW  
Atlanta, Ga. 30310

Application deadline: 21 December 1984. *An Equal Opportunity/Affirmative Action Employer.*

### ASSOCIATE OR FULL PROFESSOR OF BIOCHEMISTRY

Tenure-track position available for candidates with a Ph.D. in chemistry or biochemistry and a documented record of excellence in teaching and research. Applicants should have established, high-quality research program as evidenced by publications and extramural funding. Preference will be given to candidates with interest and expertise in membrane function. Send curriculum vitae, three letters of reference, and short summary of research goals by 15 November 1984 to: Professor Ron MacQuarrie, Chairman, Search Committee, Department of Chemistry, University of Missouri-Kansas City, Kansas City, Mo. 64110.

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

**ASSISTANT PROFESSOR OF ANALYTICAL CHEMISTRY, tenure track.** An opening is expected at the University of South Florida beginning August 1985. Applicants must hold Ph.D. with specialization in analytical chemistry. Postdoctoral experience is highly desirable. In addition to teaching, active research and the ability to attract external support is essential. Specialization in separations or electrochemistry will most complement the interests of the department; however, all qualified candidates will be considered. Send résumé, brief description of research interests, and names and addresses of three persons to be contacted for letter of reference to: Dr. W. E. Swartz, Jr., Chairman, Department of Chemistry, University of South Florida, Tampa, Florida 33620, by 1 February 1985. *The University of South Florida is an Affirmative Action/Equal Opportunity Employer.*

### ENGINEER/SCIENTIST

Geo-Centers, Inc., has an immediate opening for **Freeze-Fracture/Electron Microscopy Scientist** with a master's degree in biological sciences and experience in freeze-fracture and rapid freezing equipment.

Geo-Centers, Inc., offers an excellent benefits package with career advancement and competitive salaries. This position is located in our Washington, D.C., metropolitan area office. Please send your résumé and salary history in confidence to:

**Geo-Centers, Inc.**  
4710 Auth Place  
Suitland, Md. 20746

Attention: Russell Jeffries

United States citizenship required.

*An Equal Opportunity Employer*

### ENVIRONMENT, TECHNOLOGY, AND SOCIETY CLARK UNIVERSITY

A tenure-track faculty position in the Program on Environment, Technology, and Society (ETS). The program has 11 faculty in ETS, biology, chemistry, economics, geography, and physics, supports an undergraduate major, and a M.A. degree in environmental affairs. A M.A. in technology assessment and risk analysis is planned. Applicants should have experience in physical or life science, or technology. Research areas of special interest include risk assessment, occupational health and safety, and technology assessment. Candidates from other research areas are also welcome. Excellence in teaching and the ability to attract research funding are expected. Rank is open. Send résumé, the names of three references, and a letter outlining research and teaching plans to: Chris Hohenemser, Chair, ETS Program, Clark University, Worcester, Mass. 01610. *Clark is an Affirmative Action Employer.*

## POSITIONS OPEN

### CELL BIOLOGY

#### NORTHWESTERN UNIVERSITY DEPARTMENT OF BIOCHEMISTRY, MOLECULAR BIOLOGY AND CELL BIOLOGY

Two new positions are available at the level of assistant/associate professor beginning fall 1985. We are interested in outstanding candidates with exceptional promise in research and teaching in the area of CELL BIOLOGY. Candidates should submit curriculum vitae, list of publications, reprints and preprints, a statement of research objectives, and request three letters of reference be sent to: Dr. Lawrence B. Dumas, Faculty Search Committee, Department of Biochemistry, Molecular Biology and Cell Biology, Northwestern University, Evanston, Illinois 60201. *Northwestern University is an Equal Opportunity/Affirmative Action Employer.*

### CELL BIOLOGIST/IMMUNOLOGIST

A Ph.D. with more than 2 years of postdoctoral experience is invited to apply for a position at a major Boston teaching hospital and research institute. Evidence of grant competitiveness required. Nongrant salary negotiable with grant salary to supplement. Expertise in immunology/oncogene research/cell biology to complement group studying colorectal and other solid cancers. Joint appointments in clinical and appropriate basic science department. Training of graduate students and postdoctoral students by incorporation into candidate's own independent research. Send curriculum vitae, representative publications, and three letters of recommendation to: Glenn Steele, Jr., M.D., Ph.D., Dana-Farber Cancer Institute, 44 Binney Street, Boston, Mass. 02115.

### CURATORIAL POSITION IN INVERTEBRATE ZOOLOGY

Applications are solicited for the position of **ASSISTANT or ASSOCIATE CURATOR** in the Section of Invertebrates, Natural History Museum, Los Angeles County. Responsibilities consist of collection-oriented research on the systematics of Polychaetes, Coelenterates, or Echinoderms, participation in collections management, and participation in public programs of the museum. Applicants must possess a Ph.D. (or provide certification that it will be soon granted). Starting salaries: Assistant: \$1776; Associate: \$2095. Applications, including names of three or more references, should be sent before 15 January 1985 to: Dr. Richard C. Brusca, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, Calif. 90007; telephone 213-744-3367. *An Equal Opportunity Employer.*

### DEAN, VETERINARY MEDICINE

The University of Maryland and Virginia Polytechnic Institute and State University (Virginia Tech) seek applicants for the position of dean of the Virginia/Maryland Regional College of Veterinary Medicine. A D.V.M. is required, and a Ph.D. or equivalent, specialty certification, or other graduate study is desirable. Applicants should also have significant administrative experience, including major responsibility for a program in veterinary medical education (or equivalent). Applications and nominations should be sent to: Dr. David Roselle, Provost, Virginia Tech, Blacksburg, Va. 24061. Completed applications must include a résumé and three letters of recommendation. Applications will be received until 15 December 1984 or until the position has been filled.

*Virginia Tech is an Equal Opportunity/Affirmative Action Employer.*

### DEAN OF OCEANOGRAPHY

**Oregon State University** invites nominations/applications for dean, College of Oceanography. The dean provides leadership to a graduate college of oceanography with 93 faculty, 80 students, and excellent research facilities in Corvallis and Newport. Salary dependent upon qualifications. Tenured, full-time appointment. Completed applications for the position should be received by 31 December 1984. *Oregon State University is an Affirmative Action/Equal Opportunity Employer and encourages applications from females and minorities.* Address: Dr. John S. Allen, Chairperson, Dean Search Committee, College of Oceanography, Oregon State University, Corvallis, Ore. 97331.

# Associate Director/ Immunology

SmithKline Beckman, a leader in pharmaceutical research and technology, is seeking an outstanding senior scientist with an excellent national and international scientific reputation to lead a challenging research program on immunoregulation, inflammation and autoimmunity.

Candidates are required to possess:

- A doctorate degree with 8 or more years of postdoctoral research experience in immunology.
- Knowledge and experience in suppressor T cell circuitry and immunoregulation.
- Experience in immune-mediated inflammation and autoimmunity.
- A demonstrated record of excellence in research in either academia or industry and a significant record of publications.
- Excellent communication skills and leadership capabilities.

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your C.V. and names of 3 references to: Mr. Walter B. Flagg, SMITHKLINE BECKMAN CORPORATION, P.O. Box 7929, 1578 Spring Garden Street, Philadelphia, PA 19101.

We are an equal opportunity employer M/F/H/V

**SK&F**  
A SmithKline Beckman Company



Northeastern Ohio  
Universities  
COLLEGE OF MEDICINE

## VICE PROVOST AND EXECUTIVE ASSOCIATE DEAN

Northeastern Ohio Universities College of Medicine invites applications and nominations for the position of Vice Provost and Executive Associate Dean. The executive associate dean will be responsible for the Academic Affairs Office of the college, including the administration of an established undergraduate medical student curriculum. Other areas reporting to the Office of Academic Affairs are the Office of Medical Education, the Area Health Education Center, and Continuing Education. Of particular importance is the responsibility of the executive associate dean to assist 17 associated hospitals in the further development and strengthening of their residency programs.

The Northeastern Ohio Universities College of Medicine, in consortium with The University of Akron, Kent State University, and Youngstown State University, offers a 6-year combined B.S./M.D. degree program. Clinical education takes place in hospitals in Akron, Canton, Youngstown, and surrounding areas.

The College enjoys strong support from the state of Ohio, and a capital expansion project on the basic medical sciences campus is about to begin.

Requirements include the M.D. degree, qualifications for a senior faculty appointment, experience in medical school administration, and interest in and ability to work with basic medical scientists, clinicians, and hospital personnel.

Send curriculum vitae with list of references by 15 December 1984 to: Office of the Provost and Dean, Northeastern Ohio Universities College of Medicine, Rootstown, Ohio 44272. An Equal Opportunity/Affirmative Action Employer.



The University  
of  
British Columbia

FACULTY OF AGRICULTURAL SCIENCES

## DEAN

Applications and nominations are invited for the position of Dean of the Faculty of Agricultural Sciences, effective July 1, 1985. The Faculty includes seven departments (Agricultural Economics, Agricultural Mechanics, Animal Science, Food Science, Plant Science, Poultry Science, and Soil Science), with a total of 60 full-time faculty members and a large number of part-time faculty members. The Faculty offers the degrees of Bachelor of Science in Agriculture (current enrolment 300 students), Bachelor of Landscape Architecture (current enrolment 75 students), and the graduate degrees of Master of Science and Doctor of Philosophy (total of 150 graduate students). Bachelors and Masters degrees in Bio-Resource Engineering (B.A.Sc. and M.A.Sc.) are offered through the Department of Agricultural Mechanics.

