<table>
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<tr>
<th>Sponsor</th>
<th>Meeting/themes</th>
<th>Deadlines</th>
<th>Location</th>
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<tr>
<td>ASBMB</td>
<td>ASBMB Annual Meeting</td>
<td>April 5, 1994&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Washington, D.C.</td>
<td>FASEB/Office of Scientific Meetings and Conferences&lt;sup&gt;b&lt;/sup&gt;</td>
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<td></td>
<td>May 21–25, 1994</td>
<td>April 23, 1994&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>May 13, 1994&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>ASBMB Fall Conferences*</td>
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<td>October 7–10, 1994</td>
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<td>Lake Tahoe, Nevada</td>
<td>ASBMB Society Office&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>October 14–17, 1994</td>
<td></td>
<td>Whistler, B.C., Canada</td>
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<td>FAX: 301-571-1824</td>
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<tr>
<td>October 28–31, 1994</td>
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<td>Lake Tahoe, Nevada</td>
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<td>*Topics: To be announced</td>
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<tr>
<td>ASIP</td>
<td>COURSE: Concepts in Molecular Biology</td>
<td></td>
<td>Bethesda, Maryland</td>
<td>ASIP Office&lt;sup&gt;a&lt;/sup&gt;</td>
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<td></td>
<td>October 27–30, 1994</td>
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<td>Phone: 301-530-7130</td>
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<td>FAX: 301-571-1879</td>
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<td></td>
<td>Experimental Biology '94</td>
<td>April 24–28, 1994</td>
<td>Anaheim, California</td>
<td>FASEB/Office of Scientific Meetings and Conferences&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>AAI</td>
<td>Experimental Biology '94</td>
<td>April 24–28, 1994</td>
<td>Anaheim, California</td>
<td>FASEB/Office of Scientific Meetings and Conferences&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td>Biophysical Society</td>
<td>Biophysical Society Meeting</td>
<td>January 21, 1994&lt;sup&gt;a&lt;/sup&gt;</td>
<td>New Orleans, Louisiana</td>
<td>FASEB/Office of Scientific Meetings and Conferences&lt;sup&gt;b&lt;/sup&gt;</td>
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<td></td>
<td>March 6–10, 1994</td>
<td>January 28, 1994&lt;sup&gt;a&lt;/sup&gt;</td>
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<sup>a</sup> 9650 Rockville Pike, Bethesda, MD 20814, USA  
<sup>b</sup> Abstract deadline  
<sup>c</sup> Advance Registration  
<sup>d</sup> Housing  
<sup>e</sup> Phone: 301-530-7010. FAX: 301-530-7014  
<sup>f</sup> Advance registration: March 3, 1994; housing: March 24, 1994  
<sup>g</sup> Placement
A comprehensive calendar is published 4 times a year (January, April, July, and October); new listings appear in other months. The calendar lists open meetings of a biological topic: conferences, symposia, courses, and workshops. To have your event listed, please include the date and year of the meeting, its title and location, and a contact name and address and send the information to Calendar Editor, The FASEB Journal, 9650 Rockville Pike, Bethesda, MD 20814, USA. An asterisk (*) denotes a new listing.

1994

22-25 February. Coronary Artery Spasm, New York, New York, USA. (NYAS, 2 E 63rd St., New York, NY 10021, USA)

*28 February-2 March. Dietary Restriction: Implications for the Design and Interpretation of Toxicity and Carcinogenicity Studies, Washington, DC, USA. (D. Dalibera, ILSI Risk Science Institute, 1126 Sixteenth St., N.W., Washington, DC 20036, USA)

28 February-2 March. The Human Genome Project: Commercial Implications, San Francisco, California, USA. (Cambridge Healthtech Inst., 1000 Winter St., Ste. 3700, Waltham, MA 02154, USA)


3-5 March. Ninth International Conference on Monoclonal Antibody Immunocoagulants for Cancer, San Diego, California, USA. (C. Jones, Prof. Conf. Mgmt., Inc., 7916 Convoy Ct., San Diego, CA 92111, USA)

6-10 March. Biophysical Society Annual Meeting, New Orleans, Louisiana, USA. (FASEB Oef. of Scientific Mgs. and Conf., 9650 Rockville Pk., Bethesda, MD 20814-3998, USA)

