

highland centers of Teotihuacan and Tenochtitlan (which are frequently cited as analogues), and at one of the Maya centers referred to, Copan (where I have worked for the last three years), the data suggest very simple and small-scale patterns of specialization.

In other cases the data are pushed too far and are manipulated in unsound ways. For example, on p. 133 some highly specific assertions concerning household organization in relation to residence are advanced as demonstrated by the data rather than as models to be tested. Yet on the very next page we read about how difficult it is to assign functions to architecture in the absence of excavation, which has not been done at Coba in these contexts (so far as we are told). Even more disturbing are some of the spatial interpretations. We are told that "the number of platform groups at Coba which functioned coevally as residential units are so closely spaced . . . that an average of only about 50 m separates these groups" (pp. 117-118), and later we are shown a statistically generated arrangement of "social clusters" in Zone 1 (p. 182). Yet the authors make it abundantly clear that they have no adequate chronological control for residential contemporaneity within the Late Classic period, nor can they factor out the architectural complexes of what must have been a sizable Postclassic population. In the discussion of class structure (chapter 11), a major issue among Mayanists and one that can often be evaluated fruitfully on the basis of surface architectural remains, evidence from Coba is used very superficially in the context of a lengthy ethnographic model. Particularly unfortunate in this section is the lack of volumetric or energetic calculations on a large sample of structures to tease apart significant residential and, presumably, status variation.

All of these deficiencies are particularly unfortunate because the data from Coba are significant, given the constraints under which they were collected. The maps seem to have been competently produced and do provide extensive and reliable information on the distribution of residential compounds and other associated architectural features. When the authors choose to be conservative in their inferences, as in the discussion of linear features and kitchen gardens, plausible and provocative ideas emerge. Certainly Maya archeologists interested in settlement system analysis or the issue of Maya urbanization should examine the Coba maps. I think it will be clear to them, as it was to me, that Coba

was a large and impressive center. What will not be clear until much more work is done is whether the process of urbanization in the Maya Lowlands proceeded as far as this book maintains.

DAVID L. WEBSTER

*Department of Anthropology,  
Pennsylvania State University,  
University Park 16802*

## Books Received

- Advances in Viral Oncology.** Vol. 3, DNA-Virus Oncogenes and Their Action. George Klein, Ed. Raven, New York, 1983. x, 357 pp., illus. \$66.
- Agricultural Insect Pests of the Tropics and Their Control.** Dennis S. Hill. 2nd ed. Cambridge University Press, New York, 1983. xii, 746 pp., illus. \$69.50.
- Alcohol Fuels.** Options for Developing Countries. National Academy Press, Washington, D.C., 1983. x, 109 pp., illus. Paper, \$8.95.
- Alcyclic Chemistry.** F. J. McQuillin and M. S. Baird. 2nd ed. Cambridge University Press, New York, 1983. x, 225 pp., illus. \$39.50; paper \$16.95. Cambridge Texts in Chemistry and Biochemistry.
- The Analysis of Actual Versus Perceived Risks.** Vincent T. Covello *et al.*, Eds. Plenum, New York, 1983. x, 377 pp. \$55. Advances in Risk Analysis, vol. 1. From a workshop, Washington, D.C., June 1981.
- Analytical Profiles of Drug Substances.** Vol. 12. Klaus Florey, Ed. Academic Press, New York, 1983. x, 735 pp., illus. \$47.
- Antibiotic Choice.** The Importance of Colonisation Resistance. Dirk van der Waaij. Research Studies Press (Wiley), New York, 1983. xiv, 132 pp. \$41.95. Antimicrobial Chemotherapy Series, 5.
- Apple Assembly Language.** With LaserWare Software. W. Douglas Maurer. Computer Science Press, Rockville, Md., 1983. xvi, 403 pp., illus. Paper, \$17.95.
- Arctic Energy Resources.** Louis Rey, Ed. Elsevier, New York, 1983. x, 366 pp., illus. \$78.75. Energy Research, vol. 2. Originally published as special issue of *Cold Regions Science and Technology*, vol. 7. From a conference, Oslo, Sept. 1982.
- Are Computers Alive?** Evolution and New Life Forms. Geoff Simons. Birkhäuser, Boston, 1983. xii, 212 pp. \$22.95; paper, \$14.95.
- Aristotle to Zoos.** A Philosophical Dictionary of Biology. P. B. Medawar and J. S. Medawar. Harvard University Press, Cambridge, Mass., 1983. xiv, 305 pp. \$18.50.
- Asymptotic Methods in Nonlinear Wave Theory.** Alan Jeffrey and Takuji Kawahara. Pitman, Boston, 1982. x, 256 pp. \$43.95. Applicable Mathematics Series.
- Atmospheric Diffusion.** F. Pasquill and F. B. Smith. 3rd ed. Horwood, Chichester, England, and Halsted (Wiley), New York, 1983. 437 pp., illus. \$64.95. Ellis Horwood Series in Environmental Science.
- Atomic Physics of Highly Ionized Atoms.** Richard Marrus, Ed. Plenum, New York, 1983. viii, 571 pp., illus. \$79.50. NATO Advanced Science Institutes Series B, vol. 96. From an institute, Cargèse, Corsica, June 1982.
- BASIC Microcomputing and Biostatistics.** How to Program and Use Your Microcomputer for Data Analysis in the Physical and Life Sciences, Including Medicine. Donald W. Rogers. Humana, Clifton, N.J., 1983. xii, 274 pp., illus. \$39.50.
- Biofeedback and Family Practice Medicine.** William H. Rickles *et al.*, Eds. Plenum, New York, 1983. x, 244 pp., illus. \$29.50.
- Biological Aspects of Alzheimer's Disease.** Robert Katzman, Ed. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y., 1983. xiv, 495 pp., illus. \$55. Banbury Report 15. From a conference, Cold Spring Harbor, Oct. 1982.
- The Biology of Crustacea.** Dorothy E. Bliss, Ed. Academic Press, New York, 1983. Vol. 7, Behavior and Ecology. F. John Vernberg and Winona B. Vernberg, Eds. xxvi, 338 pp., illus. \$45. Vol. 8, Environmental Adaptations. F. John Vernberg and Winona B. Vernberg, Eds. xxvi, 383 pp., illus. \$49.50.
- The Challenge of Change.** Perspectives on Family, Work, and Education. Martina Horner, Carol C. Nadelson, and Malkah T. Notman, Eds. Plenum, New York, 1983. xviii, 329 pp. \$29.50. Women in Context. Based on a conference, Cambridge, Mass.
- Changing Families.** Irving E. Sigel and Luis M. Laosa, Eds. Plenum, New York, 1983. xviii, 333 pp., illus. \$29.50.

**Chemical Information.** A Practical Guide to Utilization. Yechezkel Wolman. Wiley-Interscience, New York, 1983. xiv, 191 pp., illus. \$24.95.

**China and Charles Darwin.** James Reeve Pusey. Council on East Asian Studies, Harvard University, Cambridge, Mass., 1983 (distributor, Harvard University Press, Cambridge, Mass.). xii, 549 pp. \$25. Harvard East Asian Monographs, 100.

**Circadian Rhythms in Psychiatry.** Thomas A. Wehr and Frederick K. Goodwin, Eds. Boxwood Press, Pacific Grove, Calif., 1983. vi, 270 pp., illus. \$28.50. Psychobiology and Psychopathology, vol. 2.

**The Classification of Finite Simple Groups.** Vol. 1, Groups of Noncharacteristic 2 Type. Daniel Gorenstein. Plenum, New York, 1983. x, 487 pp. \$59.50. The University Series in Mathematics.

**The Climatic Record in Polar Ice Sheets.** G. de Q. Robin, Ed. Cambridge University Press, New York, 1983. viii, 212 pp., illus. \$59.50. Based on workshops, Cambridge, England, Jan. and March 1973.

**CO<sub>2</sub> and Plants.** The Response of Plants to Rising Levels of Atmospheric Carbon Dioxide. Edgar R. Lemon, Ed. Published for the American Association for the Advancement of Science by Westview, Boulder, Colo., 1983. xxii, 280 pp., illus. \$25. AAAS Selected Symposia Series, 84. From a conference, Athens, Ga., May 1982.

**Computational Hydraulics.** C. A. Brebbia and A. J. Ferrante. Butterworths, Boston, 1983. x, 290 pp., illus. \$49.95.

**Crib Speech and Language Play.** Stan A. Kuczaj, II. Springer-Verlag, New York, 1983. xii, 188 pp., illus. \$22. Springer Series in Cognitive Development.

**Critical Phenomena.** F. J. W. Hahne, Ed. Springer-Verlag, New York, 1983. viii, 353 pp., illus. Paper, \$18.50. Lecture Notes in Physics, vol. 186. From a school, Stellenbosch, South Africa, Jan. 1982.

**Drugs for Mental Illness.** A Revolution in Psychiatry. Marvin E. Lickey and Barbara Gordon. Freeman, New York, 1983. xii, 349 pp. \$18.50; paper, \$12. A Series of Books in Psychology.

**Energy Storage, Compression, and Switching.** Vol. 2. V. Nardi, H. Sahlin, and W. H. Bostick, Eds. Plenum, New York, 1983. xviii, 1067 pp., illus. \$125. From a conference, Venice, Dec. 1978.

**Ergonomics of Workstation Design.** Tarald O. Kvålseth, Ed. Butterworths, Boston, 1983. x, 260 pp., illus. \$59.95. From a conference, Oslo, Aug. 1980.

**The Etiology, Concept, and Prophylaxis of Childhood Fever.** Ignaz Semmelweis. University of Wisconsin Press, Madison, 1983. xii, 263 pp. \$35; paper, \$10.95. Wisconsin Publications in the History of Science and Medicine, No. 2. Translated from the German edition (1861) and edited by K. Codell Carter.

**Evolution from Molecules to Men.** D. S. Bendall, Ed. Cambridge University Press, New York, 1983. xiv, 594 pp., illus. \$29.95. From a conference, Cambridge, England, June 1982.

**Evolving Geographical Structures.** Mathematical Models and Theories for Space-Time Processes. Daniel A. Griffith and Anthony C. Lea, Eds. Nijhoff, The Hague, 1983 (U.S. distributor, Kluwer Boston, Hingham, Mass.). x, 477 pp., illus. \$65.50. NATO ASI Series D, No. 15. From an institute, San Miniato, Italy, July 1982.

**Fish Locomotion.** R. W. Blake. Cambridge University Press, New York, 1983. xx, 208 pp., illus. \$49.50.

**Fluid Dynamics as a Localizing Factor for Atherosclerosis.** G. Schettler *et al.*, Eds. Springer-Verlag, New York, 1983. x, 230 pp., illus. \$27.50. From a symposium, Heidelberg, June 1982.

**The Fourth Dimension and Non-Euclidean Geometry in Modern Art.** Linda Dalrymple Henderson. Princeton University Press, Princeton, N.J., 1983. xxiv, 455 pp. + plates. \$60; paper, \$18.50.

**The Great Mental Calculators.** The Psychology, Methods, and Lives of Calculating Prodigies, Past and Present. Steven B. Smith. Columbia University Press, New York, 1983. xxviii, 374 pp., illus. \$25.

**Hearing.** Physiological Bases and Psychophysics. R. Klinke and R. Hartmann, Eds. Springer-Verlag, New York, 1983. xvi, 399 pp., illus. \$27. From a symposium, Bad Nauheim, Germany, April 1983.

**Heart Perfusion, Energetics, and Ischemia.** Leopold Dintenfass, Desmond G. Julian, and Geoffrey V. F. Seaman, Eds. Plenum, New York, 1983. xii, 707 pp., illus. \$92.50. NATO Advanced Science Institutes Series B, vol. 62. From a workshop, Bonas, France, July 1982.

**Herbivory.** The Dynamics of Animal-Plant Interactions. Michael J. Crawley. University of California Press, Berkeley, 1983. x, 437 pp., illus. \$45.

**Hermes.** Literature, Science, Philosophy. Michael Serres. Josué V. Harari and David F. Bell, Eds. Johns Hopkins University Press, Baltimore, 1983. xl, 168 pp. Paper, \$7.95. Reprint, 1982 edition. Translated from the French.

(Continued on page 1204)

## FILMS IN THE SCIENCES

Reviews and Recommendations

Compiled and edited by  
Michele M. Newman and  
Madelyn A. McRae

This indispensable reference reviews nearly 1000 films from all areas of science. It provides detailed summaries, evaluations, and complete ordering information for films appropriate to students, teachers, professionals, and general audiences. The reviews are grouped by Dewey decimal category. Subject-title and film distributor indexes also make them easy to use. A must for the librarian, the science teacher, or the curious browser.

182 pages 1980  
Cloth: ISBN 87168-304-7 \$14.00

American Association for the  
Advancement of Science, Box  
FL6, 1515 Massachusetts  
Avenue, N.W., Washington, D.C.  
20005

*Coming Soon*

### Ninth Annual AAAS Colloquium on R&D Policy

### R&D in FY 1985: Budgets, Policies, Outlooks

29 & 30 March 1984  
The Shoreham Hotel  
Washington, DC

*On-Site Registration Available*

For information, see the 10th, 17th, and  
24th February issues of *Science* or  
write or call: AAAS/COSEPP, 1776  
Massachusetts Avenue, NW, 6th Floor,  
Washington, DC 20036  
Phone: (202) 467-4310.

**American Association for the  
Advancement of Science**

### THIRD INTERNATIONAL SYMPOSIUM

OF THE

### SOCIETY OF TOXICOLOGIC PATHOLOGISTS

MAY 14-16, 1984

### ESTIMATING HUMAN SAFETY FROM ANIMAL TUMOR DATA

Hyatt Regency Crystal City  
at Washington National Airport  
2799 Jefferson Davis Highway  
Arlington, Virginia 22202

*For Information Contact:*

**Dr. Michael Iatropoulos**  
American Cyanamid Co.  
Pearl River, N.Y. 10965

Telephone: 914-735-5000,  
extensions 3760 and 3555

## How To Buy A Circulator Without Getting The Runaround

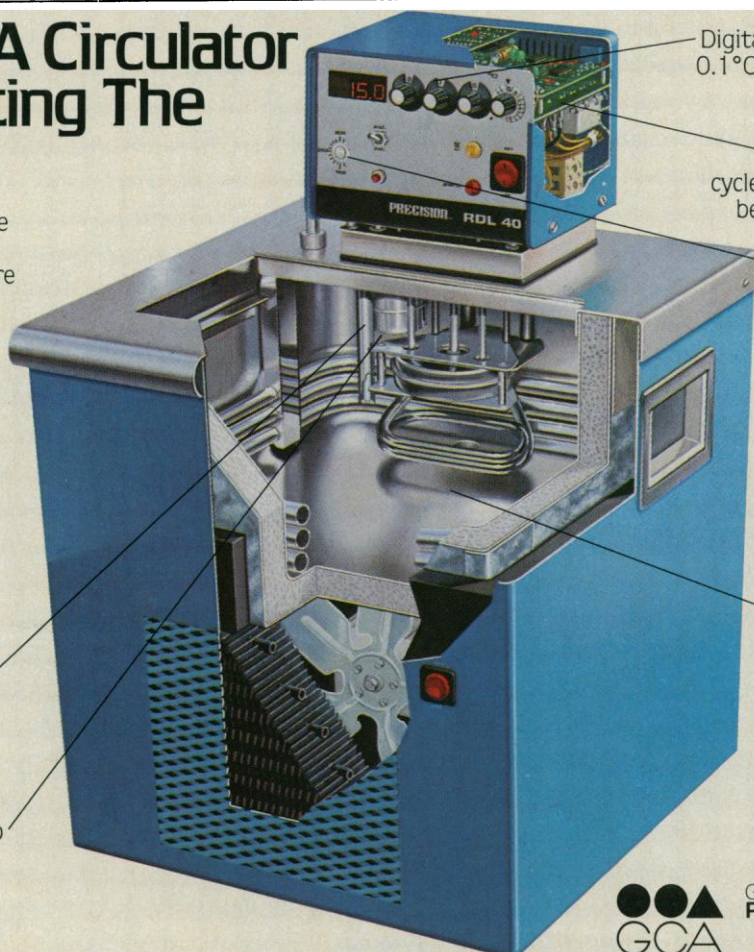
Learn how constant temperature happens. Precision™ circulators show you how. We've made more constant °C appliances for the lab than anyone else in the world. **FREE GUIDE** on how to buy a circulator plus

literature. Write GCA/  
Precision Scientific Group,  
3737 W. Cortland St., Chicago,  
Ill. 60647.

**Precision™**  
Circulators

Glass tipped  
platinum probe is  
sensitive to  $\pm 0.01^\circ\text{C}$ .

Float shuts pump  
and heater down if liquid  
ever drops too low.



Digital temperature setpoint,  
 $0.1^\circ\text{C}$  precise. LED shows real  
time value.

Solid state controller  
cycles heat near setpoint for  
better uniformity, quicker  
recovery.

Two high  
temperature safeties.  
One manual, one  
automatic.

Stainless steel  
bath. Thick block  
insulation. Epoxy  
coated finish.

Model RDL 40,  
 $\pm 0.02^\circ\text{C}$  uniformity.



GCA CORPORATION  
Precision Scientific Group

For literature circle reader service number 299  
For sales representative to call circle  
reader service number 300

## BOOKS RECEIVED

(Continued from page 1173)

**How to Keep Dinosaurs.** Robert Mash. Illustrated by William Rushton, Philip Hood, and Diz Wallis. Penguin, New York, 1983. 72 pp. Paper. \$5.95.

**The Human Brain.** Mind and Matter. James A. Corrick. Arco, New York, 1983. xvi, 192 pp., illus. \$12.95. The Arco How It Works Series.

**Image Formation and Psychotherapy.** Mardi Jon Horowitz. Aronson, New York, 1983. xvi, 319 pp., illus. \$27.50. Revision of *Image Formation and Cognition* (1978).

**Infants Born at Risk.** Physiological, Perceptual, and Cognitive Processes. Tiffany Field and Anita Sostek. Eds. Grune and Stratton, New York, 1983. xxii, 343 pp., illus. \$29.50.

**Informed Consent.** Influenza Facts and Myths. Walter Dowdle and Jack LaPatra. Nelson-Hall, Chicago, 1983. x, 136 pp. \$22.95.

**In Search of Reality.** Bernard d'Espagnat. Springer-Verlag, New York, 1983. x, 182 pp. Paper. \$14.95. Translated from the French edition.