The successful candidate must be recognized internationally in a field of research that enhances the activities of the Faculty and will provide research leadership for the Faculty and will provide research leadership for the Faculty. The Dean will have proven administrative ability and will be dedicated to excellence in teaching. In addition, the Dean must maintain active links with the professions represented in the Faculty, as well as with industry. The salary for this senior academic position is negotiable.

Applications and nominations should be directed to Dr. Robert H. T. Smith, Vice President, Academic, The University of British Columbia, 6328 Memorial Road, Vancouver, British Columbia, V6T 2B3, no later than December 15, 1984, and must include a curriculum vitae, a list of publications and the names of three referees.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of British Columbia offers equal opportunity for employment to qualified female and male applicants.

## ANIMAL/BIOLOGICAL SCIENTISTS

International Minerals & Chemical Corporation, a leading supplier to agriculture, industrial, and chemical markets worldwide, is presently seeking the following aggressive personnel in its Research and Development Center.

**ANIMAL NUTRITIONIST.** The successful candidate will possess an M.S. degree in animal science with training and knowledge related to animal nutrition and metabolism. Must be experienced in conducting applied animal studies and have a strong understanding of experimental design. Must have the ability to communicate well, both orally and written. Prime responsibility will be the design, implementation, and monitoring of field studies for clearance and support of new and existing poultry, swine, and beef products. Will require 25 percent travel.

**NUTRITION BIOCHEMIST OR ANIMAL PHYSIOLOGIST.** The successful candidate will possess an M.S. degree in animal or biological sciences with training and knowledge related to biochemistry, physiology, endocrinology, metabolism, and nutrition of food producing animals. Must have experience and strong understanding toward muscle and adipose energy metabolism, intake regulators, hormones and their relationship to growth and metabolism. Must be able to develop sound experimental designs, conduct well-controlled studies, and have the ability to communicate well, both orally and written. Prime responsibilities will be the design, implementation, supervision, and evaluation of research projects, especially those related to metabolism. A portion of time will be spent monitoring field studies for clearance and support of new and existing animal products. Will require approximately 25 percent travel.

We offer an excellent benefit package including health, dental, and life insurance; disability plan; investment and retirement plans; and liberal relocation policy. Send résumé including salary history and requirements in confidence to:

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



An Equal Opportunity/Affirmative Action Employer

## LIMNOLOGY/MAMMALOLOGY

Cornell University is seeking two faculty members in the Section of Ecology and Systematics, Division of Biological Sciences. One position can be filled at any level, from assistant to full professor. The other position is approved at the level of assistant professor. Both positions are available beginning fall 1985. These positions will be filled in the following specializations:

**LIMNOLOGY:** We seek an individual with an active research program in the study of lake or lotic ecosystems. Teaching responsibilities will include a basic undergraduate course in limnology, and other courses to be negotiated.

**ECOLOGY OR EVOLUTION OF MAMMALS.** We seek an individual with an active research program in any aspect of the ecology or evolution of mammals. Teaching responsibilities will include a basic undergraduate course in mammalogy, involvement in a jointly taught course in introductory vertebrate biology, and other courses to be negotiated. Depending on the individual's interests, the successful candidate could become curator of Cornell's mammal collection.

Interested applicants should send their curriculum vitae, copies of representative publications, a letter outlining future research plans, and the names of three references to: Dr. Simon A. Levin, Chair, Limnology/Mammalogy Search Committee, Section of Ecology and Systematics, Corson Hall, Cornell University, Ithaca, N.Y. 14853.

Applications will be accepted until suitable candidates are found, but we hope to begin selecting finalists in November or December 1984.

*Cornell University is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.*

## VICE CHANCELLOR FOR GRADUATE STUDIES AND RESEARCH BALTIMORE CITY-BALTIMORE COUNTY CAMPUSES

The University of Maryland is seeking a person of recognized academic stature to provide leadership in developing and strengthening programs of graduate study and research for both its Baltimore City (UMAB) and Baltimore County (UMBC) campuses. Must hold earned doctorate and be eligible for appointment as full professor, as well as administrative experience in grant or contract administration and related activities.

The vice chancellor for graduate studies and research will report to the chancellors of the two campuses and is responsible for the administration of the Graduate School offices serving graduate students in master's and doctoral degree programs in a wide range of disciplines at both locations. The vice chancellor is also responsible for development of new graduate programs; review and modification of existing programs; recruitment and admission of graduate students; advocacy of sponsored and state-funded research activity; assisting faculty in seeking funding opportunities; and review of research grant proposals.

*The University of Maryland actively subscribes to a policy of Equal Educational and Employment Opportunities.* Nominations or applications, accompanied by curriculum vitae whenever possible, should be forwarded to the chairman of the Search Committee, Dr. David S. Sparks, Vice President for Graduate Studies and Research, University of Maryland, Adelphi, Md. 20783. Those received by 23 November 1984 will receive full consideration. Those arriving after that date may be considered by the Search Committee if received before its final report is submitted. All applications will be treated as confidential.

## POSITIONS OPEN

Southwestern University seeks candidates for the **DISHMAN CHAIR IN SCIENCE** in the Department of Biology. This associate or full professor, tenure-track position will be filled in 1985. The successful applicant will exhibit a strong commitment to undergraduate teaching and establish a research program which can involve undergraduate students. Although broad teaching interests are desired, preference will be given to candidates with competence in some combination of cell physiology, animal physiology, or molecular genetics. Send applications and nominations to: G. Benjamin Oliver, Dean, Brown College of Arts and Sciences, Southwestern University, Georgetown, Texas 78626. An Affirmative Action/Equal Opportunity Employer.

### ECOLOGISTS/ECOSYSTEM SCIENTISTS

The Institute of Ecosystem Studies of The New York Botanical Garden seeks three staff members beginning after 1 January 1985. Persons interested in collaborative, multidisciplinary research should apply. Applicants should have a Ph.D. in any area of ecology or ecosystem science; postdoctoral experience desirable. Rank and salary will be commensurate with experience and training. Send statement of research interests, curriculum vitae, and names of three references by 1 December 1984 to: Gene E. Likens, Director, Institute of Ecosystem Studies, Mary Flagler Cary Arboretum, Box AB, Millbrook, New York 12545.

*An Equal Opportunity Employer*

### EXECUTIVE CHAIR DEPARTMENT OF PEDIATRICS SCHOOL OF MEDICINE UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)

The University of California at Los Angeles is seeking a distinguished pediatrician to serve as executive chair. Applications and nominations are invited. Applicants should have a record of significant professional accomplishment with a commitment to excellence in the clinical, educational, and research aspects of pediatrics. Applications including curriculum vitae and names of references, or nominations, should be sent by 15 December 1984 to:

Pediatric Search Committee  
c/o Sandra Phillips  
Office of the Dean  
UCLA School of Medicine  
Los Angeles, Calif. 90024

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

### FACULTY POSITIONS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS

The University of Texas Health Science Center at Dallas invites applications for junior or senior level positions available in fall 1985. Applicants must have postgraduate experience in molecular biology or biochemistry and be capable of developing an independent research program.

Teaching responsibilities include instructing medical and graduate students in selected areas of biochemistry and molecular biology. Applicants should send curriculum vitae, brief summaries of past research experience, their proposed research program, and the names of three people who can provide letters of reference to:

Biochemistry Search Committee  
University of Texas Health Science Center at Dallas  
5323 Harry Hines Boulevard  
Dallas, Texas 75235

### FACULTY POSITION IN CELLULAR OR DEVELOPMENTAL BIOLOGY

The Department of Biological Sciences at the University of Southern California is seeking two or more tenure-track faculty with research and teaching interests in cellular and/or developmental biology. Appointments may be in any of the three research sections (molecular biology, marine biology, or neurobiology) of the department. Candidates will be expected to establish an independent research program. Applicants should send, by 30 November 1984, curriculum vitae, bibliography, brief descriptions of their predoctoral, postdoctoral, and proposed research, and the names and phone numbers of three references to:

Search Committee  
Department of Biological Sciences  
University of Southern California  
AHF 107F  
Los Angeles, California 90089-0371

## POSITIONS OPEN

**FACULTY POSITIONS IN ANATOMY.** The Medical University of South Carolina desires applicants for three tenure-track faculty positions at the assistant professor level. Applicants must have an M.D., D.M.D., or Ph.D. with postdoctoral training or a proven record of accomplishments. Preference will be given to those able and willing to teach gross anatomy, embryology, or neuroanatomy. Applicants should send a résumé and three letters of recommendation to:

Richard M. Dom, Ph.D.  
Professor  
Department of Anatomy  
Medical University of South Carolina  
Charleston, South Carolina 29425

*An Affirmative Action/Equal Opportunity Employer*

As part of the rapidly expanding research and graduate training programs in the basic sciences at Emory University School of Medicine, the Department of Microbiology and Immunology is seeking to fill a **FACULTY POSITION** in bacterial genetics and physiology at the **assistant or associate professor** level by September 1985. Concurrent searches for molecular biologists are also being conducted by the Department of Biochemistry and the Department of Biology.

Candidates should be prepared to develop a vigorous research program using the latest molecular approaches in bacterial systems. Please submit curriculum vitae along with a summary of research plans and have three letters of reference forwarded by 1 December 1984 to:

Dr. June R. Scott  
Bacterial Genetics Search Committee  
Department of Microbiology and Immunology  
Emory University School of Medicine  
Atlanta, Georgia 30322

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

### IMMUNOLOGIST

M.S. or Ph.D. with experience in research on identification, characterization, and isolation of antigens and antibodies for well-established academic medical research group with solid financial basis. Please send curriculum vitae and references to: Kurt Lange, M.D., FACP, FACC, Renal Section, Immunology, Lenox Hill Hospital, 100 East 77th Street, New York, N.Y. 10021.