15-18 March. 3rd Interlaken Conference on Advances in Production of Recombinant Protein, Interlaken, Switzerland. (FASEB Conference Service, PO. Box CH-4005 Basel, Switzerland)

20-25 March. International Symposium on Dementia in Parkinson's Disease, Jerusalem, Israel. (A. Kocrony, PO. Box 50006, Tel Aviv 61500, Israel)

21-04 March. 13th Joint Meeting British Endocrine Societies, Bournemouth, United Kingdom. (J. Crompton, British Endocrine Societies, 171/8 The Courtyard, Woodlands, Almondsbury, Bristol BS12 8NQ United Kingdom)

27-30 March. IFAC Symposium on Modeling and Control in Biomedical Systems, Galveston, Texas, USA. (IFAC Biomedical Symposium, U. of Texas Medical Branch, Box 53176, Galveston, TX 77555-5176, USA)

27-31 March. Stable Isotope Applications in Biomolecular Structure and Mechanisms, San Francisco, California, USA. (J. Trewella, Stable Isotope Applications Conf., MS C345, Los Alamos Natl. Library, Los Alamos, NM 87545, USA)

5-9 April. Society for Biomaterials 20th Annual Meeting & Exhibition, Boston, Massachusetts, USA. (Soc. for Biomaterials, Box. Mgmt. Oef., 6524 Walker St., Ste. 215, Minneapolis, MN 55426-4245, USA)


10-15 April. BIOTECH '94—Biotechnology Against AIDS, Florence, Italy (CLAS International, Via Pac 8, 25122, Brescia, Italy)

10-15 April. Third Annual Wound Care Symposium, Richmond, Virginia, USA. (C. Hettema, Obj. of Med. Ed., Sch. of Med., Box 48, MCV Station, Richmond, VA 23298-0048, USA)

14-15 April. Scientists, Educators, and National Standards—Action at the Local Level, Atlanta, Georgia, USA. (D. Windley, Sigma Xi, PO. Box 19575, Research Triangle Park, NC 27709, USA)

23-24 April. Pharmacology '94 at Experimental Biology '94; ASPET Colloquium: Multiple Phosphodiesterases, Newport Beach, California, USA. (K. Croker, ASPET, 9650 Rockville Pk., Bethesda, MD 20814-3995, USA)

24-28 April. Experimental Biology '94, Anaheim, California, USA. (FASEB Oef. of Scientific Mgs. and Conf., 9650 Rockville Pk., Bethesda, MD 20814-3998, USA)

25-26 April. International Symposium on Inherited Epidermolysis Bullosa, Chapel Hill, North Carolina, USA. (J. Fine, Dept. of Dermatology, The U. of North Carolina at Chapel Hill, 137 NC MH, CB# 7600, Chapel Hill, NC 27514, USA)

26 April-1 May. Third International Conference on Nerve Growth Factor and Related Molecules, Lake Louise, Alberta, Canada. (T. Maglietta, NFG 94 Conf., Montreal Neurological Inst., 3801 University St., Rm. 851, Montreal, Quebec H3A 2B4, Canada)


8-13 May. HPLC '94: 18th International Symposium on Column Liquid Chromatography, Minneapolis, Minnesota, USA. (HPLC/cie Barr Enterprises, PO. Box 279, Wallingford, CT 21793, USA)

9-13 May. 5th International Symposium on Adenosine and Adenine Nucleotides: From Molecular Biology to Integrative Physiology, Philadelphia, Pennsylvania, USA. (Secretary, 5th Ind. Symposium on Adenosine and Adenine Nucleotides, PO. Box 933, Havertown, Pennsylvania 19083, USA)


14-18 May. 12th International Convocation on Immunology Transfusion Immunology and Medicine, Buffalo, New York, USA. (R. Cunningham, 216 Sherman Hall, SUNY at Buffalo, 3453 Main St., Buffalo, NY 14214-3078, USA)

18-20 May. The Wound Healing Society Annual Meeting, San Francisco, California, USA. (PO. Box 513 Parma Ave., Box 0522, San Francisco, CA 94143-0522, USA)