**Instability, Nonexistence and Weighted Energy Methods in Fluid Dynamics and Related Theories.** B. Straughan. Pitman, Boston, 1982. vi, 169 pp. Paper. \$18.95. Research Notes in Mathematics, 74.

**The Lively Membranes.** R. N. Robertson. Cambridge University Press, New York, 1983. x, 206 pp., illus. \$29.95; paper, \$11.50.

**Longitudinal Studies of Adult Psychological Development.** K. Warner Schaie, Ed. Guilford Press, New York, 1983. xiv, 332 pp., illus. \$32.50. Adult Development and Aging.

**Malignant Melanoma.** Advances of a Decade. Rona M. MacKie, Ed. Karger, Basel, 1983. viii, 201 pp., illus. \$83.25. Pigment Cell, vol. 6.

**Mass Transport in Solids.** F. Bénére and C. R. A. Catlow, Eds. Plenum, New York, 1983. xii, 602 pp., illus. \$85. NATO Advanced Science Institutes Series B, vol. 97. From an institute, Lannion, France, June 1981.

**Mathematical Structure of the Singularities at the Transitions between Steady States in Hydrodynamic Systems.** Hampton N. Shiner and Robert Wells. Springer-Verlag, New York, 1983. xii, 276 pp., illus. Paper, \$11. Lecture Notes in Physics, vol. 185.

**The Measurement of Work Performance.** Methods, Theory, and Applications. Frank J. Landy and James L. Farr. Academic Press, New York, 1983. xii, 343 pp., illus. \$29.50. Organizational and Occupational Psychology.

**The Mediterranean Was a Desert.** A Voyage of the *Glomar Challenger*. Kenneth J. Hsu. Princeton University Press, Princeton, N.J., 1983. xvi, 197 pp., illus. \$17.95.

**Nonverbal Behavior.** A Functional Perspective. Miles L. Patterson. Springer-Verlag, New York, 1983. xii, 216 pp. \$24.90. Springer Series in Social Psychology.

**Nourrir les Gens, Nourrir les Haines.** Ellen P. Brown. Société d'Ethnographie, Paris, 1983 (distributor, Klincksieck, Paris). 264 pp. + plates. Paper, 125 F. Etudes et Documents Tehadiens, 8.

**Nutrition and Brain Development.** Govind A. Dhoshwarkar. Plenum, New York, 1983. xiv, 196 pp., illus. \$29.50.

**Nutrition and Population Growth.** The Delicate Balance. 1: Policies for U.S. Assistance to Developing Countries; 2: Annotated Bibliography of Nutrition-Fertility Interactions in Developing Countries. Marian F. Zeitlin et al. Oelgeschlager, Gunn and Hain, Cambridge, Mass., 1983. Various pages. \$25.

**Olfactory Imprinting and Homing in Salmon.** Investigations into the Mechanism of the Imprinting Process. A. D. Hasler and A. T. Scholz, with R. W. Goy. Springer-Verlag, New York, 1983. xx, 134 pp., illus. \$26.50. Zoophysiology, vol. 14.

**Oncodevelopmental Markers.** Biologic, Diagnostic, and Monitoring Aspects. William H. Fishman, Ed. Academic Press, New York, 1983. xx, 432 pp., illus. \$64.50.

**Pediatrics Update.** Reviews for Physicians. 1984 Edition. Arthur J. Moss, Ed. Elsevier, New York, 1984. xvi, 400 pp., illus. \$49.50.

**Photomorphogenesis.** W. Shropshire, Jr., and H. Mohr, Eds. Springer-Verlag, New York, 1983. Two volumes. xxiii, 832 pp., illus. \$145.50. Encyclopedia of Plant Physiology, vols. 16A and 16B.

**Physical Disability.** A Psychosocial Approach. Beatrice A. Wright. 2nd ed. Harper and Row, New York, 1983. xxiv, 520 pp. \$24.50.

**Physics for Rural Development.** A Sourcebook for Teachers and Extension Workers in Developing Countries. Digby G. Swift. Wiley, New York, 1983. xii, 257 pp., illus. \$34.95.

**Physics of Bioenergetic Processes.** L. A. Blumenfeld. Springer-Verlag, New York, 1983. x, 132 pp., illus. \$30. Springer Series in Synergetics, vol. 16.

**The Physics of Semiconductor Devices.** D. A. Fra-

ser. 3rd ed. Clarendon (Oxford University Press), New York, 1983. x, 177 pp., illus. Paper, \$13.95. Oxford Physics Series, 16.

**The Physiological Basis of Memory.** J. Anthony Deutsch, Ed. 2nd ed. Academic Press, New York, 1983. xvi, 431 pp., illus. \$49.

**Placental Physiology.** Structure and Function of Fetomaternal Exchange. J. Job Faber and Kent L. Thornburg. Raven, New York, 1983. xvi, 192 pp., illus. \$33.

**Plants and Microclimate.** A Quantitative Approach to Environmental Plant Physiology. Hamlyn G. Jones. Cambridge University Press, New York, 1983. xviii, 323 pp., illus. \$54.50; paper, \$21.95.

**Plateau Uplift.** The Rhenish Shield—A Case History. K. Fuchs et al., Eds. Springer-Verlag, New York, 1983. xviii, 411 pp., illus. \$49.50. International Lithosphere Program Publication No. 0104.

**Polynuclear Aromatic Hydrocarbons.** Formation, Metabolism and Measurement. Marcus Cooke and Anthony J. Dennis, Eds. Batelle Press, Columbus, Ohio, 1983 (distributor, Butterworths, Boston). xlii, 1301 pp., illus. \$65. From a symposium, Columbus, Oct. 1982.

**The Poverty of Affluence.** A Psychological Portrait of the American Way of Life. Paul L. Wachtel. Free Press (Macmillan), New York, and Collier Macmillan, London, 1983. xvi, 316 pp. \$19.95.

**Pragmatics.** Stephen C. Levinson. Cambridge University Press, New York, 1983. xvi, 420 pp. \$49.50; paper, \$14.95. Cambridge Textbooks in Linguistics.

**Precipitation Scavenging, Dry Deposition, and Resuspension.** Elsevier, New York, 1983. Two volumes. xxx, 1462 pp., illus. Each volume, \$75; the set, \$135. From a conference, Santa Monica, Calif., Nov. 1982.

**Primates of the World.** Distribution, Abundance, and Conservation. Jaclyn H. Wolfheim. University of Washington Press, Seattle, 1983. xxiv, 832 pp., illus. \$57.50.

**Principles of Computer Communication Network Design.** J. Seidler. R. J. Deasington, Transl. Ed. Horwood, Chichester, England, and Halsted (Wiley), New York, 1983. 509 pp., illus. \$89.95. Ellis Horwood Series in Electrical and Electronic Engineering. Translated from the Polish edition (Warsaw).

**Selected Experiments in Organic Chemistry.** George K. Helmkamp and Harry W. Johnson, Jr. 3rd ed. Freeman, New York, 1983. xii, 195 pp., illus. Paper, \$12.95.

**Selected Radionuclides.** Tritium, Carbon-14, Krypton-85, Strontium-90, Iodine, Caesium-137, Radon, Plutonium. World Health Organization, Geneva, 1983 (U.S. distributor, WHO Publications Centre USA, Albany, N.Y.). 237 pp. Paper, \$9. Environmental Health Criteria 25.

**Solitons.** P. G. Drazin. Cambridge University Press, New York, 1983. viii, 136 pp., illus. Paper, \$15.95. London Mathematical Society Lecture Note Series, 85.

**A Sophisticate's Primer of Relativity.** P. W. Bridgman. 2nd ed. Wesleyan University Press, Middletown, Conn., 1983 (distributor, Harper and Row, New York). xlviii, 172 pp. \$20; paper, \$9.95.

**Spectral Approximation of Linear Operators.** Françoise Chatelin. Academic Press, New York, 1983. xx, 460 pp. \$69.50. Computer Science and Applied Mathematics.

**Speech and Situation.** A Psychological Conception of Situated Speaking. Theo Herrmann. Springer-Verlag, New York, 1983. viii, 185 pp. \$26.50.

**Sunsets, Twilights, and Evening Skies.** Aden and Marjorie Meinel. Cambridge University Press, New York, 1983. x, 163 pp., illus., + plates. \$29.95.

**Synergetics.** An Introduction. Nonequilibrium Phase Transitions and Self-Organization in Physics, Chemistry, and Biology. Hermann Haken. 3rd ed. Springer-Verlag, New York, 1983. xiv, 371 pp., illus. \$32. Springer Series in Synergetics, vol. 1.

**Topological Disorder in Condensed Matter.** F. Yonezawa and T. Ninomiya, Eds. Springer-Verlag, New York, 1983. xii, 253 pp., illus. \$29. Springer Series in Solid-State Sciences, vol. 46. From a symposium, Shimoda, Japan, Nov. 1982.

**Toxic and Hazardous Waste.** Michael D. LaGrega and Linda K. Hendrian, Eds. Butterworth, Boston, 1983. xviii, 647 pp., illus. \$49.95. An Ann Arbor Science Book. From a conference, June 1983.

**Ultrasound.** World Health Organization, Geneva, 1982 (U.S. distributor, WHO Publications Centre USA, Albany, N.Y.). 199 pp. Paper, \$8. Environmental Health Criteria 22.

**Ultrasound Interactions in Biology and Medicine.** R. Millner, E. Rosenfeld, and U. Cobet, Eds. Plenum, New York, 1983. xiv, 216 pp., illus. \$37.50. From a symposium, Reinhardtsbrunn, Germany, Nov. 1980.

**The Unity of Fundamental Interactions.** Antonino Zichichi, Ed. Plenum, New York, 1983. x, 817 pp., illus. \$95. The Subnuclear Series, vol. 19. From a course, Erice, Sicily, July 1981.

# Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. Any deadline in ad must be at least 2 weeks after date of issue in which ad appears. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference.

## LINE CLASSIFIED ADVERTISING DEADLINES:

6 April issue (mailed 30 March): **16 March**  
13 April issue (mailed 6 April): **23 March**  
20 April issue (mailed 13 April): **30 March**  
27 April issue (mailed 20 April): **6 April**

**POSITIONS WANTED:** 40¢ per word, plus \$4 for use of box number, per insertion. \$10 minimum, per insertion. Prepayment required. This rate is available only to individuals seeking jobs.

**LINE DISPLAY (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth):** \$10.40 per millimeter; \$260 minimum, per insertion (minimum charge covers 25 millimeters on a single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads less than 103 millimeters (4 inches). No cash discount. Prepayment required for all foreign ads. Purchase orders and billing address required for all other advertising.

Send copy for all **Positions Wanted** ads and **Line Display** ads less than 1/6 page in size (125 millimeters) to:

SCIENCE, Room 107  
1515 Massachusetts Avenue, NW  
Washington, D.C. 20005  
Telephone: 202-467-4456

Send copy for **Fractional Display** ads, 1/6 page and larger, and all **Marketplace** ads to:

Scherago Associates, Inc.  
1515 Broadway  
New York, N.Y. 10036  
Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

Box (give number)  
SCIENCE  
1515 Massachusetts Avenue, NW  
Washington, D.C. 20005

## POSITIONS WANTED

**Biologist/Biochemist.** Ph.D. Extensive postdoctoral experience in tissue culture, hybridoma, monoclonal antibodies, recombinant DNA, oncogenes, RNA tumor viruses, and molecular immunology. Needs suitable research position. No geographical preference. Box 67, SCIENCE. X

**Biology/Marine Biology/Zoology** assistant professorship with college/university desired by June 1984. Ph.D. Broad range of research/teaching experience in areas of marine biology, ichthyology, ecology, evolutionary biology, vertebrate and invertebrate zoology, and general biology. Recipient of numerous grants, awards, and scholarships. Publications. Active in making successful presentations throughout the country. For résumé and references, write: C. Stepien, Department of Biological Sciences, University of Southern California, Los Angeles, Calif. 90089. X

**Collagen/Connective Tissue Biochemist.** Ph.D. Extensive research experience in soft and hard tissue collagen types, glycoproteins, phosphoproteins, and proteoglycans. Preparative, analytical, and HPLC methods development. Publications. Box 69, SCIENCE. X

**Environmental Biologist.** M.A. (1979) botany. Experience in environmental field surveys and consulting. Background in zoology and arid land plant communities. Seeking position in biological research or consulting. Box 65, SCIENCE. 3/16, 23

**Flow Cytometrist.** Five years of experience operating FACS IV; management and teaching experience. B.S. biochemistry, graduate work in molecular cell biology. Excellent electronic, mechanical aptitudes. Extensive experience in tissue culture, hybridomas, purification techniques, assay systems, computers, electronics. Publications; strong communications skills. Box 66, SCIENCE. X

## POSITIONS WANTED

**Molecular Biologist.** Ph.D., Yale 1982. Research experience in recombinant DNA technology, protein-DNA interactions, large-scale isolation of proteins and DNA, organic synthesis, and protein chemistry. Seeking position with biotechnology company in product management, marketing, academic industrial liaisons. Articulate and aggressive. Box 53, SCIENCE. 3/16, 23

**Ph.D.:** Former NSF and NIH administrator wants to teach vertebrate anatomy. Box 44, SCIENCE. X

**Veterinarian,** master's in environmental toxicology; seeks sponsorships, fellowships, scholarships, any aid for M.D./Ph.D. in toxicology, pathology, pharmacology related discipline. P.O. Box 1535, Adelphi, Maryland 20783. X

**Water Quality Engineer.** Ph.D. Experienced in environmental policy analysis and management, environmental impact assessment, interdisciplinary research, and university-level teaching. Seeking management, consulting, research, or teaching position. Box 68, SCIENCE. X

## POSITIONS OPEN

**Ball State University  
Muncie, Indiana**

**Position title: AQUATIC BIOLOGY/BIOMETRY POSITION.**

**Description:** Tenure-track position in aquatic biology/biometry available 1 September 1984. An earned doctorate in an emphasis area of aquatic biology and strong background in biometry are required. Responsibilities include teaching aquatic biology, biometry, and introductory biology courses. Other teaching responsibilities will depend on the applicant's qualifications. The successful candidate will be expected to develop a strong research program in his/her area of expertise and interact with aquatic biology faculty to strengthen this center of excellence. Undergraduate and graduate transcripts, three letters of recommendation, and reprints along with other evidence of scholarly productivity are required. Curriculum vitae materials will be accepted until 15 April 1984 or until position is filled. Please submit curriculum vitae and supporting materials to: **Dr. George W. Welker, Chairman, Department of Biology, Ball State University, Muncie, Ind. 47306.**

*Ball State University practices Equal Opportunity in Education and Employment.*

The Animal and Nutritional Science Department, University of New Hampshire (UNH), has two ASSISTANT/ASSOCIATE PROFESSOR level, tenure-track positions, to begin September 1984 in: (i) **Physiology/toxicology/nutrition;** teach an upper level course(s) in mammalian physiology and conduct an active research program, supported by external funding in nutritional toxicology, pharmacology, or experimental pathology; advise undergraduates and supervise graduate thesis research. Qualifications: Ph.D. with emphasis involving systems level physiology; research experience in areas such as nutritional toxicology, pharmacology, or experimental pathology; teaching experience required. (ii) **Immunogenetics;** teach an upper level course(s) in immunogenetics; conduct an active research program, supported by external funding in immunogenetics; participation in an interdepartment graduate genetics program; advise undergraduates and supervise graduate level research. Qualifications: Ph.D.; research and teaching interest in immunogenetics; experience with avian species is preferred; teaching experience desired. Salary will be commensurate with qualifications and experience. Send a letter of application, curriculum vitae, and three letters of reference by 1 May 1984 to: **Dr. T. P. Fairchild, Chair, Animal and Nutritional Sciences, Kendall Hall, UNH, Durham, N.H. 03824.** UNH is an Affirmative Action/Equal Opportunity Employer.

**COLLEGE ASSISTANT PROFESSOR** position available immediately to do research on the role of polyuronides in the morphogenetic development of *Mucor*. Postdoctoral experience preferred in the area of polysaccharide biochemistry or fungal cell wall biosynthesis. Position for a minimum of 2 years. Salary: \$18,000 per year. Send curriculum vitae and three letters of recommendation by 15 April 1984 to: **Dr. Vicente D. Villa, Box 3AF, Biology Department, New Mexico State University, Las Cruces, New Mexico 88003.** New Mexico State University is an Equal Opportunity/Affirmative Action Employer.

## Biochemical Pharmacologist Ph. D. Level Group Leader

Continued expansion at the Warner-Lambert/Parke-Davis Pharmaceutical Research Division has generated an opportunity for an experienced lipid and protein biochemist.

The successful candidate will have:

A Ph.D. or equivalent in biochemistry and up to 5 years postdoctoral experience.

Expertise to apply state-of-the-art technology to the concepts of drug discovery through modification of various enzyme systems with special emphasis on the arachidonic acid cascade.

Excellent communication skills and the ability to interact with other disciplines within pharmacology.

A documented record of research excellence.

Industrial experience preferred.

Our research facilities adjacent to the University of Michigan campus in Ann Arbor, Michigan are among the finest and best equipped in the world and are devoted exclusively to the discovery and development of new drugs. We offer excellent compensation, benefits and work environment.

Send resume with salary requirements and references in confidence to: Ms. D. Love, Human Resources Supervisor, Dept. #884, Warner-Lambert/Parke-Davis, Pharmaceutical Research Division, 2800 Plymouth Road, Ann Arbor, Michigan 48105. Please indicate whether planning to attend the April 1984 FASEB meeting. An Equal Opportunity Employer M/F/H

**WARNER  
LAMBERT**

## FACULTY POSITIONS DIVISION OF REPRODUCTIVE BIOLOGY AND ENDOCRINOLOGY DEPARTMENT OF OBSTETRICS AND GYNECOLOGY UNIVERSITY OF PENNSYLVANIA

The Division anticipates appointing three assistant professors whose research focuses on molecular and cellular aspects of reproductive biology and endocrinology.

### Cell biology/electron microscopy

In addition to directing an independent research program, the faculty member will help supervise a core electron microscopy facility. This individual must have demonstrated skills as a cell biologist. Experience in EM autoradiography and EM cytochemistry is desirable.

### Gamete biology

In addition to directing an independent research program relating to molecular or cellular aspects of sperm or oocyte function or the fertilization process, the faculty member will help oversee a fully staffed laboratory performing semen analyses, sperm function tests, "hamster tests," and sperm antibody analyses.

### Molecular endocrinology

We seek an investigator whose interests will complement those of present faculty members working on steroid hormone action and control of luteal function.