### MARINE AQUACULTURIST

Applications are invited for a faculty level position for a continuing research program of culturing pelagic squids in closed seawater systems. The applicant should have a Ph.D. in marine biology, biological oceanography, or related field with a minimum of 3 years practical experience in marine aquaculture. The appointee will participate in the planning, analyses, and publication of culture experiments. Applicant should have working knowledge of biostatistics and a demonstrated ability to publish. Appointee will have the opportunity to pursue some basic research in a subject related to the culture program.

Send curriculum vitae, selected reprints, and names of three scientific references to: Roger T. Hanlon, Ph.D., Chief, Division of Biology and Marine Resources, The Marine Biomedical Institute, The University of Texas Medical Branch, Galveston, Texas 77550.

*An Affirmative Action/Equal Opportunity Employer*

### MICROBIOLOGIST

Applications are invited for a tenure-track position in the Faculty of Natural Sciences. The University of Tulsa. Appointment is at the level of assistant professor, beginning fall 1985. The candidate must have a Ph.D. degree with strong research and teaching interests in microbiology. Preference will be given to individuals with postdoctoral experience and expertise in recombinant DNA and/or immunology. Salary is competitive and negotiable.

A commitment to liberal arts education and the ability to conduct independent research are required. The Faculty of Natural Sciences offers B.S. and M.S. degrees with specializations in genetics, organismic, and environmental biology. Modern facilities are available for research and graduate studies in most phases of cell and molecular biology. Applications, including curriculum vitae, reprints, and three letters of recommendation should be sent by 31 October 1984 to: Dr. Klaus Bräsch, Faculty of Natural Sciences, University of Tulsa, Tulsa, Oklahoma 74104. *The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**FACULTY POSITION—Organic/Bio-Organic Chemistry.** Tenure-track assistant professorship available starting 19 August 1985. Rank dependent upon qualifications. Requires doctorate; subsequent postdoctoral experience preferred. Must establish vigorous program of research in any field of organic/bio-organic chemistry. Commitment to excellence in undergraduate and graduate teaching essential. Apply with complete résumé, undergraduate and graduate transcripts, a description of research plans plus three letters of recommendation by 15 November 1984 (or until a suitable candidate applies) to: **Chairman, Organic Search Committee, Department of Chemistry, University of Nebraska—Lincoln, Lincoln, Nebraska 68588-0304.** An Affirmative Action/Equal Opportunity Employer.

### MOLECULAR AND CELLULAR BIOLOGY

The Department of Biology invites applications from dynamic researchers for four tenure-track positions, at least one of which may be filled at a senior level. Evaluations will be heavily weighted on publication record and success in attracting competitive grant funding. A desire to develop courses in the area of expertise will also be an important selection criterion. A limited number of postdoctoral appointments may also be available.

Research areas of interest to the department include:

Plant molecular and cellular systems for gene transfer and expression.

Yeast or other fungal systems for gene expression and protein processing.

Bacterial or viral systems pertaining to fundamental biological problems.

Basic physiological and biochemical investigations of animal (or plant) hormone systems.

Animal molecular biology, especially in relation to pests and parasites of animals and plants.

Applications should include curriculum vitae and a statement of research plans. They should be mailed prior to 14 December 1984 to:

**Dr. Timothy C. Hall, Head  
Department of Biology  
Texas A&M University  
College Station, Texas 77843-3258**

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

### POSTDOCTORAL POSITIONS IN MOLECULAR VIROLOGY

Two positions are available immediately to conduct research on structure and function of plant viral RNA's. One position involves the further construction of mutant RNA sequences and evaluation of their function in replication and aminoacylation (see *Nature* 311, 171). Applicants for this position should have a knowledge of cloning techniques and an interest in using protoplast systems to evaluate biological activities of modified sequences (see *Nature* 298, 771). The other position is a study of replicase recognition of native and mutated RNA sequences. Expertise in the area of protein-nucleic acid crosslinking and membrane protein isolation is desirable. Applications, together with current curriculum vitae should be sent to:

**Dr. T. C. Hall, Head  
Department of Biology  
Texas A&M University  
College Station, Texas 77843-3258**

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

**SEQUENCING LABORATORY SUPERVISOR.** As part of a new research program in cellular and molecular biology, the Department of Biology is seeking a scientist having a depth of knowledge and interest in nucleotide sequencing. The successful applicant will be expected to have had at least 2 years of hands-on experience with nucleotide sequencing, preferably by both Maxam and Gilbert and dideoxy procedures. The applicants should have a Ph.D. degree, but individuals with B.S. or M.S. level degrees and adequate experience will be considered. Familiarity and competence with computer analysis of the sequencing derived will be an important factor in selection. Salary will be in the range of \$20,000 to \$30,000, depending upon qualifications and experience. For further details contact:

**Dr. T. C. Hall, Head  
Department of Biology  
Texas A&M University  
College Station, Texas 77843**

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

## PEPTIDE/BIOTECHNOLOGY RESEARCH

The Upjohn Company has an opening in its expanding Biopolymer Chemistry unit for a synthetic organic chemist to work in Peptide Synthesis. We seek a skilled scientist to assist with the solution and solid-phase synthesis of peptides, synthetic methods development, purification of peptides by aqueous and not-aqueous chromatographic procedures (LPLC and HPLC, standard column chromatography), and characterization by TLC, HPLC, NMR, amino acid analysis and other appropriate methods.

The successful candidate will have a BS or MS degree in chemistry and will assist other scientists in developing new leads for therapeutic application to a variety of disease areas. Experience in the above fields is desirable but not required. Skills in summarizing and writing data are also desired.

Kalamazoo is a medium-sized southwestern Michigan community with immediate access to a mix of excellent cultural, educational, and recreational pursuits, including numerous lakes and a four season climate. Upjohn offers an excellent salary commensurate with experience and an outstanding benefits program.

For confidential consideration, please call from outside of Michigan, toll free, 1-800-253-8600, extension 3-6767; or call from Michigan, collect, 616-323-6767 to request an application. Please refer to ad number 17023-B1 when calling.

**Upjohn**

**A century of caring**

An Equal Opportunity Employer M/F

## RESEARCH SCIENTIST

### DRUG METABOLISM PHARMACOKINETICS

The Bristol-Myers Pharmaceutical Research and Development Division has a newly created position for a scientist capable of leading a research team handling absorption, distribution, metabolism and excretion studies in animals and humans.

Candidate should possess a PhD in Pharmaceutical Science or Biochemistry coupled with 3-5 years experience in pharmacokinetics and drug metabolism, plus state-of-the-art knowledge of techniques employed for identifying and quantitating drugs and their metabolites in biological fluids. Knowledge of digital computer techniques for analyzing pharmacokinetics data and previous supervisory responsibility are highly desirable.

We offer an excellent starting salary, comprehensive benefits and a working environment conducive to professional growth. Our facility is located in Syracuse, a central New York area noted for its superb cultural, recreational and educational resources. For prompt, confidential consideration, forward your resume with salary history and requirement, to: **EMPLOYMENT RECRUITER**

**BRISTOL-MYERS COMPANY  
RESEARCH AND DEVELOPMENT DIVISION**  
P.O. Box 4755, Syracuse, New York 13221  
*An equal opportunity employer M/F*





## POSITIONS OPEN

A **GENETIC TOXICOLOGIST** position is available in health and environmental sciences, located in Midland, Michigan. Candidates for this entry-level position in the Genetic Safety Evaluations Laboratory should possess either a bachelors/masters degree (microbiology, genetics, or related fields) with appropriate experience in chromosome aberration and/or forward mutation in tissue culture systems. Candidates may forward their résumé, transcript, and salary information to: **DOW CORNING CORPORATION, 2200 West Salzburg, Midland, Mich. 49640. Attention: Genetic Toxicologist, Mail Number C01108.**

### MEDICAL DIRECTOR-LABORATORY OF CYTOGENETICS

This is a tenure-accruing position at a rank and salary commensurate with experience, in the Department of Pathology, University of Florida, College of Medicine, to begin 1 April 1985. The candidate must hold an M.D. degree and be licensed, or be eligible to apply for a license in the state of Florida. The candidate will be responsible for the medical direction of the Laboratory of Cytogenetics in the Department of Pathology. This will involve hospital service activities as well as the development of independent research and teaching programs. Preference will be given to a candidate with interest in molecular genetics or related areas.

Deadline for recruiting is 1 March 1983 and interested candidates should contact: **Raul C. Braylan, M.D., Department of Pathology, Box J-275, University of Florida, College of Medicine, Gainesville, Florida 32610.**

*An Equal Opportunity/Affirmative Action Employer*

### MOLECULAR BIOLOGY

#### Assistant Professor

(Advanced rank possible in exceptional circumstances)

Applicants with backgrounds in molecular genetics, biochemistry, and cellular biology are desired. Teaching responsibilities include courses in molecular genetics and cellular biology/biochemistry. This is a 3-year appointment of a tenurable position which requires a Ph.D. degree. Postdoctoral experience is desirable. The position is available 1 July 1985. Please have curriculum vitae, a statement of your research and teaching interests, and three letters of recommendation sent to: **Professor Henry W. Art, Chairman, Biology Department, Williams College, Williamstown, Mass. 01267.** We will start the evaluation of potential candidates by 15 November 1984.