*20-21 May. ASMBB Satellite Meeting: Structure and Function of Protein Kinases and Phosphatases, Washington, D.C., USA. (FASEB Oef. of Scientific Mgs., 9650 Rockville Pk., Bethesda, MD 20814-3998, USA)

20-23 May. International Conference on Heart Failure: Frontiers of Molecular, Cellular and Clinical Cardiology, Winnipeg, Canada. (Secretariat, Div. of Cardiovascular Sciences, St. Boniface General Hospital Res. Ctr., 351 Tache Ave., Winnipeg R2H 2A6, Canada)

21-22 May. ASMBB/ISSX Joint Symposium '94: The Cytochromes P450: Structure, Function, Regulation, and Genetics, Washington, DC, USA. (ISSX Oef., PO. Box 3, Cabin John, MD 20818, USA)

21-24 May. The 3rd International Conference on the Extracellular Matrix of the Reproductive Track, Shizuoka, Japan. (Y. Mori, Dept. of Biochemistry,
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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>May 21-25</td>
<td>ASMBS Annual Meeting</td>
<td>Washington, DC, USA</td>
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<td>May 22-27</td>
<td>9th Meeting on Vitamin B6 and Carnosyn</td>
<td>Capri, Italy</td>
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<td>May 22-27</td>
<td>8th International Symposium on Purine and Pyrimidine Metabolism</td>
<td>Bloomington, Indiana, USA</td>
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<td>May 25-27</td>
<td>May. Endocrinology Under 35</td>
<td>Rome, Italy</td>
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<td>May 29-3 June</td>
<td>39th ASMS Conference on Mass Spectrometry and Allied Topics</td>
<td>Chicago, Illinois, USA</td>
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<td>June 1-3</td>
<td>Second International Symposium on Hormone and Veterinary Drug Analysis</td>
<td>Brussels, Belgium</td>
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<td>June 4-9</td>
<td>FASEB Summer Conference: Protein Folding and Assembly</td>
<td>Santa Rockville, USA</td>
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<tr>
<td>June 6-9</td>
<td>Third International Symposium on Pediatric Pain</td>
<td>Philadelphia, Pennsylvania, USA</td>
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<td>June 6-10</td>
<td>Cardiovascular Disease '94: Molecular and Cellular Mechanisms</td>
<td>Washington, DC, USA</td>
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<td>June 10-12</td>
<td>9th International Conference on Prostaglandins and Related Compounds</td>
<td>Florence, Italy</td>
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<td>June 11-16</td>
<td>FASEB Summer Conference: Neural Mechanisms in Cardiovascular Regulation</td>
<td>Dresden, Germany</td>
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<td>June 12-15</td>
<td>9th International Congress on Protein and Quino-proteins</td>
<td>Capri, Italy</td>
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<td>June 22-24</td>
<td>FASEB Summer Conference: Purine and Pyrimidine Metabolism</td>
<td>Rockville, MD, USA</td>
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<td>June 25-27</td>
<td>International Congress on Immunology and Superfamily Structure and Function</td>
<td>Capri, Italy</td>
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<td>June 29-30</td>
<td>FASEB Summer Conference: The Biology of Cytokines</td>
<td>Santa Rockville, MD, USA</td>
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<td>July 2-7</td>
<td>FASEB Summer Conference: Nutritional Control of Gene Expression</td>
<td>Santa Rockville, USA</td>
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<td>July 9-14</td>
<td>FASEB Summer Conference: Neuropharmacology</td>
<td>Santa Rockville, MD, USA</td>
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<td>July 29-31</td>
<td>4th International Congress on Alcoholism and Related Disorders</td>
<td>Minneapolis, Minnesota, USA</td>
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<td>July 29-31</td>
<td>7th International Congress on Obesity</td>
<td>Toronto, Ontario, Canada</td>
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<td>Aug 1-7</td>
<td>FASEB Summer Conference: Smooth Muscle</td>
<td>Columbus Mountain, USA</td>
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<td>Aug 4-9</td>
<td>10th International Symposium on Gas trointestinal Hormones</td>
<td>Santa Barbara, California, USA</td>
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<td>Aug 21-28</td>
<td>10th International Congress on Mass Spectrometry and Life Sciences</td>
<td>San Francisco, California, USA</td>
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<td>Aug 18-23</td>
<td>9th International Congress on Biochemistry &amp; Molecular Biology</td>
<td>New Delhi, India</td>
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<td>Aug 21-24</td>
<td>Society for Leukocyte Biology 50th National Meeting</td>
<td>Sarasota, Florida, USA</td>
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<tr>
<td>Aug 29-30</td>
<td>11th International Symposium on Mass Spectrometry and Lipid Metabolism</td>
<td>Boston, MA, USA</td>
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<td>Aug 10-30</td>
<td>12th International Symposium on the Biochemistry of Industrial Microorganisms</td>
<td>Minneapolis, Minnesota, USA</td>
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<td>Aug 20-25</td>
<td>International Congress on Ribosomes</td>
<td>Victoria British Columbia, Canada</td>
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<td>Sep 4-8</td>
<td>Central European Anesthesia Congress</td>
<td>Vienna, Austria</td>
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<tr>
<td>Sep 22-27</td>
<td>9th International Conference on Second Messengers and Phosphoproteins</td>
<td>Nashville, Tennessee, USA</td>
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<td>Sep 28-2 October</td>
<td>9th International Conference on Mass Spectrometry and Lipid Metabolism</td>
<td>Minneapolis, Minnesota, USA</td>
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<td>Sep 21-28</td>
<td>13th International Symposium on Mass Spectrometry and Lipid Metabolism</td>
<td>San Francisco, California, USA</td>
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Courses and Workshops 1994