Interested persons should submit curriculum vitae, description of research interests, and the names of three references to:

**Jerome F. Strauss, M.D., Ph.D.**  
Director, Division of Reproductive  
Biology and Endocrinology  
Department of Obstetrics and Gynecology  
Hospital of the University of Pennsylvania  
3400 Spruce Street  
Philadelphia, Pa. 19104

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

## SENIOR SCIENTIST/PROJECT SCIENTIST

Ph.D. in physical science or engineering with dissertation written on an aerosol physics subject, or with at least two years of postdoctoral work experience on an aerosol physics project. A candidate with a background in fluid mechanics and heat transfer analysis is preferred. Will perform experimental measurements of the hygroscopic growth rates of particulate matter of health effects concern. Will be responsible for constructing a laboratory system in which the fluid dynamics and environment (temperature and relative humidity) of the human respiratory tract are simulated. Will operate instrumentation necessary to generate and characterize the monodisperse aerosols upon which the hygroscopic measurements will be conducted. A candidate familiar with laboratory equipment common to aerosol science investigations is preferred. Typical devices are monodisperse aerosol generators (spinning top and/or vibrating orifice instruments), instruments for aero-dynamic size characterization of aerosols (cascade impactor, centrifuge), and instrumentation for particle size classification using optical techniques interfaced with electronic equipment (multi-channel analyzer). The research may involve the use of a laser particle sizing system. This may involve the development of such a system if commercially available instrumentation is not suitable. Send salary history and present salary required in confidence to:

**Glenda W. Jahtaniah  
NORTHROP SERVICES, INC.  
P.O. Box 12313, Research Triangle Park, NC 27709**

An Equal Opportunity Employer

## POSITIONS OPEN

**ASSISTANT PROFESSOR, BIOCHEMISTRY; TENURE TRACK.** Department of Chemistry, University of South Florida, to begin August 1984. Ph.D. required and at least 1 year of postdoctoral research preferred. The candidate is expected to teach both graduate and undergraduate courses, establish a vigorous research program, and to obtain outside research funding. Salary range: \$21,000 to \$24,000. Applicants should send curriculum vitae, including a list of publications and a concise description of proposed research. Three letters of reference should also be sent. All materials should be sent by 31 March 1984 to: **Dr. William E. Swartz, Jr., Chairman, Department of Chemistry, University of South Florida, Tampa, Fla. 33620.** *The University of South Florida is an Affirmative Action/Equal Opportunity Employer.*

### SEARCH REOPENED

The Biochemistry Program of Fels Research Institute, a multidisciplinary cancer research center, solicits applications for the position of **ASSISTANT PROFESSOR** in the tenure track. The area of research should be on some aspect of mammalian cell biology or molecular biology of gene expression and regulation. Candidates should submit curriculum vitae and request that three letters of recommendation be submitted to: **Dr. Gerald Litwack, Chairman of the Search Committee, Fels Research Institute, Temple University School of Medicine, Medical Research Building, 3420 North Broad Street, Philadelphia, Pa. 19140.** *An Equal Opportunity Employer.*

**ASSISTANT PROFESSOR: THE DIVISION OF HEMATOLOGY AT STATE UNIVERSITY OF NEW YORK (SUNY), STONY BROOK** is seeking applications from individuals with research interests and experience in cell physiology to join our group. We are particularly interested in such areas as ionic transport events and control during cell division and differentiation, phagocytosis and its control, membrane mechanisms in signal transmission, and cell motility/cytoskeleton. Preference will be given to an individual working with blood cells or bone marrow cells or cultured cells derived from them, and with experience in tissue culture techniques. Opportunities are available for both collaborative and independent research. Interested candidates with doctoral degrees and 2 years of successful postdoctoral research experience are invited to send curriculum vitae, a brief statement of research interests, and two references to: **Search Committee, Division of Hematology, HSC T15/040, SUNY, Stony Brook, Stony Brook, N.Y. 11794-8151.**

*SUNY, Stony Brook, is an Equal Opportunity/Affirmative Action Employer. AK 29-84.*

**ASSISTANT PROFESSOR OF PHARMACOLOGY**—The Pharmacology Department, Washington University Medical School, invites applications for a tenure-track position as assistant professor. This is a multidisciplinary research oriented department which expects a modest amount of quality teaching from its faculty. Qualified applicants in any of a variety of research areas will be considered. Salary, seed money, and starting dates are negotiable. Please send curriculum vitae, names and addresses of three references, and a two- to three-page statement of specific future research plans to: **Dr. Eugene M. Johnson, Department of Pharmacology, Washington University Medical School, 660 South Euclid Avenue, St. Louis, Mo. 63110.**

**ASSISTANT STAFF** (equivalent assistant professor, \$22,000 to \$29,500) and **POSTDOCTORAL FELLOWS** (\$16,500 to \$18,500). Require Ph.D. in molecular biology, biochemistry, immunology, or physiology for basic research on vasoactive substances, hypertension, electrolytes transport, or nephron microperfusion. Contact: **Dr. Oscar Carretero, Henry Ford Hospital, Hypertension Research Division, 2799 West Grand Boulevard, Detroit, Michigan 48202; telephone: 313-876-2010.**

### POSTDOCTORAL POSITION

A position is available to join our work on the molecular biology of the expression of acetylcholine receptors in nerve and muscle. Highly motivated candidates with relevant background in molecular biology and/or biochemistry should send curriculum vitae and list of three references to: **J. P. Merlie, Department of Pharmacology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, Mo. 63110.** The position is available immediately and is funded by a research grant for a minimum of 2 years. Renewal for a third and final year is possible.

## POSITIONS OPEN

The Department of Biology at Georgia State University invites applications for an anticipated tenure-track position (**ASSISTANT PROFESSOR** level) with expertise in **GENETICS** (effective 1 January 1985). Preference will be given to candidates with postdoctoral experience who have demonstrated outstanding potential for independent research. Salary will be commensurate with qualifications. The successful candidate will be expected to participate in instruction of undergraduate and graduate courses in general genetics and in area of specialization. Applications, including curriculum vitae, reprints, a statement of research plans, and three letters of reference should be sent to: **Chairman, Department of Biology, Georgia State University, Atlanta, Georgia 30303.** Deadline for receipt of applications is 15 May 1984. *Georgia State University, a unit of the University System of Georgia, is an Equal Educational Opportunity Institution and is an Equal Opportunity/Affirmative Action Employer in compliance with Title IX and other Civil Rights laws.*

### ASSISTANT PROFESSOR OF PHARMACOLOGY

Applications are invited for a tenure-track faculty position in a research-oriented Department of Pharmacology. Minimal qualifications include a Ph.D. or M.D. degree with strong postdoctoral experience. Candidates must be capable of mounting a vigorous research program and participating in the teaching of medical, dental, and graduate students. Applicants with neuropharmacology or neurochemical backgrounds are especially encouraged. Available September 1984. Send curriculum vitae to: **E. G. Anderson, Department of Pharmacology, College of Medicine, University of Illinois at Chicago, 835 South Wolcott, Chicago, Ill. 60612.** To assure full consideration, apply by 15 April 1984. *The University of Illinois is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

**THE PSYCHOLOGY DEPARTMENT, UNIVERSITY OF MASSACHUSETTS AT BOSTON**, invites applications for a nonprobationary, 2-year, renewable appointment in **PSYCHOBIOLOGY** at the assistant professor level. Ph.D. required. Evidence of excellence in teaching and an active research program are expected. Candidate must be able to teach undergraduate courses in comparative and physiological psychology and contribute to the development of an interdisciplinary graduate program. Salary is competitive. Please send statement of interest, curriculum vitae, and three letters of reference to: **Joan H. Liem, Chairperson, Department of Psychology, University of Massachusetts/Boston, Boston, Mass. 02125,** by 7 April 1984. *An Equal Opportunity/Affirmative Action Employer.* Position is subject to the availability of funds.

### OLD DOMINION UNIVERSITY Biological Oceanographer Fisheries Management

The Department of Oceanography invites applications for a tenure-track faculty position available August 1984. Doctorate in fisheries or a related discipline and a background in marine science, mathematics, and statistics are required. Experience in automated data processing, mathematical modeling, and interpretation of fisheries statistics is highly desirable. The successful candidate will continue and enlarge a high quality, externally funded research program. Interactions with commercial marine fisheries regulators and biological and physical oceanography programs are essential. Salary and rank commensurate with qualifications. Send résumé and names of three references by 15 April 1984 to: **Chairman, Fisheries Search Committee, Department of Oceanography, Old Dominion University, Norfolk, Va. 23508.** *Old Dominion University is an Affirmative Action/Equal Opportunity Employer.*

**BIOLOGY:** Nine-month, nontenure-track position for an instructor or assistant professor. Ph.D. required for appointment at assistant rank and master's degree for instructor rank; with background and specialization in microbiology. Responsibilities include teaching lower and upper division microbiology courses, general biology, and a freshman cellular biology course. These all include laboratory instruction. Salary is commensurate with qualifications and experience. Starting date: August 1984. Send letter of application with curriculum vitae, three letters of recommendation, and academic transcripts by 6 April 1984 to: **Dr. Ross E. Johnson, Chairman, Department of Biology, Washburn University of Topeka, Topeka, Kans. 66621.** *Washburn University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### DEPARTMENT OF ZOOLOGY UNIVERSITY OF ALBERTA

The Department will make one **TENURABLE APPOINTMENT AT THE RANK OF ASSISTANT PROFESSOR** (minimum: \$29,720 per annum, 1983-1984 scale) on 1 July 1984. Applications are requested from candidates with a Ph.D. degree or equivalent, preferably with postdoctoral experience. The department is interested in an individual with training and research experience in the field of **REGULATION AND/OR MODELLING OF FRESHWATER FISH POPULATIONS.** The successful candidate will be expected to establish a vigorous research program in this field, in addition to sharing in the teaching program in the areas of vertebrate biology, ecology, and fisheries management. Interested candidates should send curriculum vitae, a brief statement of research objectives, a list of publications and reprints, and the names and addresses of three referees to: **Dr. R. E. Peter, Acting Chairman, Department of Zoology, University of Alberta, University of Alberta, Edmonton, Alberta, Canada T6G 2E9.** The deadline for receiving applications is 26 March 1984.

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

### UNIVERSITY OF CALIFORNIA, IRVINE COLLEGE OF MEDICINE DEPARTMENT OF RADIOLOGICAL SCIENCES

Applications are invited for a post at the **ASSISTANT RESEARCH SPECIALIST** level in the **DEPARTMENT OF RADIOLOGICAL SCIENCES, DIVISION OF RADIATION ONCOLOGY** at the University of California, Irvine (UCI), College of Medicine (Martin Colman, M.D., Chief). Responsibilities include teaching at undergraduate and graduate levels and research. The applicant must have a Ph.D. in radiation biology and several years of experience in working with mammalian cells in culture. Experience in working with experimental animals is desirable. The successful applicant will work together with the faculty of the Division of Radiation Oncology on a variety of research topics. Applicants with demonstrated experience in assessing the effects of radiation on mammalian cells in culture including cell killing, cell transformation, DNA damage measurement will be given preference. *UCI is an Equal Opportunity/Affirmative Action Employer.* Applications, including curriculum vitae and copies of any publications should be sent to the following address before 13 April 1984:

**Richard M. Friedenber, M.D.  
Professor and Chairman  
Department of Radiological Sciences  
University of California, Irvine  
College of Medicine  
101 City Drive South  
Orange, California 92668**

Applications are sought for the position of **ASSOCIATE HEMATOPATHOLOGIST** in the Department of Pathology, level of assistant or associate professor. Responsibilities include teaching and hospital service. Pursuit of individual research interests as well as participation in ongoing research desirable. Send curriculum vitae and three references to: **Joseph Wiener, M.D., Chairman, Department of Pathology, Wayne State University School of Medicine, 540 East Canfield, Detroit, Michigan 48201.**

*An Equal Opportunity/Affirmative Action Employer*

### CELL BIOLOGIST/ MICROBIOLOGIST

Tenure-track appointment at the assistant professor level in the Department of Biology. Responsibilities include teaching courses in cell biology, microbiology, and immunology, and directing undergraduate research. Ph.D. required. Submit letter of application, transcripts, résumé, and names of three references to: **Dr. John Mickus, Department of Biology, Illinois Benedictine College, Lisle, Ill. 60532.** *Equal Opportunity Employer.*

### PHYSICS DIVISION CHAIRMAN

Catawba College invites applications for the position of chairman of the Division of Mathematics and Sciences. Doctorate in physics with experience and training in computer science required. Position available August 1984. Rank and salary at associate or full professor level. Send résumé by 30 March to: **Dr. Robert E. Knott, Dean of the College, Salisbury, N.C. 28144.** *An Equal Opportunity Employer.*

UNIVERSITY OF WASHINGTON  
COLLEGE OF OCEAN AND FISHERIES SCIENCES  
SCHOOL OF FISHERIES  
POSITION ANNOUNCEMENT

DATE: 10 January 1984.

TITLE: ASSOCIATE PROFESSOR/FULL PROFESSOR IN FISHERIES SCIENCE.

RESPONSIBLE TO: Director, School of Fisheries, and the Director, Fisheries Research Institute.

EDUCATION AND EXPERIENCE: Candidates should have a doctorate, preferably in fisheries science, with demonstrated teaching and/or research experience at the university level.

The position requires successful research/teaching activities in fisheries sciences with expertise in one or more of the following fields:

Ecology of salmonids  
Fisheries management, particularly commercial fisheries  
Aquatic ecology and ecosystem dynamics  
Applied fishery hydroacoustics  
Population dynamics

JOB SUMMARY: The position is one of research and teaching in the Fisheries Research Institute of the School of Fisheries.

At the present time the position is 50 percent state support and 50 percent support through grant and contract research. The candidate is expected to develop a program leading to continuation of the 50 percent research support.

SALARY: Salary and rank dependent upon qualifications. This is a 12-month, tenure-track faculty position with full university benefits.

CLOSING DATE: 30 June 1984. May be extended.

BEGINNING DATE: 1 September 1984, or as soon as possible thereafter.

APPLY TO: Formal letter of application, current curriculum vitae, bibliography, copies of representative publications, and the names of three references should be sent to:

Dr. Ernest O. Salo, Chairman  
Search Committee  
Fisheries Research Institute WH-10  
University of Washington  
Seattle, Washington 98195  
Telephone: 206-543-9041

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

## SENIOR SCIENTISTS

A leading disk drive and magnetic recording head developer and manufacturer located in the midwest has two Senior Scientist positions available.

### SENIOR SCIENTIST \$3000/per month

The main duties of this position are to analyze and design sliders for flexible disk drives. Simulate slider and disk separations by numerical solution of the gas bearing and elasticity equations using digital computers. Develop the equations for steady and dynamic cases with computer algorithms for solving these equations under near contact conditions. To correlate the simulation results to measurement by interferometry.

To qualify you must have a Ph.D. in Lubrication Theory and be able to develop basic governing equations for head and flexible media from lubrication theory and elasticity theory. You must be familiar with computer numerical analysis in nonlinear partial differential equations and experience in developing computer programs in solving mathematical problems in the above fields.

Send resume to:

Ms. Nancy Thompson M.D.E.S., Control #4-17  
309 Second Avenue South, Minneapolis, MN 55401

### SENIOR SCIENTIST \$2900/per month

You will be involved with the use of transmission electron microscope in characterizing gamma-iron oxide particles. Checking atomic structure by electron diffraction. Prepare thin sections using ultramicrotome, check dispersion of iron particles in recording media. Use scanning electron microscope and auger-ESCA to do metallurgical failure analysis. Characterize alumina oxide by x-ray diffraction. Characterize magnetic properties and magnetic interactions in ferromagnetic materials.

To qualify you must have a Ph.D. in Material Science plus 1 year's experience in solid-state physics, the knowledge of cutting metallic thin sections using ultramicrotome and the use of transmission electron microscope. Also knowledge and training to characterize magnetic thin film used in the recording media using auger-ESCA instruments. Training in the use of vibrating sample magnetometer to analyze magnetic recording materials.

Send resume to:

Ms. Nancy Thompson M.D.E.S., Control #4-16  
309 Second Avenue South, Minneapolis, MN 55401

## MICROBIOLOGY CAREERS

G.D. Searle, a respected leader in pharmaceutical research and development, has a number of positions available in its biotechnology based R&D programs. These positions are open due to a significant new business interest and planned expansion of activities.

### Research Scientist – Microbiology Group

The successful candidate will plan, implement and supervise a program involved in the search for unique microorganisms capable of new biochemical transformations and microbial conversions. Applicants should have a Ph.D. in Microbiology or a closely related discipline, and 2 to 3 years industrial or appropriate postdoctoral experience. A working knowledge of classical genetics and genetic engineering is required. The position involves both research and supervision of a group of investigators so one to three years of supervisory and management experience is required. Furthermore, good communication and coordination skills are needed to interact effectively with other groups in the department.

### Research Investigators

Three Research positions are available for candidates with a Ph.D. or equivalent in Microbiology, Microbial Biochemistry or related discipline. Industrial experience would be advantageous. Successful candidates will carry out independent research to develop and improve biotechnology processes in conjunction with other researchers.

#### — Microbiology and Genetics

Microbiologist will plan and conduct research directed toward identifying & analyzing unique new microbes from many environments.

#### — Enzymology and Protein Biochemistry

Microbiologist or Microbial Biochemist will plan & conduct research using enzymes to develop new, improved biochemical conversions.

#### — Fermentation

Biochemist or Microbiologist experienced in fermentation development & scale-up using current technology will design & undertake a fermentation development program.

### Research Associates/ Assistants

We are also seeking two outstanding candidates with B.S. or M.S. degrees in biotechnology related fields to support the research investigators. Experience and interest in microbial screening, enzymology or fermentation research is required.

We offer an excellent benefit package and salary commensurate with experience. If you feel you meet one of the above qualifications and are interested in a unique opportunity to demonstrate scientific creativity in a highly professional environment, please submit your resume, including salary requirements, in confidence, to:

Barbara Gardner  
#74W  
Searle Research and Development  
Division of G.D. Searle & Co.  
4901 Searle Parkway  
Skokie, Illinois 60077

An Equal Opportunity Employer M/F/H

# SEARLE

## POSITIONS OPEN

The Department of Physiology and Biophysics at the University of Alabama in Birmingham (UAB) is seeking an individual at the level of **ASSOCIATE OR FULL PROFESSOR** who would supervise the establishment of a central facility for electron microprobe analysis. Candidates should have several years of experience in this field and a demonstrated record of productivity on the application of this technology to relevant problems in modern physiology or cell biology. Support for this position is to be jointly provided by the department and the UAB Centers for Cancer, Cystic Fibrosis and Nephrology research. Interested individuals should submit recent curriculum vitae and the names of two suitable references by 1 April 1984.