*An Equal Opportunity/Affirmative Action Employer. Williams College especially welcomes applications from women and minority candidates.*

### ● MOLECULAR GENETICS ● MOLECULAR BASIS OF CELLULAR SIGNALING REACTIONS ● MACROMOLECULAR STRUCTURE AND METABOLISM USING NMR TECHNIQUES

Tenure-track positions in Molecular Biology Institute in the above three areas. One position is available to start in July 1985 and two positions will be available in 1986. We seek outstanding candidates in these three areas who will develop independent research programs, contribute to undergraduate and graduate teaching, and interact effectively with colleagues in the Molecular Biology Institute.

Please submit résumé, list of publications, statement of research interests, representative reprints, and names of three references to:

**Dr. Larry Simpson  
Search Committee Chair  
Molecular Biology Institute  
University of California  
Los Angeles, Calif. 90024**

*The University of California is an Affirmative Action/Equal Opportunity Employer. We encourage applications from women and minority candidates.*

**POSTDOCTORAL FELLOW**—The Dairy Research Foundation is supporting research on the sensory aspects of real dairy foods. Candidate should have a Ph.D. in dairy food science or related field with a background in chemistry, biochemistry, or physiology as well as a personal commitment to the advancement of real dairy products. Multidisciplinary research facilities are available.

Send curriculum vitae with names and addresses of three references to: **Director, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, Pa. 19104.**

## POSITIONS OPEN

### MOLECULAR BIOLOGY OF SPERMATOGENESIS POSTDOCTORAL/RESEARCH ASSOCIATE

Starting 1 January 1985, a position will be available for an individual to join a group applying recombinant DNA techniques to study: (i) transcriptional and translational regulation of gene expression in the mammalian testis, (ii) the differentiation of mitochondria during gametogenesis and embryogenesis, and (iii) the development of contraceptive agents from unique haploid-specific gene products. Expertise in molecular biology, reproductive biology, or immunology is desirable. Send curriculum vitae to: **Norman B. Hecht, Ph.D., Department of Biology, Tufts University, Medford, Mass. 02155.**

**MOLECULAR GENETICIST.** Tenure-track assistant professor to establish a vigorous research program in the general area of gene organization, function, and regulation. Postdoctoral experience is essential. Choice of experimental system is open, but the research focus should be in contemporary molecular biology. Applicants should be capable of teaching basic microbial genetics. Candidates will be chosen to reinforce our strong commitment to research and graduate training in genetics and molecular biology. Send curriculum vitae, statement of research objectives, and names of three references by 1 December 1984 to: **Molecular Genetics Search Committee, T. H. Morgan School of Biological Sciences, University of Kentucky, Lexington, Ky. 40506.** *An Affirmative Action Employer.*

**NEUROMUSCULAR PHYSIOLOGY/PHARMACOLOGY.** Junior faculty or postdoctoral research level position available immediately to study alterations in neuromuscular function following burn injury. A Ph.D. or M.D. is required and the applicant should have a background in neuromuscular physiology or pharmacology. Concurrent appointment at Massachusetts General Hospital, Shriners Burns Institute, and Harvard Medical School. Send résumé to: **J. A. Jeevendra Martyn, M.D., Department of Anesthesia, Massachusetts General Hospital, Boston, Mass. 02114.** *Equal Opportunity Employer*

The Pan American Seed Company has an intermediate opening, due to business expansion for an **ORNAMENTAL PLANT BREEDER.** We are looking for a Ph.D. level candidate with 3 to 5 years of experience, plus some training and background in pathology. This position is based out of our West Chicago, Illinois, location.

We offer above average benefits and a competitive salary. If you are interested in joining a leader, please send your résumé including salary history to:

**Dr. Scott Trees  
Vice President of Research  
Pan American Seed Company  
P.O. Box 438  
West Chicago, Ill. 60185**  
*Equal Opportunity Employer, M/F*

### PHYSIOLOGY

Assistant professor to teach medical students, undergraduate, and graduate students. Ph.D. with at least 2 years of postdoctoral experience. Faculty are expected to develop an independent research program; opportunities also exist for collaborative research in a number of areas of research on systems, organs, or tissues. There are restrictions on the area of research required of candidates. Send curriculum vitae, statement of research plans and interests, and the names of three referees to: **Dr. A. R. Lind, Professor and Chairman, Department of Physiology, St. Louis University Medical School, 1042 South Grand Boulevard, St. Louis, Mo. 63104.** *St. Louis University is an Equal Opportunity Employer.*

**PHYSIOLOGICAL/COMPARATIVE PSYCHOLOGIST.** Trinity College, a 4-year liberal arts institution, has an opening for an assistant professor in a tenure-track position in physiological/comparative psychology. The appointment is effective 1 September 1985. Duties include courses in physiological and comparative psychology (each with a laboratory), and an advanced course in area of specialization. Ability to teach introductory psychology and statistics is necessary. Applicants must show promise of excellence in research and documented excellence in teaching performance. Deadline for applications: 19 November 1984. Send current curriculum vitae, at least three letters of recommendation, papers, evaluations of teaching performance, and a cover letter to: **William Mace, Chairperson, Department of Psychology, Trinity College, Hartford, Conn. 06106.** *Trinity College is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### PHARMACOLOGY/TOXICOLOGY

Applications are invited for a tenure-track faculty position at the level of assistant professor. Candidates must have a Ph.D. degree with at least 2 years of postdoctoral research experience. The successful candidate will be expected to establish an independent research program in pharmacology or toxicology and participate in teaching at the undergraduate and graduate levels. Please send curriculum vitae and the names of three references by 1 November 1984 to: **Dr. Mustafa F. Lokhandwala, Chairman, Department of Pharmacology, College of Pharmacy, University of Houston—University Park, Houston, Texas 77004.**

*The University of Houston is an Equal Opportunity Employer.*

### THE UNIVERSITY OF BRITISH COLUMBIA DEPARTMENT OF OCEANOGRAPHY PHYSICAL OCEANOGRAPHY

Applications are invited for a tenure-track position at the beginning assistant professor level (subject to budgetary approval) in the Department of Oceanography with effect from 1 July 1985. Of primary interest is a person having training and experience in an area of physical oceanography that enhances the research and teaching activities of the department, especially in numerical modelling of oceanographic processes. Applications submitted by qualified persons in other areas of physical oceanography will also be considered.

Candidates should have a Ph.D. qualification and relevant postdoctoral experience and will be required to teach in Combined Honours B.Sc., M.Sc., and Ph.D. programs.

*In accordance with Canadian immigration regulations, priority will be given to Canadian citizens and permanent residents of Canada.* Closing date for applications is 30 November 1984. Send curriculum vitae and names and addresses of three referees to:

**Dr. S. E. Calvert, Head  
Department of Oceanography  
University of British Columbia  
6270 University Boulevard  
Vancouver, British Columbia, Canada V6T 1W5**

### PHYSIOLOGY AND PHARMACOLOGY

The State University of New York (SUNY), Upstate Medical Center, invites applications for 12-month tenure-track positions in the Departments of Physiology (one position) and Pharmacology (three positions). Rank and salary depend on prior experience. Qualifications include the Ph.D. or M.D. degree, 2 years of postdoctoral experience, and commitment to conduct research. For at least two of the positions, preferences will be given to endocrinology. One position in each department will be available 1 January 1985; the others, 1 July 1985. Applicants should submit curriculum vitae, a statement of research interests, and at least three letters of reference. Applications may be addressed to either: **J. B. Preston, M.D., Department of Physiology, or I. M. Weiner, M.D., Department of Pharmacology, SUNY-Upstate Medical Center, Syracuse, N.Y. 13210.**

*Affirmative Action/Equal Opportunity Employer*

**POPULATION DYNAMICIST.** Tenure-track faculty position. Ph.D. in population dynamics or allied fields. Formal training in quantitative disciplines. Teaching under and graduate level. Research fish stocks of North Pacific. Send letter of application, résumé, transcripts, reprints, and names, addresses, and telephone numbers of three references to: **University of Alaska-Juneau, Office of Personnel, 11120 Glacier Highway, Juneau, Alaska 99801,** by 1 January 1985. *An Equal Opportunity/Affirmative Action Employer and Educational Institution.*

**POSTDOCTORAL FELLOW**—Immediately available in the area of in vitro cellular aging, funded through a training grant from the National Institute of Aging. Work will involve the isolation and characterization of novel hormone growth factors for prostate, liver, and endothelial cells. Appointments will be for 2 years at a starting salary of at least \$14,040 per annum, plus benefits. Candidates must have a Ph.D. in the biological sciences and also be permanent residents of the United States. Knowledge of protein biochemistry and molecular biology and cell culture would be desirable. Interested persons should send curriculum vitae and names of reference and specific areas of interest to: **The Personnel Office, W. ALTON JONES CELL SCIENCE CENTER, 10 Old Barn Road, Lake Placid, New York 12946.** Refer to Job MC-201.

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# National Cancer Institute National Institutes of Health Public Health Service Department of Health and Human Services

**The National Cancer Institute (NCI), is accepting applications for 3 key leadership positions in the Division of Cancer Prevention and Control (DCPC). The NCI develops the overall national strategy against cancer, coordinates Federal government and non-Federal government career programs, and supports international programs of cancer research. DCPC assures the rapid and effective application of cancer research findings in the prevention, detection, diagnosis, and treatment of cancer patients; and the research and development of cancer control programs designed to facilitate the transfer of findings from cancer research to the public and the professional community.**

**The following are Civil Service positions established at the GS-15 level with a salary range from \$50,495 to \$67,969 (currently limited to \$66,400 per annum). Physicians may also be eligible for Physicians' Comparability Pay up to \$10,000 per year.**

**THE CHIEF, DIET AND CANCER BRANCH** will have full responsibility for the following critical activities: (1) planning, developing, directing, and coordinating a research program in the Diet and Cancer Branch as it relates to cancer prevention; (2) developing, refining, and testing hypotheses of diet in the etiology and prevention of cancer; (3) developing quantitative methods to monitor nutritional intake in large populations and to convert diet into nutrient content; (4) studying baseline dietary data on populations in chemoprevention trials; (5) studying and testing hypotheses related to macronutrients (e.g., fats, fibers, vegetables) and cancer; and (6) assessing strategies for altering diet in relation to cancer risks, and weighing scientific knowledge and the impact of such strategies. Candidates must meet the minimum experience and education requirements for Medical Officer, GS-602, as defined by the U.S. Office of Personnel Management (OPM) Handbook X-118 (Qualifications for Positions under the General Schedule) which is available in Federal personnel offices. In addition, candidates must have experience in nutritional science, epidemiology, or a related field. Research experience involving human diet or clinical trials is desirable.

**THE CHIEF, OCCUPATIONAL CANCER BRANCH** is responsible for the overall administration of a research program designed to bring applied cancer prevention to the occupational setting. This includes program planning and development, scientific direction and evaluation and assessment of activities related to

identifying persons and cohorts at risk for occupation-related cancers or pre-neoplastic conditions, identifying and implementing risk reduction strategies, identifying and implementing studies of cancer detection in high risk occupational groups, implementing programs in worker education and, in conjunction with staff of other branches, identifying and implementing studies of chemoprevention or dietary intervention aimed at cancer prevention. Relevant research areas include epidemiology, toxicology, carcinogenesis, occupational health and cancer prevention. Responsibility also extends into participation in the overall planning for the Prevention Program and the administrative and scientific review of its research projects. Candidates must meet either the minimum experience and education requirements for Medical Officer, GS-602, as defined by the U.S. Office of Personnel Management (OPM) Handbook X-118 (Qualifications for Positions under the General Schedule) which is available in Federal personnel offices, or the minimum experience and education requirements for Health Scientist Administrator, GS-601, as defined in Announcement WAH-111, which is available from the National Institutes of Health, Special Examining Unit. Candidates with a medical degree must have research and/or clinical experience providing medical evaluations on various health problems, including causes, methods of prevention and control, and methods of treatment. Candidates with a Ph.D. or equivalent must have research experience or other professional or scientific work in occupational cancer hazards and prevention or in epidemiological studies related to health hazards. All candidates must provide evidence of managerial and administrative skills in planning, developing, and directing a research program. It is desirable that candidates possess research experience in all or some of the following areas: cancer hazards related to occupational exposures; evaluation of trends in cancer incidence; early detection of cancer or premalignant lesions; early diagnosis and treatment, and the education of workers in methods of self-protection and cancer prevention.

**THE CHIEF, CANCER PREVENTION STUDIES BRANCH** will have major responsibility for managing and administering an intramural research program in cancer prevention. Specifically, the incumbent 1) plans, develops and conducts research in the areas of diet, nutrition and cancer, cancer chemoprevention, and occupational cancer studies and other cancer prevention research involving actions or interventions aimed at lowering human cancer risk; 2) plans, develops and conducts nutritional and chemoprevention interventions and trials designed to test the effect of nutritional

and chemopreventive agents in reducing cancer risk; safety and toxicity studies; and clinical studies examining the relationship of substances under investigation to biochemical and physiological parameters; 3) develops methodologies for ascertaining research study priorities and for assuring quality control and excellence in the performance of the studies and appropriate standardization between studies; 4) develops, coordinates, and maintains data systems and other resources necessary for conducting these studies; and 5) determines key research needs and studies particularly suitable to be done at or by the National Cancer Institute and develops collaborative research arrangements and appropriate contracts, interagency agreements or other methods of supporting this intramural research. Candidates must meet either the minimum experience and education requirements for Medical Officer, GS-602 as defined by the U.S. Office of Personnel Management (OPM) Handbook X-118 (Qualifications for Positions under the General Schedule) which is available in Federal personnel offices, or the minimum experience and education requirements for Health Scientist Administrator, GS-601, as defined in Announcement WAH-111, which is available from the National Institutes of Health, Special Examining Unit. Candidates with a medical degree must have research and/or clinical experience providing medical evaluations on various health problems including causes, methods of prevention and control, and methods of treatment. Candidates with a Ph.D. or equivalent must have research experience or other professional or scientific work in nutritional and/or chemoprevention interventions and/or clinical trials, and experience in program planning and development in research projects related to cancer prevention. All candidates must provide evidence of managerial and administrative skills in planning, developing, evaluating and assessing activities related to intramural research projects.

Additional information may be obtained from Ms. Janet Gregory or Mr. Jerry Chambers, NCI Personnel Office, (301), 496-6862.

**Applicants must submit an SF-171 (Personal Qualifications Statement), a current curriculum vitae and bibliography to: National Cancer Institute, Personnel Office, Building 31, Room 3A-32, 9000 Rockville Pike, Bethesda, Maryland, 20205. Applications of women and/or minority group members are especially solicited.**

The National Institutes of Health is an Equal Opportunity Employer.

## POSITIONS OPEN

### PLANT ECOLOGY/CELL PHYSIOLOGY/ SYSTEMATICS

The Department of Botany, Louisiana State University (LSU), invites applications in ecology, cell physiology, and systematics, for new tenure-track positions expected for August 1985. A Ph.D. before appointment, evidence of creative research, and quality and experience in teaching are required. Responsibilities include developing an active research program and teaching introductory and specialty courses. Review of applications will begin on 1 December 1984 and continue until the positions are filled.

Send résumé, names and addresses of three references, and a brief statement of research goals to: Search Committee, Department of Botany, LSU, Baton Rouge, La. 70803-1705.

LSU is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL FELLOW

The appointee will be expected to develop techniques to study optical properties of the atmosphere relating to climate changes. These studies will emphasize the role of absorbing aerosol particles in atmospheric radiative transfer. Require Ph.D. in physics, chemistry, or atmospheric sciences. Strong experimental background in optics, spectroscopy, or atmospheric sciences preferred. Please specify Job Number A/3149. Send two copies of résumé to: Lawrence Berkeley Laboratory, One Cyclotron Road, Employment Office 90-1042, Berkeley, Calif. 94720. For further information, please contact: Hal Rosen, telephone: 415-486-5319. An Equal Opportunity Employer, M/F/H.

### LAWRENCE BERKELEY LABORATORY

Immediate opening for a POSTDOCTORAL FELLOW to work in the field of molecular genetics of human inherited disorders. Background in molecular biology and recombinant DNA technology preferred. Send curriculum vitae and names of three references to: Dr. Owen M. Rennert, Department of Pediatrics, Oklahoma Children's Memorial Hospital, P.O. Box 26901, Oklahoma City, Oklahoma 73190.

### POSTDOCTORAL FELLOW/BIOCHEMISTRY

Ph.D. in biochemistry required; must be skilled in recombinant DNA techniques including cloning, sequencing, and gene expression; must have understanding of intracellular interaction between nuclear and mitochondrial genes, such as integration of mitochondrial genes into the nuclear DNA. Salary: \$16,000 per year; 40-hour week. Send résumé to: Denver Job Service Center, 1330 Fox Street, Denver, Colo. 80203, referred to Job Order Number 2299019.

**POSTDOCTORAL POSITION IN MOLECULAR IMMUNOLOGY.** A 2-year position is offered to study molecular mechanisms for immune regulation through cloning DNA encoding immunoregulatory T lymphocyte membrane glycoproteins. Recent Ph.D. with experience in molecular biology required. Experience in immunology is desirable. Please submit a résumé and names of three references to: Dr. Colleen Hayes, Department of Biochemistry, University of Wisconsin, 420 Henry Mall, Madison, Wis. 53706.

**POSTDOCTORAL POSITIONS** available for recent Ph.D.'s to participate in an active research program on the regulation of DNA repair in human cells. Current research efforts focus on the use of monoclonal antibody and recombinant DNA technology for biochemical and cellular studies of DNA repair in normal human cells and in cells from cancer-prone individuals [see *PNAS* 80, 5822 (1983); 81, 757 (1984)]. Interested individuals should submit curriculum vitae and names of two references to: Dr. Michael Sirover, Fels Research Institute, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, Pa. 19140. Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** available immediately for electrophysiological and behavioral study of the monkey visual system. Send curriculum vitae and three letters of reference to: Dr. David B. Bender, Department of Physiology, State University of New York (SUNY)/Buffalo, School of Medicine, Buffalo, N.Y. 14214. SUNY/Buffalo is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

**POSTDOCTORAL POSITIONS IN MASS SPECTROMETRY** at the Midwest Center for Mass Spectrometry, University of Nebraska-Lincoln. Projects include: (i) development of new analytical methods for highly toxic chlorinated aromatics (dioxins, dibenzofurans and so forth) in tissue and for nitroaromatics in diesel particulates, (ii) utilization of FAB and tandem mass spectrometry for determination of biomolecules, and (iii) studies of mechanisms of reactions of radical cations and metal ions with organic molecules; \$17,000 minimum. Apply by 15 November with résumé and three letters of reference to: Michael L. Gross, Department of Chemistry, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-0304. Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available immediately to study the anaerobic metabolism of pectin by bacteria and the physiological interactions between pectinolytic bacteria and other microorganisms. Background in microbiology and biochemistry is desired. Salary commensurate with education and experience. Send curriculum vitae and names and addresses of three references to: E. Canale-Parola, Department of Microbiology, University of Massachusetts, Amherst, Mass. 01003. Application deadline: 16 November 1984. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** for 2 years (\$15,000 per year). Involved with research for either the molecular biology and immunology of human rotaviruses or Epstein-Barr virus. Background in protein biochemistry and molecular biology desired. Send curriculum vitae and names of three references to: John H. Hughes, Ph.D., Children's Hospital, Columbus, Ohio 43205.