Address inquiries and applications to:

**D. R. DiBona, Ph.D.**  
Director, Division of Cell and Membrane Biology  
Department of Physiology and Biophysics  
University of Alabama in Birmingham  
University Station  
Birmingham, Ala. 35294

*The University of Alabama in Birmingham is an Affirmative Action/Equal Opportunity Employer.*

**BIOLOGY.** Assistant professor, tenure-track, Marshall University. September 1984. Ph.D. required; salary open. Teach molecular and general biology. Research desirable. Send curriculum vitae, transcripts, and names and telephone numbers of three references by 1 April 1984 to: **Dr. F. Binder, Department of Biology, Marshall University, Huntington, W. Va. 25701.** *Equal Opportunity Employer.*

**BIOLOGY.** Department of Biology, Wilmington College of Ohio, has two 1-year temporary positions open for sabbatical replacements. Both positions involve teaching introductory courses. First position is a plant biologist to teach plant physiology and field botany. Second position is an animal physiologist to teach human anatomy, comparative anatomy, and physiology. Dedication to quality teaching is expected. Recent Ph.D.'s are encouraged to apply. Send letter of application, curriculum vitae, and three letters of reference to: **Dr. Douglas Burks, Chairman, Department of Biology, Wilmington College, Wilmington, Ohio 45177.** Deadline for application is 1 May 1984.

### CHAIRPERSON DEPARTMENT OF BIOLOGY

Applications and nominations are invited for the position of chairperson of the Department of Biology at Tennessee Technological University. The Department of Biology, with a faculty of 15, offers B.S. degrees in biology and wildlife management and an M.S. degree in biology. Candidates must have an earned Ph.D. in a biological science and a distinguished record of scholarly activity, including excellence in teaching and an active research program in some area of the biological sciences. They must have demonstrated leadership abilities, be able to interact effectively with faculty and students, and have demonstrated ability to generate extramural support. Salary will be commensurate with qualifications and experience. Candidates should be available to assume the position by 1 September 1984.

Nominations and applications, with résumés and names and telephone numbers of references, will be accepted until 1 May 1984. Materials should be sent to: **Dr. Gordon E. Hunter, Chairman, Search Committee, College of Arts and Sciences, Box 5065, Tennessee Technological University, Cookeville, Tenn. 38505; telephone: 615-528-3134.** *Tennessee Technological University is an Equal Opportunity/Affirmative Action Employer.*

### DIRECTOR, NEUROSCIENCES PROGRAM UNIVERSITY OF ALABAMA SCHOOL OF MEDICINE

Applications are being accepted for the position of director, Neurosciences Program, University of Alabama School of Medicine, University of Alabama in Birmingham. The director coordinates the research activities of about 30 scientists, who also participate in the teaching and patient care activities of the medical school. The director should be an active scientist with a background of accomplishments in the area of neurosciences. Please submit applications or nominations and curriculum vitae to:

**Antonietta D. Hyche**  
Administrative Officer  
University of Alabama School of Medicine  
Medical Education Building, Room 306  
Birmingham, Alabama 35294

*An Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

### BIOLOGY CHAIR

The Department of Biology at Colgate University, a ten-member department serving a student population of 2600, invites applications for the position of chair of the department beginning fall term 1984. This position is offered at the level of associate or full professor depending on the qualifications of the applicant. Expected qualifications are a Ph.D. degree in the area of molecular biology, evidence of outstanding teaching and research ability, administrative experience, and a strong commitment to undergraduate liberal arts education. Teaching responsibilities will be participation in the department's introductory sequence of courses and an upper-level course in specialty area. We especially welcome applications from persons with distinguished careers in teaching and research who are able to provide the department with innovative leadership.

Closing date for applications is 15 April 1984, or until a suitable candidate is found. Please submit a letter of application summarizing qualifications, a complete résumé, and the names of three references to: **Dr. Robert E. Goodwin, Chairman, Department of Biology, Colgate University, Hamilton, New York 13346.**

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

### CHAIRMAN AND PROFESSOR DEPARTMENT OF PHARMACOLOGY

Faculty position: Ph.D. or M.D. Background in research and teaching. Contact:

**Dr. Thomas Norris, Academic Dean**  
Morehouse School of Medicine  
720 Westview Drive, SW  
Atlanta, Georgia 30310  
*Equal Opportunity Employer*

### COSMOCHEMISTRY FACULTY POSITION UNIVERSITY OF ARIZONA

The Department of Planetary Sciences and the Lunar and Planetary Laboratory invite applications for a state-funded, tenure-track position in **cosmochemistry**. The area of specialization within cosmochemistry is open. The appointment involves research, teaching, and the supervision of graduate students. The successful candidate will be either at a junior level with extraordinary promise of scientific accomplishment, as well as the potential for developing substantial leadership capabilities and an international scientific reputation, or will be at a senior level having already demonstrated these qualities. The position is available as early as August 1984 if a suitable candidate can be identified. Applications will be accepted at least until 15 May 1984, or until acceptable candidates are identified. Applications, including a résumé and the names and addresses of four individuals who could serve as references, should be sent to: **Professor Eugene H. Levy, Head, Department of Planetary Sciences, University of Arizona, Tucson, Ariz. 85721.** *The University is an Equal Opportunity/Affirmative Action Employer.*

### DEAN FOR THE COLLEGE OF SCIENCE

Florida Atlantic University at Boca Raton, Florida, invites applications or nominations for the position of dean of the College of Science. Candidates should qualify for a tenurable appointment at the rank of professor in one of the departments of the College (Biological Sciences, Chemistry, Geology, Mathematics, Physics, or Psychology), demonstrate potential for academic leadership, and provide evidence of scholarly achievement in teaching and research. Previous administrative experience is necessary. The appointment will be effective 1 September 1984 or shortly thereafter.

The duties of the dean of the College of Science include coordinating the academic and administrative affairs of the College as well as generating outside financial support for science programs. The new dean will be expected to lead the College of Science in the development of doctoral programs, the expansion of computer oriented programs, and the development of strong ties with local industry.

Applicants should submit a complete résumé with cover letter and a list of at least three references by 1 May 1984 to: **Dr. Manley L. Boss, Chairman, College of Science Dean Search Committee, Department of Biological Sciences, Florida Atlantic University, Boca Raton, Fla. 33431.**

*Florida Atlantic University is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.*

## POSITIONS OPEN

The Department of Biological Sciences at Stanford University seeks a **DEVELOPMENTAL GENETICIST—MOLECULAR BIOLOGIST** for a faculty appointment at the assistant professor level. The appointee will be expected to develop an active and distinctive research program and to participate in both graduate and undergraduate teaching programs. Interested persons should send curriculum vitae and the names of three references to: **Professor Robert T. Schimke, Department of Biological Sciences, Stanford University, Stanford, California 94305,** by 1 April 1984.

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

**DEVELOPMENTAL ZOOLOGIST;** starting fall 1984, a 1-year replacement position to teach developmental zoology, molecular biology, and introductory zoology. The doctorate is required, or defense within the year. Send curriculum vitae and three letters of recommendation by 9 April to: **Dr. R. K. Pettegrew, Chairman, Biology Department, Denison University, Granville, Ohio 43023.** *Denison is an Equal Opportunity/Affirmative Action Employer.*

### DIRECTOR OF CORPORATE RELATIONS Worcester Polytechnic Institute

Applications are invited for the position of Director of Corporate Relations at Worcester Polytechnic Institute (WPI), an innovative College of Science and Engineering with an enrollment of 2500 undergraduate and 400 full-time graduate students, located in central Massachusetts.

The director of corporate relations would be responsible for planning and implementing programs to attract current, capital, and special gifts from corporations for programmatic and institutional grants. The director of corporate relations would also serve as a member of the development staff with allied responsibilities.

Successful candidates will have significant experience in one or more of the following areas: research administration or planning, marketing, corporate communications; fund raising in higher education, with a preference for corporate fund raising.

A bachelor's degree is required with an advanced degree preferred. Candidates should send a letter of application, résumé, and the names of three references to: **The Personnel Office, WPI, 100 Institute Road, Worcester, Mass. 01609,** no later than 20 April 1984. *Equal Opportunity/Affirmative Action Employer.*

**ECOLOGIST.** Assistant or associate professor, tenure-track. Preference should be given to candidates with broad ecological background, expertise in ecosystem function, and postdoctoral experience. Applicants should send curriculum vitae, a brief résumé of research plans, and names of four individuals willing to provide references to: **Chairman, Ecology Search Committee, Department of Biology 010-A, University of North Carolina, Chapel Hill, N.C. 27514.** Applications received after 20 April 1984 cannot be assured of consideration. *The University of North Carolina at Chapel Hill is an Equal Opportunity/Affirmative Action Employer. Minorities and females are encouraged to identify themselves voluntarily.*

### EXECUTIVE OFFICER—CANCER RESEARCH

For Northern California Oncology Group, with active programs in clinical research. Coordinates scientific, administrative, and planning responsibilities. Oversees and facilitates timely development and activation of clinical cancer research protocols. NCI designated cancer center seeks scientific leader experienced in cancer research, proven administrator. Excellent research opportunities. Salary and total compensation package attractive. Send curriculum vitae to: **Edwin Cadman, M.D., Chairman, Search Committee, Northern California Oncology Group/Northern California Cancer Program, P.O. Box 10144, Palo Alto, Calif. 94303.** *Equal Opportunity Employer.*

The Section of General Surgery of the University of Michigan has an opening (assistant or associate professor) for a **GENERAL SURGEON** with experience in surgical oncology. The position carries clinical, research, and teaching responsibilities. An applicant must be Board-certified in general surgery and have academic experience. All inquiries should be directed to: **Robert H. Bartlett, M.D., Professor and Head, Section of General Surgery, Department of Surgery, University of Michigan Hospitals, D-2255 SACB Box 46, Ann Arbor, Michigan 48109.** *The University of Michigan is a nondiscriminatory, Affirmative Action Employer.*

## MOLECULAR BIOLOGIST

### Ph.D. for Technical Services

Bethesda Research Laboratories has an immediate opening for an Instructor to teach DNA Sequencing and DNA Cloning Workshops. This position also has responsibilities for generating applications data on existing and new products, providing back-up for technical service inquiries and assisting in the production of the molecular biology publication *FOCUS*.

Applicants must have expertise in chemical and dideoxy DNA sequencing techniques and experience with molecular cloning techniques. Teaching and communication skills are a must. Substantial travel will be required.

We invite your inquiry. Send your resumé in confidence to:

Mr. Wayne E. Fowler  
BETHESDA RESEARCH  
LABORATORIES, INC.  
P.O. Box 6009  
Gaithersburg, MD 20877



An equal opportunity employer, M/F/H

KING SAUD UNIVERSITY (FORMERLY UNIVERSITY OF RIYADH)  
QASSEEM BRANCH, SAUDI ARABIA

COLLEGE OF AGRICULTURE AND VETERINARY MEDICINE  
DEPARTMENT OF FOOD SCIENCES

The department has vacant faculty positions (Professor, Associate Professor, Assistant Professor) for Ph.D. holders and/or holders of academic titles earned at accredited universities who would be employed on contract basis as of commencement of the academic year 1984-85, which begins on August 11, 1984. THE LANGUAGE OF INSTRUCTION AT THE DEPARTMENT IS ARABIC.

#### NOTEWORTHY BENEFITS:

Free return air tickets annually for faculty member and family  
Furnished accommodation or housing and furnishing allowances  
Monthly transportation allowance  
Relocation allowance  
End-of-service gratuity  
Free medical and dental care covering family  
Contribution by University to tuition fees of non-Arabic-speaking children

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

DEAN, COLLEGE OF AGRICULTURE AND VETERINARY MEDICINE  
KING SAUD UNIVERSITY  
P. O. BOX 1482  
BURAIDAH, SAUDI ARABIA

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

KING SAUD UNIVERSITY OFFICE  
2425 WEST LOOP SOUTH, SUITE 450  
HOUSTON, TEXAS 77027  
ATTENTION: MISS AIDA GANIM

His/her address and telephone number (if available) should also be included so that he/she could be contacted if selected for interview.



## SMITHSONIAN TROPICAL RESEARCH INSTITUTE

### DEPUTY DIRECTOR

Applications are invited for this position, which falls vacant due to the appointment of Dr. Michael H. Robinson as Director of the National Zoo. The Smithsonian Tropical Research Institute (STRI) is a bureau of the Smithsonian Institution of Washington, D.C. devoted to basic research in tropical ecology, animal behaviour and evolution. These activities are conducted principally in the Republic of Panama with comparative studies encouraged throughout the New and Old World Tropics. The STRI also supports programs in graduate education and conservation.

The incumbent will need to demonstrate a commitment to the support of innovative basic research, as well as to the administrative management of STRI with approximately 200 employees and more than 1000 visiting scientists and students annually.

Candidates should possess a Ph.D. degree with a research background in an area of STRI research interest. A knowledge of Spanish and an ability to communicate effectively to both scientists and government managers will be helpful.

Salary between \$43,000.00-59,000.00 plus allowances. Inquiries including a C.V. and a description of your interest in STRI should be sent to:

Dr. Ira Rubinoff, Director  
Smithsonian Tropical Research Institute  
APO Miami 34002

Appointment will be made without regard to sex, citizenship, race, religion or other factors irrelevant to execution of the job.

## Toxicologists

### Pharmaceutical Research

Warner-Lambert/Parke-Davis Pharmaceutical Research Division in Ann Arbor, Michigan, is undertaking major facility and personnel expansion in the Pathology and Experimental Toxicology Department. This expansion has created employment opportunities in the following areas:

#### Research Management

##### Associate Department Director

This position requires a very senior-level professional with an outstanding record of scientific contribution and management experience to share the responsibility for the design and accomplishment of department objectives; the improvement and expansion of test methods, experimental design and evaluative technical reports; and, development of improved operating structures.

The requirements for this position include: M.D., Ph.D. or DVM/Ph.D. Degree with professional board certification; 10 years industrial or academic toxicology research experience; extensive publication record; international scientific reputation; and, demonstrated management strength.

#### General Toxicology

##### Senior Scientist

This position will be responsible for conducting and executing a variety of reproductive and general toxicity support studies; examining fetuses and evaluating skeletons for malformations.

The requirements for this position include a D.V.M. or Ph.D. degree and 3 years post-doctoral experience.

#### Toxicology Information Systems

##### Assistant Scientist

This position will be responsible for the coordination of computerized data capture systems; preparation of tables, reports and forms associated with toxicology studies.

The requirements for this position include a Bachelor of Science degree, knowledge of computers, data base management, toxicology techniques, and GLP regulations.

Join our dynamic, modern research and development team and enjoy outstanding compensation, the highest caliber science, and an unparalleled community. Send resume, references and salary requirements in confidence to: Ms. M. Wolin, Senior Human Resources Representative, Dept. #1184, Warner-Lambert/Parke-Davis, Pharmaceutical Research Division, 2800 Plymouth Rd., Ann Arbor, MI 48105. An Equal Opportunity Employer M/F/H.

**WARNER  
LAMBERT**

## POSITIONS OPEN

**COMPUTER MANAGER/STATISTICIAN.** Southwest Foundation conducts basic research in the biological sciences. We are seeking an individual to manage the operations of our central computing facility and to provide statistical support services for our professional staff.

We presently use a Hewlett Packard HP/3000 system as our central computer. The successful candidate will have an advanced scientific degree, 3 to 5 years of experience in computer systems management, and a background in statistics. Strong oral and written communication skills and well-developed interpersonal relations abilities are a must.

We offer exceptional working conditions in an atmosphere conducive to professional development. Participation in both independent and collaborative research studies is encouraged. We provide a competitive salary and an excellent fringe benefits package, with relocation provided. Please send your résumé with salary history in confidence to: **Personnel Manager, Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, Texas 78284.** An Equal Opportunity/Affirmative Action Employer

### OCCIDENTAL COLLEGE

#### One-Year Faculty Position in Geology

Applications are invited for a position in the Geology Department for the 1984-1985 academic year. Ability to teach undergraduate courses in introductory geology, mineralogy, igneous geology, field geology, and/or related subjects are necessary. Research or applied experience, while not essential, is desirable. Salary and rank will be commensurate with degree level and experience.

*Occidental College is an Equal Opportunity Employer, and encourages applications from qualified women and minorities.*

For consideration, send résumé and letters of reference to:

**Dr. William J. Morris**  
Department of Geology  
1600 Campus Road  
Occidental College  
Los Angeles, Calif. 90041

### FACULTY POSITION MICROBIAL GENETICIST UTAH STATE UNIVERSITY (USU)

The Department of Biology has reopened the search for a tenure-track assistant professor with interests in microbial genetics. A Ph.D. is required. Candidates with postdoctoral research experience using genetic manipulation techniques will be given preference. Selection will be based on accomplishments and potential for excellence in research and teaching. The appointee is expected to administer a vigorous research program and teach undergraduate and graduate courses in microbiology. USU is a growing land-grant institution with 12,000 students and is attractively situated in the Wasatch Mountains of Northern Utah. Send inquiries, curriculum vitae, transcripts, research plans, and three reference letters to: **Dr. Jon Takemoto, Search Committee, Department of Biology, UMC 53, Utah State University, Logan, Utah 84322, before 15 April 1984.** Affirmative Action/Equal Opportunity Employer.

### THREE FACULTY POSITIONS AVAILABLE MEDICAL MICROBIOLOGIST/VIROLOGIST MEDICAL BIOCHEMIST/NUTRITIONIST MEDICAL PHARMACOLOGIST

Tenure-track positions (assistant/associate professor) available fall 1984 in a multidisciplinary preclinical division with 35 faculty members. Individuals with or expecting a Ph.D. degree in one of the above disciplines and a strong commitment to excellence in teaching osteopathic medical students are invited to apply. Successful applicants will participate in teaching basic medical science and interdisciplinary organ systems courses in their discipline and subdiscipline. Research opportunities are available in an organized research program. Preference will be given to applicants with research interest and documented successful teaching experience. Rank and salary negotiable. Send curriculum vitae, graduate transcripts, and three letters of recommendation by 1 May 1984 to: **Robert C. Ritter, Ph.D., Acting Associate Dean of Preclinical Education, The Oklahoma College of Osteopathic Medicine and Surgery, 1111 West 17 Street, Tulsa, Oklahoma 74107.** An Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### FACULTY POSITIONS, MEDICAL SCHOOL

Applications are invited for tenure-track appointments at the assistant or associate professor levels in the Department of Microbiology, School of Medicine, Texas Tech University Health Sciences Center. Applicants must hold a Ph.D. degree, or the equivalent, and have research interests in virulence mechanisms or the molecular genetic analysis of virulence. Appointees will be expected to participate in teaching programs for medical and graduate students and maintain strong, independent research programs. The setting provides an opportunity to work in well equipped laboratories and collaborate with other investigators interested in pathogenesis. Rank and salary will depend on training and experience. Please send résumé and the names of three referees by 1 July 1984 to: **Dr. David J. Hentges, Chairman, Department of Microbiology, Texas Tech University Health Sciences Center, Lubbock, Texas 79430.** An Affirmative Action/Equal Opportunity Employer.