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

**POSTDOCTORAL POSITION** available in protein chemistry and affinity labeling of purine nucleotide sites in enzymes. Recent Ph.D. in biochemistry. Send résumé and three references to: Dr. Roberta F. Colman, Chemistry Department, University of Delaware, Newark, Del. 19716. An Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION (MOLECULAR GENETICS)

Available from January 1985 in our group studying biosynthesis of antifungal compounds of pseudomonads. The successful applicant will research the genetic organization and regulation of the biosynthetic pathway. Send curriculum vitae and names of three references to: J. Gower, Advanced Genetic Sciences, 6701 San Pablo Avenue, Oakland, Calif. 94608.

**POSTDOCTORAL POSITION IN INORGANIC CHEMISTRY/RADIOCHEMISTRY.** Available January 1985 for 2 years to develop techniques for labeling monoclonal antibodies with beta-emitting radionuclides for use in internal cancer radioimmunotherapy. Experience in labeling proteins with iodine or bifunctional chelating agents desirable. Send curriculum vitae to: Dr. Michael A. Davis, Department of Radiology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Mass. 01605. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITIONS** in pharmacology. The faculty members of the Department of Pharmacology listed below invite applications for postdoctoral trainees:

Dr. M. W. Anders: Biotransformation and cellular toxicity of xenobiotics.

Dr. Richard F. Borch: Synthesis and mechanisms of action of antitumor agents.

Dr. Gary L. Diamond: Renal pharmacology and toxicology of heavy metals and metal complexing agents.

Dr. Patricia M. Hinkle: Molecular mechanisms of hormone action.

Dr. Michael L. Mangiapane: Neural control of the circulation.

Dr. Shey-Shing Sheu: Calcium regulation in cardiac muscle.

Applicants should submit curriculum vitae, bibliography, brief description of research interests, and the names of three individuals qualified to evaluate their work to the person of interest at: The Department of Pharmacology, School of Medicine and Dentistry, University of Rochester, 601 Elmwood Avenue, Rochester, N.Y. 14642. The University of Rochester is an Equal Opportunity Employer, M/F.

## POSITIONS OPEN

**POSTDOCTORAL POSITION—MOLECULAR BIOLOGY/BACTERIAL PATHOGENESIS**, available by arrangement for 2 to 3 years, employing recombinant DNA and monoclonal antibody technologies to study the genetics, pathogenesis, and immunology of *Treponema pallidum* infection. Candidates with a strong background in the relevant technologies, including gene expression, will be given preference. Emphasis shall be on using molecular biological approaches for the identification, isolation, and characterization of key recombinant *T. pallidum* immunogens. The position offers an excellent opportunity to train in a department with great strengths in the areas of molecular biology, molecular immunology, and bacterial pathogenesis. Please send curriculum vitae and the names of two references to: Dr. Michael V. Norgard, Department of Microbiology, University of Texas Health Science Center at Dallas, 5323 Harry Hines Boulevard, Dallas, Texas 75235. An Equal Opportunity University.

### POSTDOCTORAL POSITION

A 1½-year postdoctoral position is available in plant membrane biochemistry in a program which seeks to elucidate the physical, chemical, and transport properties of the proton translocating ATPase of the vacuolar membrane of the CAM plant *Kalanchoë daigremontiana*. Applicants should have a Ph.D. in biochemistry or plant physiology and be competent in modern physical and chemical techniques of membrane protein isolation, purification, and characterization. Applicants should send a letter of application, current curriculum vitae and bibliography, and the names of three references to: Dr. Ernest G. Uribe, Department of Botany, Washington State University, Pullman, Washington 99164-4230. Closing date is 30 November 1984.

**POSTDOCTORAL POSITIONS (TWO)** available immediately to participate in ongoing projects involving induction of mouse tumors by (i) RNA tumor viruses and (ii) chemical carcinogens. Research includes DNA transfection, gene cloning, DNA sequencing, and so forth. Candidates with experience in molecular biology are desired. Send curriculum vitae and names of three references to: Dr. Dorothy L. Buchhagen, State University of New York-Downstate Medical Center, Department of Microbiology and Immunology, Box 44, 450 Clarkson Avenue, Brooklyn, N.Y. 11203. Equal Opportunity/Affirmative Action Employer. DMC Number 573.

### POSTDOCTORAL RESEARCH ASSOCIATE COCHLEAR PHYSIOLOGY

To study the mechanical response of the chinchilla basilar membrane using the Mössbauer technique. Two-year appointment available immediately. Candidates should have experience in auditory neurophysiology. Send curriculum vitae and the names of three references to: Dr. Mario A. Ruggero, Department of Otolaryngology, University of Minnesota, 2630 University Avenue, SE, Minneapolis, Minn. 55414. An Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL RESEARCH ASSOCIATE

Position available to do research in positron emission tomography (PET) in the area of instrumentation and applications development, including optimization and development of imaging techniques with new PET system and development of physiological modeling and parameter estimation techniques for PET studies in the Laboratory of Nuclear Medicine. Applicants should preferably have doctorate in medical physics, physics, or bioengineering. Experience with PET instrumentation, tracer kinetic modeling, or medical imaging systems desirable. Salary: \$19,000 to \$24,000. Apply to: E. J. Hoffman, Ph.D., Division of Biophysics, Laboratory of Biomedical and Environmental Sciences, University of California, Los Angeles, School of Medicine, Los Angeles, Calif. 90024. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE** position available with cardiovascular physiology group. Research projects include the role of the coronary microcirculation in: myocardial protection and preservation, myocardial recovery from ischemia, diabetes, and chronic exposure to altitude and carbon monoxide. Candidates with a background in physiology or related discipline should send résumé and names of three references to: Dr. Paul McDonagh, Department of Physiology, School of Medicine, Texas Tech University Health Sciences Center, Lubbock, Texas 79430.

# SCIENTISTS

**Creative BioMolecules, Inc.** is a research and development company involved in production of proteins using recombinant DNA technologies. Our protein chemistry laboratory has opportunities for enterprising and well-qualified individuals with experience in one or more of the following research areas:

- **Immunochemistry**
- **Protein characterization/purification**
- **Protein immobilization chemistry**
- **Protease enzymology**

Applicants for these positions should have post-doctoral experience and demonstrated capacity to carry research project responsibilities.

Creative BioMolecules offers competitive salaries and benefits plan and the opportunity to make a significant contribution to our research program.



Interested individuals may apply by sending a resume to:

**Personnel Director**  
**Creative BioMolecules, Inc.**  
 35 South Street  
 Hopkinton, MA 01748

**CREATIVE BIOMOLECULES**

## HABITAT RESTORATION SCIENTIST

B.S./B.A. in botanical or ecological sciences plus 5-10 years additional training and/or experience in the field of habitat restoration. At least 2-3 years of this training/experience must be in a position that was directly involved in practical, applied habitat restoration of a large scale, preferably for an energy related project. Must have had more than technical input to the program, and a demonstrated publication record including senior authorship. Training in disciplines such as sensing in the broadest sense, biostatistics, modelling, radiation biology, ecology, and experience with wildlife, especially endangered species desired. Will implement habitat restoration plan at Elk Hills, Kern County, California, design and conduct R&D programs, assist with botanical and ecological support. Will assist supervisor in developing new programs and provide both oral and written communications with sponsors. Will synthesize literature and research data into professionally acceptable topical reports and articles in referred, scientific journals.

Previous applicants will be reconsidered, and need not reapply.

Qualified candidates send resume to:



**EG&G Energy Measurements, Inc.**  
 Attn: Personnel  
 P.O. Box 98  
 Goleta, California 93116

U.S. Citizenship Required  
 An Equal Opportunity Employer

## POSTDOCTORAL APPOINTEE PSYCHOPHYSICS- BEHAVIOR STUDIES

The Los Alamos National Laboratory has a developing neurosciences effort based on advanced methods in magnetoencephalography, NMR, and theoretical neural networks. The program combines technological developments in the Physics Division with theoretical and neurobiological expertise in the Theoretical and Life Science Division. Candidates interested in being part of this interdisciplinary effort should have:

- Ph.D. in physics, psychology, biophysics, or mathematics within the last three years.
- Intensive training and experience in psychophysics research or behavior studies using evoked responses from well defined sensory input.

Responsibilities include designing and participating in psychophysics experiments using well defined protocols, computer generation of optimal stimuli and analysis of results, and interpretation of behavior and sensory processing information from MEG measurements in animals and man.