### UNIVERSITY OF WYOMING

**FISHERIES SCIENTIST.** Tenure-track assistant or associate professor in the Department of Zoology and Physiology beginning January or August 1985. Requires Ph.D. in fisheries or related field with management and research experience. Duties include undergraduate and graduate teaching in fish management and related courses, research, graduate student supervision, and collaboration with others in the University's active fisheries and water research programs. Send letter of application with research and teaching interests, résumé, representative reprints, and three letters of recommendation by 1 September 1984 to: **Dr. Harold Bergman, Search Chairman, Box 3166, University Station, Laramie, Wyoming 82071.**

*An Equal Opportunity/Affirmative Action Employer*

### FOOD MICROBIOLOGIST

Assistant/associate professor, 80 percent research, 20 percent teaching, tenure-track position. Ph.D. in microbiology, molecular biology, food microbiology, or related area. Develop a research program in food, industrial, or biotechnical fermentations. Send curriculum vitae, three letters of recommendation, and other pertinent information by 15 May 1984 to: **Dr. M. A. Cousin, Department of Food Science, Smith Hall, Purdue University, West Lafayette, Ind. 47907.** Purdue University is an Equal Opportunity/Affirmative Action Employer.

**GENETICIST**, with an interest in exploiting restriction fragment length polymorphisms and other molecular genetic characters, to establish a new laboratory in our Genetics Department. We maintain over 2700 baboons and 1000 marsupials in addition to standard laboratory animals. Major collaborative projects among our existing biochemical genetics, population genetics, and immunogenetics laboratories involve genetic influence on predisposition to atherosclerosis in baboons; regulation of immune functions and of X-chromosome inactivation in marsupials; and organization of genes in and near the major histocompatibility complexes of mice, rats, marsupials, baboons, and humans. The successful applicant will be expected to develop a strong independent research program and will have the opportunity to collaborate in any of the above projects. Academic affiliation is possible. This is an excellent opportunity for a creative scientist in a young, expanding department. Send résumé, statement of research interests, and names and addresses of three references to: **Personnel Manager, Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, Texas 78284.** An Equal Opportunity/Affirmative Action Employer.

### IMMUNOLOGY FACULTY POSITION

Tenure-track, at either assistant/associate or full professor, Department of Microbiology, Southwestern Medical School, Dallas.

Areas of particular interest include molecular genetics, cellular immunology, and cell cloning. Rank and salary open. Current members of immunology faculty are: **Doctors Capra, Forman, Kettman, Lipsky, Sullivan, Tucker, Uhr, Vitetta, and Wasserman.** Applicants should submit curriculum vitae, description of research interests, and names of four references to: **Dr. J. W. Uhr, Department of Microbiology, Southwestern Medical School, 5323 Harry Hines Boulevard, Dallas, Texas 75235.**

*The University of Texas Health Science Center is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### GENETICIST

Vacancy in the Division of Biological Sciences at Emporia State University for a broadly based **geneticist** to teach a general genetics course and develop a research program in genetics. The successful candidate may develop an advanced genetics course but will also be expected to teach at least one of the following: histology; parasitology; cell physiology; and human anatomy and physiology. Successful candidates must also be able to teach introductory-level courses.

The Ph.D. is required. Excellence in teaching and a commitment to scholarly and research activities are expected. The appointment will be on tenure-track. The effective date of employment is 18 August 1984.

Formal application must include a cover letter or curriculum vitae and three letters of reference sent directly to: **Dr. John Ransom, Division of Biological Sciences, Emporia State University, Emporia, Kansas 66801.** Closing date for applications is 6 April 1984.

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

The **United National Educational, Scientific and Cultural Organization (UNESCO)**, is recruiting a **GEOLOGIST-SPECIALIST** in earth sciences. Post temporarily located at Paris Headquarters. Fluent English and working Arabic essential. Annual salary approximately equivalent in French francs to \$32,000. Curriculum vitae and identity photograph should be sent to: **Recruitment Division, Bureau of Personnel, Place Fontenay, 75700 Paris, France**, quoting reference AR/RP/ROS/SC/008.

The Anatomy Department at the Medical College of Georgia is seeking an **INSTRUCTOR OR ASSISTANT PROFESSOR** who has had postdoctoral research experience with the potential for extramural funding, and who can teach gross anatomy, neuroanatomy, or histology to medical students. The position will commence 1 July 1984. Please send personal information to:

**Dr. Thomas H. Rosenquist**  
Acting Chairman  
Department of Anatomy  
Medical College of Georgia  
Augusta, Georgia 30912  
Telephone: 404-828-2016

*An Equal Opportunity/Affirmative Action Employer. J1520.*

### ILLINOIS LEGISLATIVE SCIENCE INTERN

Sangamon State University invites applications from graduates (B.S., M.S., Ph.D.) of natural science or engineering programs for a 9.5-month **science internship** beginning 1 October 1984 as part of the Illinois Legislative Staff Internship Program. The science intern will be assigned to the Illinois Legislative Council's Science Unit and will respond to legislators' requests for information and research about policy issues that involve science and technology. As part of the program, the science intern will participate in an academic seminar with other legislative interns. Applicants should be mature, self-motivated scientists or engineers with interests in public service. Send curriculum vitae by 27 April 1984 to: **Dr. Kent Redfield, Coordinator, Illinois Legislative Staff Internship Program, Sangamon State University, Springfield, Illinois 62708.** An Equal Opportunity/Affirmative Action Employer.

**MAMMALOGIST, ASSISTANT OR ASSOCIATE PROFESSOR, TENURE-TRACK.** Open fall 1984 for experienced person to contribute to undergraduate and graduate programs in mammalian systematics and basic and applied ecology. Must help advise students in and contribute to applied research in wildlife ecology in collaboration with the Cooperative Wildlife Research Laboratory; and must pursue research attracting external support. Submit résumé, three letters of reference, and transcripts to: **Dr. Ronald A. Brandon, Chair, Department of Zoology, Southern Illinois University, Carbondale, Ill. 62901.** An Equal Opportunity/Affirmative Action Employer. Deadline for applications: 15 April 1984 or until filled.

**MEDICAL REPORTER** sought by one of the largest international public relations agencies to prepare medical information for all media. Prefer 5 years of experience with major newspaper or wire service and educational background in health sciences. Good salary and benefits. Send résumé, references, samples of writing, and salary requirements. **Box 64, SCIENCE.**

## AGRICULTURAL RESEARCH ASSOCIATESHIPS

The Northern Regional Research Center, U.S. Department of Agriculture (USDA), Peoria, IL, has research associate positions available for scientists with training and interests in the following areas:

1. *Plant Biochemistry/Molecular Biology.* To study the developmental regulation of fatty acid biosynthesis in soybeans. Research will be at both the protein and nucleic acid level using antibodies and cDNA as probes. Send résumé to Dr. John B. Ohlrogge.
2. *Yeast Molecular Biology.* To screen an extensive fungal collection for plasmid DNAs; to isolate and characterize fungal plasmid DNAs or constructs for use as eukaryotic cloning vectors. Send résumé to Dr. Paul L. Bolen.
3. *Entomology.* To work with a group of natural product chemists who are seeking insect control agents in plants; to devise bioassays, to detect antifeedants, plant resistance factors, morphological agents, etc.; to determine the mechanism of action of such substances. Send résumé to Dr. Cecil R. Smith.
4. *Polymer Physical Chemistry.* To work with group on natural polymer-synthetic polymer composites providing basic knowledge to enhance the potential for natural polymers as materials to replace petrochemicals. Emphasis is on mechanisms of polymer interactions and factors affecting composite properties such as diffusion rates, stress-strain characteristics, and polymer compatibility. Send résumé to Mr. Felix H. Otey.
5. *Plant Physiologist.* To investigate the mechanism of action of phytohormones using radiochemicals and photoaffinity labeling agents in search of binding sites. Send résumé to Dr. George E. Inglett.
6. *Phytochemistry/Organic Chemistry.* To determine the structure, chemical properties, and reactions of complex molecules extracted from whole plants. Emphasis will be placed on polyphenols and whole plant oils. Send résumé to Mr. Marvin O. Bagby.

The positions are available for one year with probability of renewal for a second year. Salary is \$25,365 per year. Ph.D. or equivalent training is required.

This Center employs about 150 scientists engaged in diverse programs of basic and applied research and provides a stimulating professional environment. The Center also provides relocation expense assistance. U.S. citizenship is required. Send curriculum vitae to scientists indicated above. **Northern Regional Research Center, USDA, 1815 North University Street, Peoria, IL 61604.** The USDA is an Equal Opportunity Affirmative Action Employer.

## RESEARCH SCIENTIST PHARMACOLOGY

Bristol-Myers Pharmaceutical Research and Development Division currently has an opening in Buffalo for a Research Scientist in Pharmacology.

The successful candidate will have a Ph.D. in Pharmacology or related field with post-doctoral experience, or an MS with experience conducting pharmacological research related to inflammatory and hyperproliferative processes. Experience in immunology and cell biology, and/or cutaneous research would be helpful.

Responsibilities include the planning, scheduling, designing and conducting of pharmacological studies as well as collecting, analyzing, and interpreting data related to these studies. Supervision of technicians would also be required.

This position offers a competitive salary, a comprehensive benefits package and growth opportunities. For confidential consideration, please submit your resume to:

Manager, Human Resources

### **Bristol-Myers Company**

Pharmaceutical R & D Division

100 Forest Avenue, Buffalo, N.Y. 14213

An Equal Opportunity Employer M/F/H/V

## National Institutes of Health National Cancer Institute

# SUPERVISORY MICROBIOLOGIST/BIOLOGIST/CHEMIST

The National Cancer Institute has an opening for Chief of the Chemical and Physical Carcinogenesis Branch of the Carcinogenesis Extramural Program.

Duties include planning, developing, directing and managing a national extramural program of basic and applied research concerned with the occurrence and inhibition of cancer caused or promoted by chemical or physical agents, acting separately or together, or in combination with biological agents.

The position requires extensive knowledge of the scientific basis of chemical and physical carcinogenesis research; experience in planning, administration and evaluation of research carried out under the grant, contract and cooperative agreement mechanisms; experience with effective personnel management and supervision as well as experience in dealing with interrelationships between governmental, educational, industrial, and private research concerns.

In addition to three years of appropriate experience, minimum educational requirements include a 4 year course of study in an accredited college or university leading to a

bachelor's degree with major study in chemistry or biology. A doctorate or equivalent training in molecular biochemistry, pharmacology or biology is desirable.

This is a Civil Service Career-Conditional Appointment under the Merit Pay System at the GS-15 level with a salary range of \$50,252 to \$63,652 depending upon the qualifications of the applicant selected. Benefits include Civil Service Retirement, life and health insurance. This is a supervisory position and may require the incumbent to serve a one year probationary period. U.S. citizenship is required.

Submit application (SF-171, Personal Qualifications Statement), current performance appraisal and names of 3 references to:

**Ms. Rados, Cancer Personnel Office  
Bldg. 31, Rm. 3A-35, 9000 Rockville Pike  
Bethesda, MD 20205, Tel: 301/496-6864**

Applications must be received or postmarked by April 6, 1984.

NIH is an equal opportunity employer.

## POSITIONS OPEN

### IMMUNOLOGIST DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY UNIVERSITY OF WASHINGTON

Cellular immunologist with molecular orientation, assistant or associate professor level, tenure track. Candidate expected to set up a strong research program and to teach graduates and undergraduates. Submit résumé, research goals, and the names of three references by 15 April 1984 to: **Dr. Ursula Storb, Chairperson, Search Committee, Department of Microbiology and Immunology SC-42, University of Washington, Seattle, Wash. 98195.**

*Affirmative Action/Equal Opportunity Employer*

**MICROBIOLOGY: ASSISTANT/ASSOCIATE PROFESSOR.** Tenure-track position; requires Ph.D., strong teaching interests in immunology, medical microbiology, virology, general microbiology, and conducting research. Send curriculum vitae with undergraduate/graduate transcripts, statement of teaching/research interests, and names of three references by 1 May 1984 to: **Dr. William McEnery, Biology Department, Mankato State University, Mankato, Minn. 56001.** *Equal Opportunity/Affirmative Action Employer.*

**MOLECULAR BIOLOGIST.** Associate professor. Department of Animal Science, Texas A&M University, College Station. To develop a research/teaching program in molecular biology employing genetic engineering techniques as an independent program in one of the areas of eukaryotic (preferably mammalian) molecular genetics and to collaborate with established research programs in breeding, genetics, reproductive physiology, nutrition, and meats/muscle biology. Qualifications: A Ph.D. and 2 years of postdoctoral experience (or equivalent) in molecular biology with expertise in recombinant DNA techniques, mammalian cell culture, and characterization of specific gene products. Submit résumé, transcripts, reprints, three reference letters, and research interests/expertise/goals by 15 May 1984 to:

**Dr. G. C. Smith**  
133 Kleberg Center  
Department of Animal Science  
Texas A&M University  
College Station, Texas 77843  
Telephone: 409-845-1541

*Texas A&M is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from women and minorities.*

**MOLECULAR/CELLULAR BIOLOGIST.** A tenure-track position with postdoctoral experience and a strong interest in teaching lower-level undergraduate courses in biology as well as in his/her specialty. The candidate will be expected to have an active fundable research program in molecular/cellular biology in which undergraduate and graduate students can participate. Appointment date: 1 September 1984. Send curriculum vitae, reprints, statement of research goals, and three letters of recommendation to: **Search Committee, Department of Biological Sciences, Box 246, State University of New York, Plattsburgh, N.Y. 12901.** Deadline: 13 April 1984. Incomplete applications will not be considered. *An Equal Opportunity/Affirmative Action Employer.*

### MOLECULAR IMMUNOLOGIST

Tenure-track faculty position in the Department of Cell Biology. Candidates must have demonstrated research ability in molecular biology and immunology and will be expected to establish an independent research program. Level of appointment will depend on applicant's experience. Minimum of 3 years of postdoctoral research training. Send curriculum vitae, summary of present and future research activities, and names and addresses of at least three references to: **T. B. Tomasi, M.D., Ph.D., Department of Cell Biology, School of Medicine, UNM Cancer Center, The University of New Mexico, Albuquerque, N.M. 87131.**

### PEDIATRICS

Applications are invited by Ph.D. in biochemical sciences for position at faculty or postdoctoral level. Experience with growth factor or hormone binding, tissue culture, and protein or enzyme purification essential. Curriculum vitae and names of three references should be sent to: **Dr. Olga Greengard, THE MOUNT SINAI SCHOOL OF MEDICINE, Annenberg Building, Room 1740, One Gustave L. Levy Place, New York, N.Y. 10029.** *An Equal Opportunity Employer.*

## POSITIONS OPEN

**MICROBIOLOGIST.** Tenure-track position for Ph.D. to teach general and medical microbiology in a growing college setting. Send curriculum vitae information, transcripts, and three letters of recommendation that specifically address abilities in teaching and research to: **Dr. Robert W. Korn, Biology Department, Bellarmine College, 2001 Newburg Road, Louisville, Ky. 40205.**

**MOLECULAR BIOLOGIST** to pursue studies on the biosynthesis and regulation of proteolytic enzymes involved in apolipoprotein intra- and extracellular remodeling. The project will enjoy multidisciplinary interactions with several faculty members. Depending upon qualifications, position may be from postdoctoral to research assistant professor. Salary depending upon qualifications. Inquiries: **Lipoprotein Study Group, University of Chicago, 5841 South Maryland Avenue, Box 231, Chicago, Ill. 60637.** Telephone: 312-962-1775.

### MOLECULAR BIOLOGIST

The Department of Biology at Memphis State University invites applications for a tenure-track faculty position in the area of molecular biology at the level of assistant or associate professor. The applicant must have postdoctoral experience with demonstrated excellence in molecular biology including recombinant DNA methodology. This position includes ample space and funding for research. It is expected that the successful candidate will develop a research program that will qualify for extramural funding. The individual will also be expected to participate in appropriate departmental teaching. Interested individuals should submit a résumé, a statement of research plans, reprints of publications, and have three letters of recommendation sent to: **Dr. Lewis B. Coons, Chairman, Search Committee, Department of Biology, Memphis State University, Memphis, Tenn. 38152.** *Memphis State University is an Equal Opportunity University.* Closing date is 30 April 1984.

### NEUROBIOLOGY RESEARCH ASSOCIATES

Openings for two postdoctoral research associates are immediately available in the laboratory of Dr. Robert J. O'Connell to study **olfactory physiology** in vertebrates and invertebrates. The planned research involves a multidisciplinary approach to the anatomical, behavioral, chemical, electrophysiological, and hormonal substrates of olfactory communication in several species. Experience in one or more of these areas is a requisite. Send résumé, statement of research interests, and names of three references to: **Dr. Robert J. O'Connell, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.**

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

**OCEANOGRAPHER.** United States Minerals Management Service is recruiting oceanographers at the GS-12 and GS-13 grade levels who possess: an in-depth knowledge of physical oceanography and marine climatology, including the design and management of studies, transfer of information, and modeling of results; an ability to organize, direct, and coordinate complex research activities with particular emphasis on activities related to physical oceanography and marine climatology; a knowledge of federal procurement laws and regulations; a knowledge of federal and state legislative procedures and their potential impact on the Environmental Studies and Offshore Leasing Programs; an ability to track and evaluate progress of work and expenditures for multimillion dollar oceanographic contracts with complex substantive content and tight deadlines; and an ability to work effectively with other agencies and groups whose views may not conform with established policy. Interested applicants should submit a Personal Qualifications Statement, SF-171, to: **Chief, Staffing and Classification Branch, Mail Stop 634, U.S. Minerals Management Service, 12203 Sunrise Valley Drive, Reston, Va. 22091.**

**POSTDOCTORAL RESEARCH ASSOCIATE.** Department of Chemistry. To conduct research on the structures, rearrangements, and energy surfaces of important carbocations, using high field NMR spectroscopy. Requires Ph.D. in physical organic chemistry as well as prior experience in vacuum line techniques, solid-state NMR spectroscopy, synthesizing labeled organic molecules, and the operation of superconducting NMR spectrometers. Full-time position with annual salary of \$15,000. Interested applicants should submit their résumés to: **Box 63, SCIENCE.**

## POSITIONS OPEN

### PATENT ADMINISTRATOR The Ohio State University Research Foundation

The Ohio State University (OSU) Research Foundation is accepting applications for the position of patent administrator, a new position with university-wide responsibilities. Duties will include liaison with OSU faculty to identify discoveries and ensure their prompt disclosure; filing, or assisting in filing, applications for patents or other protections; negotiations with potential licensees; and marketing technologies to interested organizations. Salary and starting date are negotiable.

Applicants should have a bachelor's degree in science or engineering and 5 years of experience in administering intellectual property in a corporate or university setting. Experience as a patent attorney is desirable as are considerable knowledge and aptitude for use of marketing theories and practices.

Please submit letter of application, résumé, and names of three references by 1 April 1984 to: **Kenneth W. Sloan, Executive Director, The Ohio State University Research Foundation, 1314 Kinnear Road, Columbus, Ohio 43212.**

*The Ohio State University Research Foundation is an Equal Opportunity/Affirmative Action Employer.*

**THE UNIVERSITY OF MASSACHUSETTS AT BOSTON** seeks two tenure-track faculty for new positions in September 1984 in a new doctoral program in environmental science. Successful candidates will provide evidence that they will conduct significant research programs, participate effectively in graduate education, and interact with other faculty in program development and in multidisciplinary research that emphasizes, but need not be limited to, urban harbors. Doctorate required; postdoctoral experience desirable. The appointments are expected to be at the assistant professor level, but applications from senior investigators will be considered. **PHYSICAL OCEANOGRAPHER** to develop graduate courses and a research program that will include studies of Boston harbor. Research interests should be in coastal/estuarine dynamics and/or sediment transport processes. **ENVIRONMENTAL POLICY AND LAW** to develop a core course and other courses, and a research program in legal/policy aspects of environmental legislation, regulation, and enforcement. There are extensive opportunities for collaboration with the John W. McCormack Institute of Public Affairs located on campus and a joint appointment in the Political Science Department is possible. Nominations or applications to: **Chair, Search Committee, Environmental Science, University of Massachusetts at Boston, Boston, Mass. 02125.** The positions are subject to the availability of funds. Applications received by 6 April 1984 will be assured of consideration. *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL ASSOCIATE.** Department of Anesthesiology. To study neurophysiology and biomechanics of cutaneous mechanoreceptors. Requires Ph.D. in mechanical engineering as well as prior experience in biomechanics and physiology of skin. Full-time position with annual salary of \$18,500. Interested applicants should submit their résumé to: **Box 62, SCIENCE.**

**POSTDOCTORAL/ASSOCIATE RESEARCH POSITIONS IN MALE REPRODUCTIVE BIOLOGY** for two Ph.D.'s trained in biochemistry or cell biology to study regulatory mechanisms of: (i) spermatogenic stage-dependent protein phosphorylation and secretion; and (ii) cell differentiation during spermatogenesis in vitro. Relevant techniques include protein purification, gel electrophoresis, monoclonal antibody production, immunocytochemistry, and in vitro biological assays. Send curriculum vitae and names of three references to:

**Dr. Laura L. Tres or Dr. A. L. Kierszenbaum**  
The Laboratories for Reproductive Biology  
509 Clinical Sciences Building 209H  
University of North Carolina  
Chapel Hill, N.C. 27514

**POSTDOCTORAL FELLOW** position available immediately to study and develop techniques assaying short-term effects of ultraviolet radiation in skin of human and experimental animals. Previous experience in photobiology or photochemistry desirable, but not necessary. Send curriculum vitae with names of three references to: **Dr. Vincent A. DeLeo, Department of Dermatology, Columbia University, 630 West 168 Street, New York, N.Y. 10032.** *An Affirmative Action/Equal Opportunity Employer*

**THE INTERNATIONAL CENTRE OF  
INSECT PHYSIOLOGY AND ECOLOGY  
P.O. BOX 30772, NAIROBI, KENYA**

**REF: S7/ADVERT/20/479      20th January 1984**

**DEPUTY DIRECTOR  
(REF: SCI/83/7): Readvertisement**

The ICIPE is an international institution headquartered in Nairobi, Kenya. It undertakes advanced research in insect science and pest management, and offers high-level training to insect scientists and technologists from Africa and other developing countries. It has 40 senior scientists; and is funded by a consortium of donors comprising United Nations and international bodies, governmental aid agencies, and private foundations.

Applications are invited from highly qualified scientists and widely experienced research managers for the senior research management position of DEPUTY DIRECTOR at the ICIPE.

The Deputy Director reports directly to the Director of the Centre, and in his absence, acts for him. He/she will, in addition, have overall responsibility for the Research Division of the ICIPE, which includes the research programmes, research support units, and technical support services (including field station facilities); and maintain close liaison with supportive Divisions within the ICIPE (on Administration, Finance, and Communication and Training). The successful candidate will be a person with a solid research background in insect science or pest management or plant protection, and will have had considerable experience in science policy matters and research management, and will be a successful internationalist able to work in an African environment. A more detailed job description will be sent to qualified candidates.

The remuneration package will be competitive, and will reflect the vital importance of this position within the ICIPE. Applications, giving updated curriculum vitae and addresses of three referees should be addressed (in confidence) to:

**The Director,  
ICIPE,  
P.O. Box 30772,  
NAIROBI, Kenya.**

*Closing Date: 31st March 1984.*

**ASSISTANT VICE PRESIDENT FOR  
INFORMATION PROCESSING**

**University of Minnesota**

The person selected for this new position will be the principal line officer for units and activities related to computing and telecommunications and will report to the Vice Presidents for Academic Affairs and Finance and Operations. The primary emphasis of the position will be on planning, coordination, and management of these activities to serve the academic and administrative needs of the University.

Leadership and line responsibility for the University Computer Services, the Administrative Data Processing Division, and a new Department of Telecommunications Services to be established are major responsibilities of this position.

Candidates must have, as a minimum, a master's degree (Ph.D. preferred) in engineering, science, mathematics, management information systems, or comparable technical discipline; a minimum of 5 years of experience in planning and management in the area of computer and/or telecommunications technology. Significant experience in a research university; understanding of and experience in conducting or supporting academic research, undergraduate and graduate education, or comparable experience in private or governmental laboratories.

Applications and nominations for this position are solicited and applicants should forward a résumé, three letters of evaluation, and a personal statement in regard to the position on or before 25 April 1984 to:

**Dr. A. J. Linck, Associate Vice President for Academic Affairs  
and Chair, Search Committee  
213 Morrill Hall  
100 Church Street, SE  
University of Minnesota  
Minneapolis, Minnesota 55455**

This is an administrative position of the University, with faculty benefits. Faculty rank and tenure status are possible in an appropriate academic department, depending on qualifications.

Salary: negotiable and commensurate with qualifications and experience.

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

## **CNS Research Opportunities**

Pfizer's Central Research Laboratories are seeking qualified scientific assistants to conduct research in the areas of depression, psychosis, anxiety and related CNS disorders.

These positions require a B.S. in biology or related discipline. An M.S. will be an advantage. Research experience in a biochemically related field is highly desirable. People with skills in the following areas are of particular interest:

- receptor binding techniques
- measurement of cerebral metabolism
- small animal surgery
- computer operations

In addition to the potential for career growth, these positions provide opportunities for motivated individuals to contribute to all levels of experimental work in a stimulating professional environment. We offer an excellent salary, benefit and relocation package plus an attractive Connecticut shore location. Qualified applicants should submit their resume, including summary of research accomplishments, to: Mrs. Lorraine C. Corr, Personnel Associate, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.



An equal  
opportunity employer



## **Queen's Fellowships in Marine Science**

To commemorate the Royal visit to Australia in 1970 the Australian Government established the Queen's Fellowships Scheme. Under this Scheme up to five fellowships may be awarded each year for full-time research by young scientists of exceptional promise and proven capacity for original work. These awards are tenable at an Australian university or approved research institution normally for two years. Tenure of a Fellowship is expected to commence within nine months of the announcement of the award.

**QUALIFICATIONS:** Queen's Fellows should have a Ph.D. or equivalent qualifications, or equivalent research or professional experience, in a discipline applicable in marine science or coastal engineering.

Awards will, in general, be restricted to applicants who are not more than 30 years of age on the date when applications close.

**SALARY:** \$24,445 (Australian) per annum – increased to \$26,540 at age of 28 years.

**TRAVEL EXPENSES:** Necessary travel expenses are payable.

**APPLICATIONS:** Persons interested in applying for the above fellowships should obtain application forms from:

The Executive Officer, Queen's Fellowships Scheme, Department of Science and Technology, P.O. Box 65, Belconnen, A.C.T. 2616, Australia.

The next round of awards will be announced in August 1984. Applications close on 18 April 1984.

## POSITIONS OPEN

The Department of Pharmacology and Toxicology of the Medical College of Virginia/Virginia Commonwealth University has a number of positions open at the level of **POSTDOCTORAL FELLOW, RESEARCH ASSOCIATE, and RESEARCH ASSISTANT PROFESSOR**. We are interested in receiving applications from neuroscientists with training in biochemical or molecular pharmacology, in the isolation and purification of endogenous peptides and interested in various aspects of the interactions between chemical agents and the central nervous system. Salaries are competitive and rank will depend on prior experience and training. Please send curriculum vitae, list of publications, and names of three references to: **Louis S. Harris, Ph.D., Chairman, Department of Pharmacology and Toxicology, Medical College of Virginia/Virginia Commonwealth University, MCV Station, Box 27, Richmond, Va. 23298.**

*An Equal Opportunity/Affirmative Action Employer*

### CENTER FOR MOLECULAR MEDICINE AND IMMUNOLOGY

**POSTDOCTORAL POSITIONS** in tumor immunology program, emphasizing antigen characterization, radioimmunoassay, chemotherapeutic, radioimmunotherapy, and immunoliposomes, in a newly developed research center. Ph.D. applicants with experience in one or more of the following areas preferred: immunochemistry, glycoprotein chemistry, radiochemistry, lipid chemistry, and protein-labeling techniques. Send curriculum vitae, summary of research interests, and names of three references to: **Dr. James Primus, Center for Molecular Medicine and Immunology, University of Medicine and Dentistry of New Jersey, 100 Bergen Street, Room 1602, Newark, New Jersey 07103.**

**POSTDOCTORAL POSITION IN HUMAN NUTRITION** available 1 July 1984. Background/experience in biochemistry, enzymology, or immunochemistry required for research in developmental gastroenterology. Send curriculum vitae to: **Dr. Norman Kretschmer, Department of Nutritional Sciences, University of California, Berkeley, Berkeley, Calif. 94720. The University of California is an Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** for recent Ph.D. or M.D., U.S. citizen or permanent resident, available immediately, supported by NIH Training Grant (National Research Service Awards), in the area of basic cancer chemotherapy, clinical cancer chemotherapy, cancer biology (including radiation biology), or cancer drug development (organic synthesis). Application deadline: 1 month. Send résumé, indicating area(s) of interest, and two or more letters of reference to: **Dr. Sungman Cha, Brown University, Box G, Providence, R.I. 02912. Telephone: 401-863-3114. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION**—Vanderbilt University Center in Toxicology seeks an **NMR SPECTROSCOPIST**. Duties include operation and care of a new Bruker AM-400 and other spectrometers, and training and supervision of open-shop users. Extensive opportunities exist for collaborative research; the position involves not only provision of routine service but also development and refinement of methods needed to solve non-routine problems. Salary: \$17,222. Send letter of application, résumé, and names of three references to: **Professor Thomas M. Harris, Department of Chemistry, Vanderbilt University, Nashville, Tenn. 37235. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION**—Enzymes and peptides of the renin-angiotensin system and processing enzymes of neural proteins and peptides. Also acetylcholinesterase and other esterases. Send curriculum vitae and names of three references to: **Dr. Irwin B. Wilson (AcChE) or Dr. Robert B. Harris (ACE; processing enzymes), University of Colorado, Department of Chemistry, Box 215, Boulder, Colo. 80309. University of Colorado, Boulder, is an Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available after 1 July to study mechanism of action and resistance to anticancer agents with focus on drugs that alter DNA. Current areas of investigation include nuclear and mitochondrial DNA damage and repair and drug transport across membranes. Candidates with experience in areas of DNA repair, protein purification, molecular biology, tissue culture, or drug transport are especially encouraged to apply. Send curriculum vitae and names of three references to: **Dr. Warren Ross, Box J-267, J. Hillis Miller Health Center, Gainesville, Fla. 32610.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** (research associate) available to study the binding of amphiphilic environmental chemicals to biological and model membranes and the relationship of binding to membrane activity. Requires Ph.D. in biochemistry or other area of relevant training. Research background in membranes, binding studies, and liposome preparation is highly preferred. Send résumé and three letters of recommendation before 15 April 1984 to: **Dr. Terry L. Miller, Environmental Health Sciences Center and Department of Agricultural Chemistry, Oregon State University, Corvallis, Ore. 97331. An Equal Opportunity/Affirmative Action Employer; complies with Section 504 of the Rehabilitation Act of 1973.**

**POSTDOCTORAL POSITION.** Begin 1 May. Chemical research. Surface chemistry of transition metal compounds. Experience with AES, ELS, XPS, thermal desorption or other UHV surface sensitive techniques desirable. Salary: \$14,000 to \$18,000, depending on experience. Send résumé and three letters of recommendation to: **Dr. M. Langell, Department of Chemistry, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-0304. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION IN BEHAVIOR PHARMACOLOGY** to investigate stimulus properties of drugs. Research will develop drug discrimination procedures and study the role of stimulus effects of drugs in classical conditioning and drug-induced amnesias. NIMH research grant funding is available for 2.5 years. Position is available immediately. Send curriculum vitae and names of references to: **Donald Overton, Psychiatry Department, Temple University Medical School, 3401 North Broad Street, Philadelphia, Pa. 19140. Telephone: 215-787-1534. Temple University is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION(S)** available summer/fall in biochemical toxicology and immunotoxicology. Ph.D. required. Experience in one of the following preferred: protein chemistry/enzymology, pharmacokinetics, tissue culture, cellular immunology or synthetic chemistry. Send curriculum vitae and three references to: **Dr. Sarjeet Gill, Division of Toxicology and Physiology, University of California, Riverside, Calif. 92521. An Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION.** Study of proteins and/or synthetic polymers by two-dimensional NMR and distance-geometry calculations. NMR experience essential, computer experience desirable. Send résumé and three letters of recommendation to: **Dr. L. R. Brown, Michigan Molecular Institute, 1910 West St. Andrews Road, Midland, Mich. 48640. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITIONS** available immediately to study: (i) development and application of monoclonal antibodies to DNA modified by chemotherapeutic or carcinogenic agent; (ii) with labeled antibodies flow cytometric studies in cytogenetics, gene mapping and regulation, and cellular pharmacology. Experience in nucleic acid chemistry and immunology desired. Applications must be received by 1 April 1984. Positions sponsored by Brian H. Mayall, M.D., Department of Laboratory Medicine, University of California, San Francisco (UCSF), and Martin Vanderlaan, Hybridoma Facilities, Lawrence Livermore National Laboratory. Send curriculum vitae and names of three references to: **Brian H. Mayall, M.D., Department of Laboratory Medicine, L-518, UCSF, San Francisco, Calif. 94143. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

### POSTDOCTORAL TRAINING IN BIOCHEMICAL OR MOLECULAR ENDOCRINOLOGY

Postdoctoral positions supported by an NIH Training Grant are available to U.S. citizens or permanent residents. Research training will be in the biochemistry of estrogen and progesterone receptors, molecular biology of estrogen action in reproductive tissues, and biochemistry of progesterone action in neuroendocrine systems. Write or call: **Dr. Jack Gorski, Biochemistry Department (telephone: 608-263-4441), or Dr. Harry Karavolas, Physiology Chemistry Department (telephone: 608-262-1348), University of Wisconsin, Madison, Wis. 53706.**

## POSITIONS OPEN

**POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE** to study regulation of lipolysis at interfaces; relevant to physiology of lipid adsorption, fat necrosis, and atherosclerosis. Opportunity to learn novel approaches to physicochemical regulation of lipid-metabolizing enzymes.

Annual stipend (\$16,400 minimum) and position dependent on previous research experience. Submit, before 15 April 1984, curriculum vitae, names of three references and a brief description of research experience and goals to: **Dr. Howard Brockman, The Hormel Institute, University of Minnesota, 801 16th Avenue, NE, Austin, Minn. 55912; telephone: 507-433-8804. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages women and minority applicants.**

**POSTDOCTORAL FELLOW.** A postdoctoral fellowship is immediately available in the Regional Bone Center at Helen Hayes Hospital. The successful candidate will have a Ph.D. or equivalent degree with expertise in tissue culture. Experience in electron microscopy would be an advantage. Projects will involve application of electron microscopy and biochemical techniques to studies of bone metabolism in vitro. Salary: \$19,030. Applicants should send curriculum vitae, reprints of relevant publications, and names, addresses, and telephone numbers of three references to: **Dr. D. W. Dempster, Ph.D., Regional Bone Center, Helen Hayes Hospital, Route 9W, West Haverstraw, New York 10993. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL-LEVEL POSITION:** Biochemist to participate in NIH-funded research on purification and characterization of a hemopoietic growth factor derived from a long-term bone marrow adherent cell line. The position is research assistant or associate professor depending on qualifications. Position available immediately. Send curriculum vitae to: **Dr. Peter J. Quesenberry, Chief of Hematology/Oncology Division, Box 502, University of Virginia, School of Medicine, Charlottesville, Va. 22908.**

**POSTDOCTORAL RESEARCH ASSOCIATE** in reproductive biology to study the molecular basis for regulation of control and life-span of corpora lutea. Predoctoral experience with radioimmunoassays and small animal physiology (male or female) desired. Requires U.S. citizenship or permanent residence visa in United States. Candidates should write to: **Dr. Lutz Birnbaumer, Professor, Department of Cell Biology, Baylor College of Medicine, Houston, Texas 77030, and provide a list of references.**

### POSTDOCTORAL RESEARCH ASSOCIATES

Applications invited from persons with backgrounds in cell biology/biochemistry to study the role of all extracellular matrix interactions in oncogenic transformation. Desirable areas of expertise include protein and/or glycosaminoglycan characterization, immunological techniques, and cell culture. Please send curriculum vitae and three letters of recommendation to: **Dr. Susan P. Hawkes, Molecular Oncology Program, Michigan Molecular Institute (MMI), 1910 West Saint Andrews Road, Midland, Mich. 48640. MMI is an Equal Opportunity Employer.**

**POSTDOCTORAL RESEARCH ASSOCIATE.** NIH-funded project involves high-resolution electron microscopy and other biophysical techniques to study protein structure and self-assembly mechanisms. Fibrinogen and fibronectin are the main interest of present project. Research projects on microtubules and intermediate filaments are also possible. Previous experience with electron microscopy not necessary; background in physical biochemistry is desirable. Send résumé and names of three references to: **Dr. H. P. Erickson, Department of Anatomy, Duke University Medical Center, Durham, N.C. 27710. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL/RESEARCH ASSOCIATE POSITION** available immediately to study the molecular mechanism of cell transformation/carcinogenesis by EBV and HTLV, including cloning of HTLV genome and preparation of molecular probes, transfer of EBV and HTLV subgenomic fragments into lymphocytes, mapping and analysis of the viral and cellular transforming functions. Ph.D. and experience in molecular virology and recombinant DNA technology preferred. Salary: \$19,000 per year. Send résumé and three references to: **Dr. David J. Volsky, Pathology and Laboratory Medicine, University of Nebraska Medical Center, Omaha, Neb. 68105. An Equal Opportunity/Affirmative Action Employer.**

# Toxicologist

## Join new R&D facility of ARCO Chemical Company.

With this key division of Atlantic Richfield Company, one of the nation's largest, fully integrated energy companies, you'll focus on projects critical to engineering, chemical products and the environment.