Please submit detailed resume including transcripts, letters of reference and research interests to:

Richard O. Garcia, DIV P-84—DH  
 MS P205  
 Los Alamos National Laboratory  
 Los Alamos, New Mexico 87545

University  
 of California



An Affirmative Action/Equal Opportunity Employer

## DEAN SCHOOL OF HEALTH SCIENCES HUNTER COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

Upper division undergraduate and graduate programs in Allied Health Services Administration, Communications Sciences, Community Health Education, Environmental Health Science, Medical Laboratory Sciences, Nutrition and Food Science and Physical Therapy. 700 students, 35 full-time faculty, over 100 teaching, clinical and research affiliations with nearby major health-related facilities.

**RESPONSIBILITIES:** Maintain excellence in all academic, professional, public service and research programs; reports directly to the Provost.

**QUALIFICATIONS:** Earned doctorate; demonstrated competence in administration of health-related academic, voluntary or governmental institutions; teaching, fund-raising, research and service.

**AVAILABILITY:** February or September, 1985.

Resumes and names of 3 references by: November 20, 1984, to:

**Professor S. Marvin Friedman**

**OFFICE OF THE HUNTER COLLEGE SENATE**

Box 407, 695 Park Avenue  
 New York, New York 10021

AA/Equal Opportunity Employer



## POSITIONS OPEN

### POSTDOCTORAL RESEARCHER VASCULAR SMOOTH MUSCLE PHYSIOLOGY

Immediate opening for a biophysically oriented Ph.D. to join a multidisciplinary group studying the myogenic, mechanical, electrophysiological, and pharmacological properties of brain and coronary arteries. A challenging opportunity for candidate interested in the areas of hypertension, stroke, and vasospasm. Stipend dependent on qualifications. Send résumé and names of three references to: **Dr. William Halpern, University of Vermont, College of Medicine, Department of Physiology and Biophysics, Burlington, Vt. 05405. An Affirmative Action Employer.**

### POSTDOCTORAL/RESEARCH ASSISTANT

Available immediately for Ph.D. or M.D. interested in the sterilizing and mutagenic effects of cancer chemotherapy/radiotherapy on male reproductive potential. Investigator can pursue projects ranging from basic studies on animal systems to clinical studies of the effects observed on treated patients. Salary range: \$19,000 to \$30,000. Send curriculum vitae, names and telephone numbers of references, and statement of research interests to:

**Dr. Marvin Meistrich**  
Experimental Radiotherapy  
Box 66  
University of Texas  
M. D. Anderson Hospital and Tumor Institute  
Houston, Texas 77030

**TWO POSTDOCTORAL, RESEARCH ASSOCIATE POSITIONS** are available to study the structure and biosynthesis of skin and scar tissue proteoglycans and glycoproteins and the role these extracellular matrix components play in inflammatory processes.

Candidates with research backgrounds in biochemistry and immunology are requested to send their curriculum vitae and names of three references to: **Dr. David A. Swann, Shriners Burns Institute, 51 Blossom Street, Boston, Mass. 02114.**

A **POSTDOCTORAL RESEARCH POSITION** will be available after 1 January 1985 for an individual interested in **INVERTEBRATE IMMUNOLOGY** and with specific interests in the defense mechanisms of molluscs to metazoan parasites. A strong background in biochemistry or immunology, and familiarity with HPLC methods, immunochemistry, and/or tissue culture would be desirable. Funding available for 2 years. Send curriculum vitae and two letters of recommendation to: **Dr. Timothy Yoshino, Department of Zoology, University of Oklahoma, 730 Van Fleet Oval, Norman, Oklahoma 73019.**

**POSTDOCTORAL RESEARCH ASSOCIATE.** The U.S. Department of Agriculture, in conjunction with the University of Maryland, seeks a cell physiologist to conduct basic investigations on factors influencing the phagocytosis of pathogenic bacteria by bovine leukocytes. The successful candidate will function as part of a team investigating physiological defenses of the bovine against bacterial infection of the mammary gland. Experience and/or training in immunology and electron microscopy is required. Salary is competitive and dependent upon qualifications. Contact: **Dr. Max J. Paape, Milk Secretion and Mastitis Laboratory, BARC, Room 103, Building 173, Beltsville, Maryland 20705. Telephone: 301-344-2213.**

**PROFESSOR OF REPRODUCTIVE BIOLOGY.** Applications are invited for a tenured, full-time research position to provide leadership to a reproductive biology group. Preferred area of research is application of advanced biotechnology in the study of embryonic survival in livestock. Applicants with a Ph.D. should send résumé and names of references to: **Dr. B. N. Day, Department of Animal Science, 159 Animal Sciences Center, University of Missouri, Columbia, Mo. 65211, by 1 December 1984. The University of Missouri is an Equal Opportunity Employer.**

**RESEARCH ASSISTANT PROFESSOR, Ph.D./or M.D.**—to study growth factor interaction with receptors of fibroblasts. Candidate must be familiar with methodology for following fate of ligand and receptor from membrane into lysosomes, and the study of DNA synthesis. Independent funding expected within 2 years. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae to: **Charles Scher, M.D., Division of Oncology, Children's Hospital of Philadelphia, 34th and Civic Center Boulevard, Philadelphia, Pa. 19104.**

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH ASSOCIATES

Several positions are available 1 January 1985 to study chemical carcinogenesis, mutagenesis, and DNA repair:

- 1) Genetic factors controlling susceptibility to skin carcinogenesis in inbred strains of mice: current studies are examining the number and map position of gene(s) controlling susceptibility to tumor promotion by phorbol esters (**Dr. John DiGiovanni**).
- 2) Repair and mutagenesis of chemical carcinogen-induced DNA damage: the use of a phage DNA transfection system to study the genetic control and enzymology for repair of different kinds of DNA adducts, and to sequence the mutants produced (**Dr. Moo-shong Tang**).
- 3) Southern blot restriction fragment analysis of mutation, recombination, and inactivation events in DNA repair-deficient versus -proficient CHO cell lines (**Dr. Gerald Adair**).

Candidates for these positions should have strong backgrounds in biochemical or molecular genetics. Send curriculum vitae and names of three references to the appropriate investigator.

**The University of Texas System Cancer Center  
Science Park—Research Division  
P.O. Box 389  
Smithville, Texas 78957**

*An Equal Opportunity/Affirmative Action Employer*

**POSTDOCTORAL RESEARCH POSITION** is available immediately to study the structure and expression of catecholamine biosynthetic enzyme genes and heat-shock proteins. The candidate should have a strong background in recombinant DNA technology. Salary level: between \$17,000 and \$18,000 per annum. Send inquiries, curriculum vitae, and references to: **Joachim D. Raese, M.D., Director, Special Diagnostic and Treatment Unit, Veterans Administration Medical Center, Psychiatry Service (116A), 4500 South Lancaster Road, Dallas, Texas 75216. Telephone: 214-376-5451, extension 5692. The University of Texas Health Science Center is an Equal Opportunity/Affirmative Action University.**

**RADIATION/HYPERTHERMIA BIOLOGIST.** Faculty position available immediately to support research in cellular and molecular aspects of radiation and hyperthermia damage, repair processes, and thermotolerance. Some teaching required. Salary and rank commensurate with experience; postdoctoral experience required. Position complements ongoing cellular, tissue, and clinical studies. Send curriculum vitae, summary of research interests and ongoing projects, and names of three references to: **Dennis B. Leeper, Ph.D., Laboratory of Experimental Radiation Oncology, Department of Radiation Therapy and Nuclear Medicine, THOMAS JEFFERSON UNIVERSITY HOSPITAL, Philadelphia, Pa. 19107. An Equal Opportunity/Affirmative Action Employer.**

**RESEARCH ASSOCIATE.** Opportunity for M.D. or Ph.D. to perform studies of human metabolic regulation, with emphasis on the response to injury and nutritional support. Training on application of stable isotope/mass spectrometry techniques. Starting date, duration of appointment flexible. Contact: **Dr. Robert R. Wolfe, Shriners Burns Institute, and The University of Texas Medical Branch, 610 Texas Avenue, Galveston, Texas 77550; telephone: 409-761-6538.**

### RESEARCH ASSOCIATES

Multidisciplinary research group in Portland, Oregon, investigating connective tissue macromolecules, is currently seeking two talented individuals with proven abilities:

**POSTDOCTORAL RESEARCH ASSOCIATE.** Position available immediately, for up to 2 years, to study the structure and function of minor human collagens.

**SENIOR RESEARCH ASSOCIATE.** Immediate opening for individual to assist with primary structure determinations of matrix proteins. *This position is potentially permanent.*

For both positions strong protein chemistry background with HPLC experience is required, previous postdoctoral research experience with collagens strongly preferred. Salary commensurate with experience. Please indicate your interest in either the temporary or permanent position and send curriculum vitae, list of publications of thesis abstract, a brief statement of research interests, and three letters of recommendation to:

**Box 241, SCIENCE  
Equal Opportunity Employer**

## POSITIONS OPEN

A **LABORATORY RESEARCH ASSOCIATE** position is available at Kansas State University for work in the James R. Macdonald Laboratory on accelerator design, construction, and operation. Associate will work directly with project director. Applicant must have M.S. in physics and experience with the operation of a tandem Van de Graaff accelerator, vacuum equipment, and digital electronics. Annual salary is \$16,000. Deadline for applications is 1 November 1984. Send application letter, curriculum vitae, and three letters of reference to: **Professor Patrick Richard, Director, James R. Macdonald Laboratory, Cardwell Hall, Kansas State University, Manhattan, Kansas 66506. Kansas State University is an Equal Opportunity/Affirmative Action Employer.**

### RESEARCH ASSOCIATE

Applications are invited for a research associate with a Ph.D. in biochemistry and at least 5 years of experience. This position requires an individual who is an expert in the field of glycolipid chemistry. The candidate selected will become an integral part of a research team involved in the study of human tumor antigens. Salary range: \$17,500 to \$21,000 per annum. Forward curriculum vitae to:

**Patricia Menel  
The Wistar Institute  
36th Street at Spruce  
Philadelphia, Pa. 19104  
An Equal Opportunity/Affirmative  
Action Employer, M/F/H/V**

**RESEARCH POSITIONS** in molecular biology immediately available. Research projects will be in the areas of recombinant DNA, cDNA, and genomic DNA cloning, sequencing, expression vectors, and the molecular genetics of mammalian apolipoprotein gene expression. Ph.D. in a biochemical science essential. Experience in recombinant DNA techniques highly desirable.