Duties include designing protocols, monitoring studies and evaluating data from acute and chronic toxicity investigations. Also, developing recommendations on safe exposure levels for various chemicals.

Ideal candidate will be strong communicator with PhD in Toxicology plus minimum of three years experience in industrial toxicology. Must have comprehensive knowledge of government regulations. Requires ability to apply analytical approach to solution of a wide variety of problems and to assimilate details of analysis, procedures and tests.

Position is based in beautiful Philadelphia suburb. We offer an excellent salary and benefits package. Please send resume and salary history to: **Ms. Shirley G. Arline, Employee Relations Supervisor, ARCO Chemical Company, 3801 West Chester Pike, Newtown Square, PA 19073.**

**ARCO Chemical Company**   
Division of Atlantic Richfield Company

An equal opportunity employer

## HOFFMANN-LA ROCHE

### Sr. Scientists Virology & Tumor Biology

Hoffmann-La Roche, a leader in the pharmaceutical industry, has two key research opportunities in its Experimental and Applied Biology Department. Responsibilities will include generating pre-clinical data on the use of recombinant interferons, interleukins and other products in virology and oncology using relevant animal models and new methodologies.

#### Virologist

Additional responsibilities will include *in vitro* and *in vivo* evaluation of potential antiviral drugs. Knowledge of antiviral chemotherapy is desirable.

#### Tumor Biologist

Qualifications include experience in the use of a wide variety of animal tumor model systems and interest in the development of new approaches to cancer therapy. Experience in the study of processes of metastasis and/or angiogenesis desirable.

Both positions require PhD plus 3 or more years postdoctoral study. Supervisory experience desirable.

Roche offers an outstanding compensation package including an attractive bonus and an environment that encourages professional growth. **Please send resume to: Mrs. Eleanor M. Malone, Professional Employment & Staffing Specialist.**



**HOFFMANN-  
LA ROCHE INC.**  
Nutley, NJ 07110

An Equal Opportunity Employer

*Products that matter  
from people who care*

# OSHA Opportunities

The Occupational Safety and Health Administration (OSHA) is seeking qualified applicants for several positions in its National Office, Directorate of Health Standards Programs which develops and promulgates workplace standards and regulations. OSHA's health standards and regulations address worker exposure to toxic substances and physical and biological hazards; industrial hygiene; and other practices to reduce the risk of occupationally related disease.

Vacancies for these positions include the Federal service grade levels and starting salaries (pay ranges) noted:

#### Industrial Hygienist:

GS-09, \$20,965 - \$27,256

GS-11, \$25,366 - \$32,980

GS-12, \$30,402 - \$39,519

GS-13, \$36,152 - \$46,997

#### Engineer:

GS-11, \$26,959 - \$36,928

#### Statistician Health:

GS-12, \$30,402 - \$39,519

GS-13, \$36,152 - \$46,997

#### Health Scientist:

GS-12, \$30,402 - \$39,519

GS-13, \$36,152 - \$46,997

All candidates must possess excellent writing skills and meet the minimum educational and/or experience requirements for positions and grade levels as established by the U.S. Office of Personnel Management. All positions will be directly involved in the development of health standards and regulations.

Industrial hygienists who possess experience and/or knowledge relative to the measurement and/or control of toxic substances and respiratory protection programs are specifically sought for a

number of these opportunities. Candidates may have degrees in industrial hygiene, chemistry, physics or related areas.

Candidates selected for engineering positions will be responsible for evaluation of strategies to reduce concentrations of airborne contaminants in the workplace. Candidates should have knowledge of ventilation systems and plants design. Chemical or mechanical engineers are preferred.

Candidates for statistician positions must have knowledge of biology and biostatistics. The selected applicants will be responsible for performing mathematical evaluations of biological data to predict risks associated with exposures to workplace hazards. Statisticians will perform quantitative risk analysis calculations involving biological data based models and will write documentation to describe the analysis.

Health scientists added to the OSHA staff will be responsible for the critical review of studies relative to health effects of toxic chemicals and for developing written analysis of these studies. Candidates should be knowledgeable in the fields of epidemiology and/or toxicology.

Interested persons may obtain further information from Mrs. Christine Freeman or Ms. Claudia Bridgett, OSHA Personnel Office, U.S. Department of Labor, 200 Constitution Avenue, N.W., Room N3308, Washington, D.C. 20210 telephone number (202) 523-8013. All applications must be postmarked no later than April 6, 1984.



**U.S. Department of Labor  
Occupational Safety and Health Administration** **An Equal Opportunity Employer**

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH ASSOCIATE

Postdoctoral position available immediately for studies on the assembly of murine leukemia virus. Individuals interested in covalent attachment of fatty acids to proteins as well as isolation of viral coded proteases are encouraged to apply. Send curriculum vitae and the names of three references to: **Dr. R. B. Luftig, Professor and Head, Department of Microbiology and Immunology, Louisiana State University (LSU) Medical Center, New Orleans, La. 70112.** *LSU Medical Center is an Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL RESEARCH ASSOCIATE.

Available 1 June. Research area includes identification of an airway inhibitory transmitter and establishing transmitter mechanism of action. Ph.D. in pharmacology or related field required. Experience in protein chemistry, neurophysiology, and radioimmunoassay desirable. Support available for up to 3 years. Send résumé and three letters of reference by 1 May 1984 to: **Dr. C. Venugopalan, Department of Veterinary Physiology, Pharmacology and Toxicology, School of Veterinary Medicine, Louisiana State University, Baton Rouge, La. 70803.** *Affirmative Action/Equal Educational Opportunity Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATE** position available to study problems of membrane structure, function, and biogenesis in normal and transformed cells. Experience in enzymology or fluorescence techniques useful. Send résumé and names of three references to: **Dr. Michael Glaser, Department of Biochemistry, University of Illinois, 1209 West California, Urbana, Ill. 61801.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATE** position available immediately to Ph.D. biochemist to study the role of calmodulin in cellular regulation. Candidates with a strong background in enzymology or protein chemistry are preferred. Please send curriculum vitae and three letters of recommendation to: **Dr. Wai Yiu Cheung, Department of Biochemistry, St. Jude Children's Research Hospital, Memphis, Tennessee 38105.**

*Equal Opportunity Employer*

### PROVOST Utah State University Logan, Utah

The provost is the chief academic officer of the University directly responsible to the president. As chief administrative officer for academic affairs, the provost must provide leadership in faculty and staff recruitment and development, all academic programs including research and extension, and budget development and administration. Qualifications include an earned doctorate; demonstrated scholarly achievement commensurate with rank of full professor in one of the disciplines of the university; evidence of excellence in teaching and research; demonstrated administrative and fiscal effectiveness in higher education; an understanding of and commitment to the role of a modern land-grant institution; demonstrated ability to work and communicate effectively; and knowledge of international development programs and extramural funding. To apply, submit a detailed résumé with full representation of qualifications, a letter of interest, and names and telephone numbers of five references to: **Dr. David Luthy, Chairman, Provost Search Committee, UMC 35, Utah State University, Logan, Utah 84322.** Applications must be postmarked by 13 April 1984. *An Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSISTANT

Norden Laboratories, subsidiary of SmithKline Beckman Corp. and leader in the animal health industry, has an immediate opening in our research and development area. As an important member of one of our biological research teams, the research assistant will be responsible for laboratory work in the area of molecular biology.

Applicants should have an M.S. degree in microbiology, molecular genetics, or biochemistry; or a B.S. degree plus 2 to 3 years of research experience.

In addition to an attractive starting salary, Norden offers a comprehensive benefit package that is one of the finest in the industry. Interested applicants should send a résumé (including salary requirements), in confidence, to **Connie Soucie** at:

**NORDEN LABORATORIES  
P.O. Box 80809  
Lincoln, Neb. 68501**

*An Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

**POSTDOCTORAL POSITION** to study the structure, function, and mechanisms operating along the secretory path, especially the Golgi complex of myeloma cells, using the approaches of immunocytochemistry, subcellular fractionation, somatic cell genetics, and glycoprotein biochemistry. Send detailed curriculum vitae and two letters to: **Dr. Alan Tartakoff, Institute of Pathology, Case Western Reserve University School of Medicine, 2085 Adelbert Road, Cleveland, Ohio 44106.**

*An Equal Opportunity/Affirmative Action Employer*

**POSTDOCTORAL POSITION** available immediately in regulatory enzymology. Studies on the molecular and cellular properties of liver glucokinase: allosteric regulation by palmitoyl-CoA; slow conformational transitions and glucose cooperativity. Methods include fluorescence, circular dichroism, hepatocyte culture, and affinity labeling. **Dr. K. E. Neet, Department of Biochemistry, Case Western Reserve University, Cleveland, Ohio 44106.** *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately for research on processes controlling pH and ion activity in neural tissue as related to control of breathing. Doctoral degree in physiology, biomedical engineering, or related area required. Please send curriculum vitae and names of three references to: **Dr. J. Milton Adams, Box 377—Medical Center, University of Virginia, Charlottesville, Va. 22908.** Deadline for applications: 30 April 1984. *Equal Opportunity/Affirmative Action Employer.*

**VISITING PROFESSOR OF MEDICAL MICROBIOLOGY.** A temporary appointment to present about 20 lectures to medical students on bacterial pathogens, and to supervise a laboratory for 5 weeks, 5 hours weekly. Appointment may be made at any academic level for the months of May and June 1984. An office and laboratory space can be provided. Furnished campus housing is also available. To apply or to request more specific information, contact:

**Chairman  
Department of Microbiology and Molecular Genetics  
College of Medicine  
University of California  
Irvine, Calif. 92717**

*An Affirmative Action/Equal Opportunity Employer*

The Department of Psychology, Columbia University, has undertaken a search for a **SENIOR PSYCHOLOGIST** at the level of professor with tenure. The person we seek is an outstanding teacher with a recognized record of significant scientific contributions and an ongoing program of research. Our preferences as to area are for cognitive and physiological psychology, in that order. But we will consider applications from outstanding individuals whose specialties are not presently represented in the department, as long as they are consistent with the Department's overall orientation. *We are especially interested in considering applications from women and minority group members.* Applicants should submit their curriculum vitae along with the names of at least three individuals who are willing to write letters of recommendation to: **Personnel Search Committee, Department of Psychology, Box 29 Schermerhorn Hall, Columbia University, New York, N.Y. 10027.** *Columbia University is an Affirmative Action/Equal Opportunity Employer.*

**RESEARCH FACULTY—NEUROBIOLOGY AND BEHAVIOR.** The Department of Psychiatry of the Albert Einstein College of Medicine and Montefiore Medical Center seeks to recruit a new research faculty member in neurobiology and behavior. Applicants must be specialists in the area of **BRAIN FUNCTION, HORMONES, AND BEHAVIOR.** For consideration at the assistant professor level, applicants must have a Ph.D. or M.D. plus at least 2 years of relevant postdoctoral research experience, and show clear potential for outstanding research contributions to the field. For the associate professor level, applicants must have at least 5 years of experience at the assistant professor level plus an outstanding record of research publications and grant funding by outside agencies. The successful applicant will receive 2 years of initial support, after which he/she will be expected to provide own support from outside grant sources. Send curriculum vitae and representative publications to: **Dr. Eliot L. Gardner, Chairman, Search Committee, ALBERT EINSTEIN COLLEGE OF MEDICINE, 1300 Morris Park Avenue, Bronx, New York 10461.** *An Equal Opportunity Employer.*

## POSITIONS OPEN

The Department of Physiology and Biophysics at the University of Alabama in Birmingham has an opening for a **RESEARCH ASSOCIATE** 1 July 1984, for studies of regional oxygen supply and demand during hypoxia. Recent Ph.D. with interests in respiration and circulation and especially in problems relating to oxygen transport to tissues would be suitable. In addition, interest in the application of microcomputers to laboratory problems is desirable. Salary follows NIH guidelines for postdoctoral fellowships. Send curriculum vitae and two letters of reference to:

**Stephen M. Cain, Ph.D.  
Department of Physiology and Biophysics  
University of Alabama in Birmingham  
University Station  
Birmingham, Ala. 35294**

*The University of Alabama in Birmingham is an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSOCIATE

A 2-year position at the rank of **postdoctoral research associate** is available in the Department of Physiology and Biophysics of the University of Tennessee Center for the Health Sciences. Candidates should have a Ph.D. or M.D. degree, and a research interest in neuroendocrine regulatory mechanisms and anterior or posterior pituitary physiology. Send curriculum vitae, brief statement of research interests, and the names of three references to: **Dr. Clark Grosvenor, Professor, Department of Physiology and Biophysics, University of Tennessee Center for the Health Sciences, Memphis, Tennessee 38163.** *An Equal Opportunity/Affirmative Action Employer.*

**RESEARCH ASSOCIATE IN BIOPHYSICS.** A position is available 1 June 1984 for a person with at least 5 years of postdoctoral research experience to conduct molecular studies on gene regulation in yeast. Experience in recombinant DNA techniques and chemical and radiation mutagenesis is required. Send curriculum vitae and names and addresses of three references to: **Dr. T. R. Manney, Department of Physics, Cardwell Hall, Kansas State University, Manhattan, Kans. 66506.** Deadline: 31 March 1984. *An Equal Opportunity/Affirmative Action Employer.*

**RESEARCH ASSOCIATE** (postdoctoral) and graduate research assistant positions available immediately to study the organization and expression of genes for pectolytic and other polygalacturonate catabolic enzymes in plant pathogenic *Erwinia* spp. Excellent facilities are available for work using recombinant DNA technology, recombinational genetics, and immunological and biochemical techniques. Stipend is from an NSF grant and is highly competitive. Send curriculum vitae and three letters of reference to: **Dr. Arun K. Chatterjee, Department of Plant Pathology, Throckmorton Hall, Kansas State University, Manhattan, Kans. 66506.** *An Affirmative Action/Equal Opportunity Employer.*

Positions Ag-497 and AG498. **TWO RESEARCH ASSOCIATE POSITIONS:** Immunochemist/biochemist with experience in monoclonal antibody production, characterization, and enzyme immunoassay to develop diagnostic capabilities for haptens in complex organic matrices. Ph.D. with experience in purification, analysis, and conjugation of low molecular weight compounds to proteins is desirable. One-year renewable position; salary \$17,000 to \$20,000; available immediately. Submit résumé, transcripts, publication lists, and three letters of reference to: **Dr. J. Pestka, Department of Food Science and Human Nutrition, Michigan State University, East Lansing, Mich. 48824-1224.** *Affirmative Action/Equal Opportunity Employer.*

**RESEARCH ASSOCIATE** opening for a scientist with Ph.D. in biochemistry or neurochemistry and 2 to 3 years of postdoctoral research experience in the area of CNS oxygen toxicity and/or hyperoxia at the tissue and whole animal levels. Experience with tissue antioxidant defense mechanisms (such as vitamin C, vitamin E, or enzymes) is particularly desired. Candidates must also have proven ability to carry out independent research. Please send curriculum vitae, a detailed summary of research work and interests, and the names of three references promptly to:

**Research Administrator  
INSTITUTE FOR ENVIRONMENTAL MEDICINE  
14 Medical Laboratories/G2  
UNIVERSITY OF PENNSYLVANIA  
Philadelphia, Pa. 19104**

*Affirmative Action/Equal Opportunity Employer*

# POLYSACCHARIDE MICROBIOLOGIST

A challenging career opportunity currently exists in the expanding biotechnology section of the Celanese Research Company. The successful candidate will join our professional team of dedicated scientists engaged in the applications of state-of-the-art technology to the development of microorganisms and processes for the production of a variety of chemical products.

In addition to a Ph.D. in Biology, this position requires at least 2 years post doctoral experience in the production (e.g. fermentation), isolation and evaluation of microbial polysaccharides.

Located at our Corporate Research Center in Summit, N.J. this position offers a salary commensurate with credentials, and comprehensive benefits package in addition to a professionally stimulating environment.

To be considered for this exceptional opportunity, please forward a resume with salary history in confidence to: **Employee Relations, Dept. PK, Celanese Research Company, 86 Morris Ave., Summit, N.J. 07901.**



**CELANESE**

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

SUMMIT TECHNICAL CENTER

## Research Scientists Post-Doctoral Scientists

Advanced Genetic Sciences, Inc. (AGS) is an R & D company in Agricultural Biotechnology seeking Ph.D.-level **Research Scientists** and **Post-Doctoral Scientists** with background in the areas of Plant Tissue Culture, Genetics, Molecular Biology and/or Plant Physiology interested in basic and applied programs using: **Plant Cell Fusion, DNA Transformation and Clonal Selection in Cultured Cells.**

Above positions available in the Cell Genetics Unit of AGS's Plant Science Research Laboratories in Berkeley, California and in Manhattan, Kansas.

**MANAGEMENT** position available for an enterprising individual with the expertise and aptitude to initiate a program on **TISSUE CULTURE PROPAGATION**, at the Manhattan, Kansas facility.

Please send a resume, three letters of reference and academic transcripts to:



ADVANCED GENETIC SCIENCES

**Dr. Pal Maliga, Science Director,**  
**Advanced Genetic Sciences, Inc.**  
**P.O. Box 1373**  
**Manhattan, Kansas 66502**

# SCIENCE

## SCIENCE Introduces "The Four-Day Close"

We now offer our recruitment advertisers the convenience formerly found only in daily newspapers. We call it **"The Four-Day Close."** Instead of reserving space a month or more in advance, you now have until just four days before the issue is mailed to its 160,000-plus subscribers.

Film (right-reading, emulsion face down, 1/4 or 1/2 page size only) and insertion order must reach: **SCIENCE, Room 107, 1515 Massachusetts Avenue, N.W., Washington, D.C. 20005**, by 3 p.m. Mondays (except for legal holidays when material must reach Washington by 3 p.m. Fridays). Because space is limited, the four-day close page will be reserved on a first-come, first-served basis.

Now you don't have to wait for the professional you need **as soon as possible**. Nor must you advertise in a Sunday paper that pans a lot of sand, but not much gold. Scientific employers know that SCIENCE ads fill the job better. Now they fill it faster, too.

We call it **"The Four-Day Close."**

You can call it **"Instant Recruitment."**

For further information, **telephone Dick Charles at SCIENCE: 212-730-1050, or write: 1515 Broadway, New York, N.Y. 10036.**

\*At a 15% premium.

## AAAS Memberships and Subscriptions

• Whenever you write us about your membership or subscription, please attach a Science address label to ensure prompt service.

• **Mail to:** Membership and Subscription Records, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005.

☐ **Change of Address:** Please provide 6 weeks' notice. Paste an address label from a recent issue in the space provided. Print new address below.

☐ **Query:** If you have a question, place your address label here and attach this form to your letter.

• **To join or subscribe:** Mail this form with your payment, mark the appropriate boxes, and print your name and address in the space below. (For renewals, attach label.)

☐ **Membership rates** (individual only)  
☐ \$53 USA ☐ \$77 Canada ☐ \$80 Foreign  
☐ \$118 air-surface delivery via Holland

☐ **Subscriber rates**  
☐ \$90 USA ☐ \$114 Canada ☐ \$117 Foreign  
☐ \$155 air-surface delivery via Holland

☐ Payment enclosed ☐ Bill me later

Name Please print

Address

City State Zip

SA16R43

ATTACH  
LABEL  
HERE

## POSITIONS OPEN

**RESEARCH ASSISTANT/ASSOCIATE POSITION** available 1 June to work with ecosystems analysis/soil fertility project in Costa Rica on soil physical structure, soil solution sampling, and nutrient availability. Salary: \$16,000 to \$18,000, plus room and board while in Costa Rica. Send résumé and names of three referees to: **Dr. Phillip Sollins, Forest Science Department, Oregon State University, Corvallis, Ore. 97331.** Applications received after 1 May cannot be assured of consideration. *An Equal Opportunity/Affirmative Action Employer; complies with Section 504, Rehabilitation Act of 1973.*

## RESEARCH ASSOCIATE

A Ph.D. **neuropharmacologist** to join an active research program aimed at exploring the neurochemical basis of specific neurologic and/or psychiatric disorders. A strong interest and postdoctoral experience in the area of neuropeptides in synaptic transmission is preferred. The individual will be given the opportunity to design and conduct neurochemical studies within the framework of the ongoing neurotransmitter research program. Salary is competitive at the research assistant professor level. Available 1 July 1984. Send curriculum vitae and the names of three references to: **Phyllis Nash, Chair, Faculty Selection Committee, Department of Behavioral Medicine and Psychiatry, West Virginia University Medical Center, Morgantown, West Virginia 26506.** Deadline date for submission of application is 1 May 1984. *Equal Opportunity Employer.*

## U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) OPTS/Office of Pesticide Programs Hazard Evaluation Division

The Hazard Evaluation Division is recruiting for qualified **SCIENTISTS** in the fields of environmental chemistry, analytical chemistry, biochemistry, toxicology, pharmacology, physiology, microbiology, and biostatistics to perform analysis of pesticide exposure, environmental fate, and environmental and human health hazards.

Applicants must have at least a bachelor's degree or equivalent plus 1 year of appropriate directly related professional experience. Salary ranges from \$17,138 to \$55,538 per annum (GS-7 through GS-14), depending on qualifications. Applicants must have current OPM eligibility for all positions at GS-7 level and for all life-science positions GS-7 through -12.

Application submissions: Please submit a completed SF-171 and course listing available at the Federal Job Information Centers and federal agency personnel offices, to reach EPA no later than 15 April 1984, to: **EPA, 401 M Street, SW, Room 3020-PM-212, Washington, D.C. 20460, Attention: Jennifer Karey.** *An Equal Opportunity Employer.*

## SECTION HEAD Natural Product Chemist

International pharmaceutical start-up company in biotechnology seeks section head with 5 years of experience in the U.S. pharmaceutical industry. Outstanding leadership ability directing group leaders and Ph.D.'s in the extraction, isolation, purification, and structure elucidation of natural products, preferably from the marine environment. Should be thoroughly familiar with FDA regulations and latest analytical methods and instrumentation. Relocate to beautiful, unspoiled area of Florida's east coast. Call or send résumé to: **Barbara Young, P.O. Box 286, Morrisville, Pa. 19067; telephone 215-736-0071.**

## STATISTICIAN WATER RESOURCE RESEARCH

Excellent opportunity with Wyoming Water Research Center and Department of Statistics at the University of Wyoming, to perform statistical/mathematical research, consult in parametric and stochastic hydrology, interact with state agencies, and teach limited classes, including guidance of graduate student research. Requires a Ph.D. with demonstrated research ability in applied statistics, probability modeling, and stochastic processes related to water problems. Mathematical and computer applications, that is, simulation and programming, as well as prior consulting are also preferred. This tenure-track position provides rank and salary commensurate with experience. Our location in the Medicine Bow Range of the Rocky Mountains offers abundant recreational opportunities. Write: **Dr. Leon Borgman, Department of Statistics, University of Wyoming, Laramie, Wyoming 82071.**

*An Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

### SENIOR FACULTY POSITION

**Mental Retardation Research Center  
University of California, Los Angeles (UCLA)**  
An opening for a group coordinator exists in the Developmental Biology Group of the UCLA Mental Retardation Research Center. Candidates with very strong backgrounds in developmental biology of the central nervous system, including genetics, molecular biology, immunology, immunohistochemistry, or pharmacology are invited to apply. Appointment will be made at senior associate professor or professorial level. Compensation dependent upon academic rank and clinical qualification, if any.

Write: **N. A. Buchwald, Director, Mental Retardation Research Center, 760 Westwood Plaza, Los Angeles, Calif. 90024.**

*UCLA is an Equal Opportunity/Affirmative Action Employer.*

### VETERINARY PATHOLOGIST

**ASSISTANT ADJUNCT PROFESSOR:** A veterinary pathologist position is available at the California Primate Research Center, University of California, Davis. Salary: \$31,300 to \$32,500; level dependent upon qualifications. The appointee will be responsible for pathology service, one-half time conducting research in developmental and reproductive biology and development of an experimental program of special interest. Experience in nonhuman pathology and primate reproductive toxicology highly desired. Interaction/collaboration with Primate Medicine Unit and research teams in fetal and neonatal medicine, respiratory diseases, and many others required. Academic appointment in Department of Veterinary Medicine provides interaction with graduate and professional students. Staff includes three postgraduate pathology trainees and four staff research associates. Send complete curriculum vitae, including bibliography and three references, to: **Dr. Charles E. Cornelius, Director, California Primate Research Center, University of California, Davis, Calif. 95616.** Applications accepted through 30 April 1984, or until filled. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

## COURSES

### PREPARATIVE TECHNIQUES FOR TEM Center for Electron Microscopy (CEM) University of Illinois, Urbana-Champaign

4 to 9 June 1984—An intensive "hands-on" course designed to teach participants the basic skills required for biological specimen preparation for transmission electron microscopy.

For application and information, please contact: **Dr. Marcelle A. Gillott, CEM, University of Illinois, 78B Bevier Hall, 905 South Goodwin, Urbana, Ill. 61801; telephone: 217-333-2108.**

Approved for CMLE credits (ASCP).

## PROGRAMS

### JOINT GRADUATE PROGRAM IN TOXICOLOGY RUTGERS UNIVERSITY/ UMDNJ-RUTGERS MEDICAL SCHOOL

M.S. and/or Ph.D. program; more than 40 faculty with research in cellular/molecular mechanisms in carcinogenesis, immunotoxicology, hepatotoxicology, inhalation/respiratory toxicology, neurotoxicology, aquatic toxicology, and drug metabolism. Teaching assistantships and predoctoral fellowships available on a competitive basis. Contact: **Dr. Robert Snyder, Director, Graduate Program in Toxicology, Rutgers University, P.O. Box 789, Piscataway, N.J. 08854. Telephone: 201-932-3720.**

## FELLOWSHIPS

**POSTDOCTORAL TRAINEESHIPS IN PARASITOLOGY/VECTOR BIOLOGY** available in biochemistry and pharmacology of parasitic helminths (Dr. Saz); genetics, cytogenetics, and speciation of *Aedes* mosquitoes (Dr. Rai). Appointments start between 1 July and 1 October 1984. Candidates must be U.S. citizens or permanent residents. Send résumé and names of three references to: **Dr. Paul P. Weinstein, Department of Biology, University of Notre Dame, Notre Dame, Ind. 46556.**

## ASSISTANTSHIPS

### GRADUATE ASSISTANTSHIPS

Assistantships in Ph.D. program available for a limited number of qualified graduate students. All students supported by teaching or research assistantships carrying 12-month stipends of \$6750 (plus tuition and dependency allowances). Active research programs include behavior, biochemistry, biophysics, cell biology, development, genetics, microbiology, molecular biology, neurophysiology, and physiology. For further information, write: **Director of Graduate Admissions, Department of Biology, Wesleyan University, Middletown, Conn. 06457.**

**TEACHING ASSISTANTSHIPS/RESEARCH FELLOWSHIPS** for students studying for Ph.D. and M.S. degrees in all areas of chemistry, including clinical chemistry (clinical chemistry program affiliated with Cleveland Clinic Foundation). Stipend \$6200 to \$7200, plus tuition and fees. Contact: **Dr. Thomas Flechtner, Department of Chemistry, Cleveland State University, Cleveland, Ohio 44115; telephone: 216-687-2458.**

## FELLOWSHIPS

**A POSTDOCTORAL FELLOWSHIP** is available in protein crystallography related to active sites and regulatory mechanisms, including enzymes modified at the DNA level by recombinant techniques. Applicants from the area of small molecule crystallography will also be considered.

Applicants may write to: **Professor William M. Lipscomb, Gibbs Chemical Laboratory, Harvard University, Cambridge, Mass. 02138.** *Harvard University is an Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL FELLOWSHIPS IN PHYSIOLOGY OF PEPTIDE HORMONES (2 or 3 years), BEGINNING JULY 1984 OR EARLIER.

Opportunity available for Ph.D.'s in an interdisciplinary group, studying hitherto unknown polypeptides of human and animal pituitaries, and other tissues. Classic techniques of endocrine physiology, bioassay, and RIA development are utilized to identify and characterize the biologic role of these novel polypeptides. U.S. citizens/permanent residents, experienced in the above, are invited to apply. Stipend: \$27,000, plus travel. Send curriculum vitae and names of three references to: **Dr. A. F. Parlow, Harbor—UCLA Medical Center, 1000 West Carson Street, Torrance, Calif. 90509.**

**POSTDOCTORAL FELLOWSHIP.** The Anatomy Department at the Medical College of Georgia offers a postdoctoral research position. The successful applicant may choose area of concentration. One academic quarter teaching medical students will be required. Doctoral candidates or recent graduates may apply by contacting:

**Dr. Thomas H. Rosenquist  
Acting Chairman  
Department of Anatomy  
Medical College of Georgia  
Augusta, Georgia 30912  
Telephone: 404-828-2016**

*An Equal Opportunity/Affirmative Action Employer. J1519.*

### POSTDOCTORAL FELLOWSHIPS IN BASIC MECHANISMS OF CARCINOGENESIS AND MUTAGENESIS AT THE UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Four fellowships are available in a multidisciplinary research training program focusing on the molecular, cellular, genetic, and developmental aspects of cells responding to perturbations of their milieu. The faculty include: **J. Cleaver (DNA repair genes), R. B. Painter (DNA replication), R. Pedersen (early mammalian development), Z. Werb (phagocytes; extracellular matrix), and S. Wolff (cytogenetics).**

Stipends are funded through a training program sponsored by the NIEHS. Appointments to begin July 1984. The requirements are U.S. citizenship or permanent residency, and Ph.D. degree or equivalent. Send résumé, graduate transcript, statement of research interests, and three letters of recommendation by 15 April 1984 to: **Professor Z. Werb, Laboratory of Radiobiology and Environmental Health, University of California, San Francisco, Calif. 94143.** *An Equal Opportunity/Affirmative Action Employer.*

# Biomedical Scientists

The Lawrence Livermore National Laboratory is an R&D facility operated by the University of California for the U.S. Department of Energy. Located in the San Francisco East Bay Area, the Lab employs 8,000 individuals engaged in challenging basic and applied R&D. Currently, we are seeking Biomedical Scientists to join us in the following areas:

## Immuno Chemist

In this position you will work on synthesizing haptencarrier antigens, designing screening assays for hybridoma selection, characterizing the antibody specificity and applying the antibodies in new immunoassays. Antibodies will be used in conventional fluorescence and enzyme immunoassays as well as in fiber-optic based probes for remote, realtime monitoring of antigens in environmental samples. Antigens include pesticides, halogenated hydrocarbons, modified nucleic acids and trace metals.

For this position we require a PhD or equivalent work experience in Chemistry or Biochemistry as well as a strong background in the structural chemistry of combining sites, protein immobilization on solid supports, nucleotide chemistry and hapten immunochemistry.

## Microbiologist/ Recombinant DNA Scientist

This challenging position offers the self-motivated scientist the opportunity to apply microbiological and recombinant DNA techniques to programs in basic energy science, geochemistry or chemical detoxification. Additionally, this individual will provide support to a core recombinant DNA facility and projects related to the construction and characterization of chromosome-specific human gene libraries.

For this position we require a PhD or equivalent work experience in Microbiology, Biochemistry, Genetics or a related field, with experience in basic or applied microbiology and the application of recombinant DNA techniques. A working knowledge and experience with a variety of microorganisms is highly desirable.

## Postdoctoral Research Fellow Flow Cytometry/Hematology

In this position you will be involved in all aspects of a new project to identify **flow cytometric** probes that correlate with cell function (particularly with clonogenic potential **in vitro**) for cultured cells and for mouse bone marrow. Biological aspects of the project involve the use of clonogenic assays for progenitor cells from bone marrow. Biophysical aspects involve multiparameter indexed cell sorting, image analysis and hierarchical data analysis. Success in these areas will allow detailed study of the cytokinetic response to anticancer agents of the cytometrically distinct subpopulations.

For this position we require a PhD or equivalent work experience in Biology, Hematology, Microbiology and/or Biophysics. Experience with tissue culture is highly desirable.

## Postdoctoral Research Fellow Cytogenetics

In this position you will work on projects related to the induction, mechanism and significance of sister chromatid exchange and chromosomal aberrations induced by environmental agents in humans. You will be involved with an active and diverse cytogenetics group and be expected to participate in the design, implementation, analysis and publication of experiments.

For this position we require a PhD or equivalent work experience in Cell Biology, Genetics or a related field with interest in human population cytogenetics as applied to research in environmental mutagenesis.

To apply for these positions interested applicants are invited to send their curriculum vitae to: **Earl G. Morrell, Professional Employment Division, Lawrence Livermore National Laboratory, Dept. KSC-034, P.O. Box 5510, Livermore, California 94550.**

U.S. Citizenship is required.  
An equal opportunity employer m/f/h/v.

University of California



**Lawrence Livermore  
National Laboratory**





## Every powder, crystal, flake, and grain Kodak makes is a solution.

The next time you face a problem in the laboratory, maybe the solution is a chemical from Kodak. We now supply not only organic chemicals, but hundreds of inorganic chemicals too—plus a growing number of biochemicals.

Our new publication—"KODAK Inorganic Chemicals"—lists more than 250 "solutions" available from Kodak Laboratory and Specialty Chemicals. Each one features the same quality, purity, and consistency as our organic chemicals.

What's more, with ON TIME, our new direct-shipment service, your dealer can see that your rush chemi-

cal needs get the attention they deserve. When you order a chemical that your dealer doesn't have in stock, the order can be transmitted to us. We'll ship it direct to you—usually within 24 hours.

Find out how our "solutions" can help you become a more creative chemist. Send for your free copy of "KODAK Inorganic Chemicals" today.

**KODAK LABORATORY & SPECIALTY CHEMICALS**

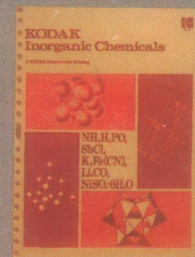


### The creative source.

**The ready source**—dealers handling KODAK Laboratory Chemicals: American Scientific & Chemical; American Scientific Products; Bioclinical Laboratories NJ; B.C. Chemicals; Brand-Nu Laboratories, Inc.; Bryant Laboratory, Inc.; CAMX Scientific; Doe & Ingalls, Inc.; Fisher Scientific; Mays Chemical; Midland Scientific, Inc.; North-Strong Division; Preiser Scientific; Sargent-Welch Scientific; Scientific & Industrial Sales & Service, Inc.; Specialty Chemicals, Inc.; Spectrum Chemical Corp.; VWR Scientific Inc.; Ward's Natural Science Establishment, Inc.

© Eastman Kodak Company, 1982. Kodak Laboratory and Specialty Chemicals, Rochester, NY 14650.

Send to: Eastman Kodak Company,  
Kodak Laboratory & Specialty Chemicals,  
Dept. 412-L, Rochester, NY 14650



Please send me my free copy of  
"KODAK Inorganic Chemicals" (JJ-15).

NAME \_\_\_\_\_  
TITLE \_\_\_\_\_  
FIRM \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_  
STATE \_\_\_\_\_  
ZIP \_\_\_\_\_