Level of position [research associate-junior faculty] and salary commensurate with experience. Interested candidates should have résumé and three letters of reference sent to: **Dr. Lawrence Chan, Department of Cell Biology, Baylor College of Medicine, One Baylor Plaza, Houston, Texas 77030.**

*Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSOCIATE

Candidate will apply knowledge of proteoglycan chemistry to conduct research aimed at investigating the biosynthesis and degradation of proteoglycans in cartilage and their relation to the biochemistry of endochondral ossification. Position requires a Ph.D. in biochemistry. Experience not necessary but graduate work must include independent study and research in proteoglycan chemistry. Salary offer: \$20,000 per year, 40 hours per week, 8 a.m. to 5 p.m., Monday through Friday. Send résumé to: **Doctor Klaus Kuttner, Chairman of Department of Biochemistry, Rush-Presbyterian-St. Luke's Medical Center, 1753 East Congress Parkway, Chicago, Illinois 60612.**

**RESEARCH ASSOCIATE POSITION: TURBULENCE AND MICROMETEOROLOGY.** Available immediately. M.S. level training in atmospheric turbulence, micrometeorology, or related areas needed. Familiarity and experience with turbulence (eddy correlation) instrumentation and analytical techniques desirable. Full-time position. Opportunities for Ph.D. study available. Send curriculum vitae, transcripts, and names of references by 30 November 1984 to: **Dr. S. B. Verma, Center for Agricultural Meteorology and Climatology, University of Nebraska, Lincoln, Nebraska 68583-0728; telephone: 402-472-6702. University of Nebraska, Lincoln, does not discriminate in employment practices.**

### VIROLOGIST

**ASSISTANT PROFESSOR.** The Department of Microbiology and Molecular Genetics of Harvard Medical School (HMS) seeks an assistant professor for the Microbiology Division of HMS's New England Regional Primate Research Center. Preference will be given to those candidates desiring to study primate retroviruses or herpesviruses but strong candidates in all areas of microbiology will be considered. Send curriculum vitae, publication list, and a brief statement of research experience to: **Dr. Ronald C. Desrosiers, Harvard Medical School, New England Regional Primate Research Center, Southboro, Mass. 01772. An Affirmative Action/Equal Opportunity Employer.**

# PHYSIOLOGICAL ECOLOGIST

## University of California, Davis

The Division of Environmental Studies solicits applications for a tenure-track, 11-month position in **PHYSIOLOGICAL ECOLOGY**, effective July 1, 1985. The appointment will be made at the Assistant Professor level. A Ph.D. in Physiology, Ecology, Evolutionary Biology, Zoology, or a related discipline is required. Candidates are expected to establish an outstanding research program in physiological or biochemical adaptation to the physical environment, working at the organismal level and within an ecological or evolutionary context. Teaching responsibilities include an undergraduate laboratory and field class in physiological ecology, in addition to advising and to undergraduate or graduate teaching in general ecology and the speciality of the candidate.

Applicants are required to submit a curriculum vita, official graduate transcripts, a statement of research and teaching interests, selected publications, and the names and addresses of at least three references to William J. Hamilton III, Chair, Search Committee, Division of Environmental Studies, University of California, Davis, California 95616, USA.

In order to be assured of consideration, applications should be received by January 15, 1985.

**THE UNIVERSITY OF CALIFORNIA IS AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER, AND INVITES APPLICATIONS FROM ALL QUALIFIED INDIVIDUALS.**

## RESEARCH ASSISTANT

Applications are invited for the position of Research Assistant in the Central Nervous System Research Unit. This position would require follow-up studies on lead compounds by receptor binding assay, enzymatic assay, radioimmunoassay, GC/MS and HPLC. Expertise in neurochemistry of cholinergic system is desirable.

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Neuroscience Program  
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**Dr. John K. Spitznagel  
Professor and Chairman  
Department of Microbiology and Immunology  
502 Woodruff Memorial Building  
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Statement required by the Act of 12 August 1970, Section 3685, Title 39, United States Code, showing the ownership, management, and circulation of:

1-6. *Science* is published weekly on Friday except the last week in December, at 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Date of filing: 10 October 1984. This is also the address of the publisher and the editor, who are, respectively, William D. Carey and Philip H. Abelson. There is no managing editor.

7. The owner is American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Stockholders: None.

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9. The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes have not changed during the preceding 12 months.

10. The average number of copies of each issue during the preceding 12 months is (A) Total number of copies printed: 162,918; (B) Paid circulation: (1) sales through dealers and carriers, street vendors, counter sales: None; (2) Mail subscriptions: 154,788; (C) Total paid circulation: 154,788; (D) Free distribution by mail, carrier, or other means: samples, complimentary, and other free copies: 4,080; (E) Total distribution: 158,868; (F 1) Office use, leftover, unaccounted, spoiled after printing: 4,050; (F 2) Returns from news agents: None; (G) Total: 162,918.

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I certify that the statements made by me above are correct and complete. (signed) *Ann Ragland, Science Circulation Manager.*

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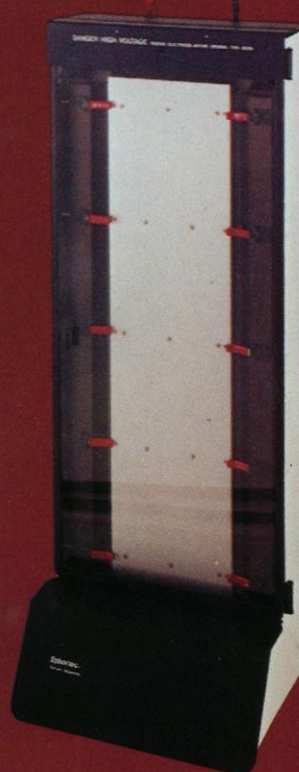
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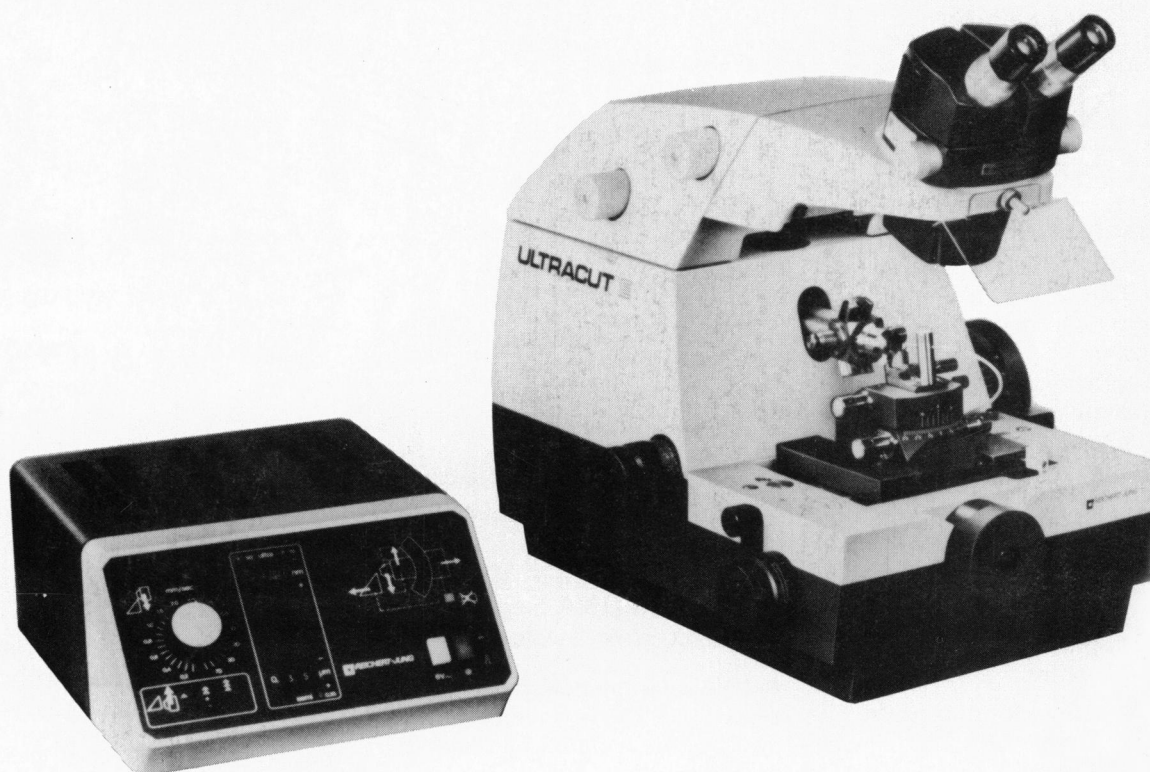


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