- 21-28 January: Transposition and Site-Specific Recombination: Mechanism & Biology, Park City, Utah, USA
- 25-28 August: 9th International Symposium on Mass Spectrometry and Lipid Metabolism, Minneapolis, Minnesota, USA
CALENDAR

22-25 January. Mass Spectrometry in Polymer and Material Science, Sanibel Island, Florida, USA. (J. A. Sjoberg, ASMS, 815 Don Gaspar, Santa Fe, NM 87501, USA)

23-30 January. Advances and Controversies in Bone Marrow Transplantation, Keystone, Colorado, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

31 January-7 February. Stem Cells, Keystone, Colorado, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

6-13 February. Membrane to the Nucleus, Keystone, Colorado, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

7-13 February. Steroid/Thyroid/Retinoic Acid Super Gene Family, Taos, New Mexico, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

13-20 February. Basic Aspects of Transcription, Keystone Colorado, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

*13-20 February. The Eukaryotic Nucleus, Tamarron, Colorado, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

*13-20 February. Nucleic Acid-Protein Interactions, Tamarron, Colorado, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

*13-20 February. Tumor Suppressor Genes, Taos, New Mexico, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

*13-20 February. Human Tumor Viruses, Taos, New Mexico, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

*20-25 February. The Cellular and Molecular Regulation of the Acute Inflammatory Response, Tamarron, Colorado, USA. (Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA)

26 February. 1994 Sleep Medicine Update, La Jolla, California, USA. (Dept. of Academic Affairs, 4030, Scripps Clinic and Raph. Found., 10666 N. Torrey Pines Rd., La Jolla, CA 92037, USA)

3-4 March. Anaerobic Bacteriology, Rockville, Maryland, USA. (ATCC/Workshop Mgr., 12301 Parklawn Dr., Rockville, MD 20852, USA)


14-18 March. Recombinant DNA Techniques, New Brunswick, New Jersey, USA. (Ofc. of Continuing Professional Ed., Cook Coll., PO. Box 231, New Brunswick, NJ 08903, USA)

*14-18 March. Recombinant DNA Techniques, New Brunswick, New Jersey, USA. (Ofc. of Continuing Professional Ed., Cook Coll., PO. Box 231, New Brunswick, NJ 08903, USA)

5-8 April. In Vitro Toxicology: Techniques & Applications, Rockville, Maryland, USA. (ATCC/Workshop Mgr., 12301 Parklawn Dr., Rockville, MD 20852, USA)

20-22 April. Cell Culture & Hybridomas: Quality Control & Cryopreservation Techniques, Rockville, Maryland, USA. (ATCC/Workshop Mgr., 12301 Parklawn Dr., Rockville, MD 20852, USA)

*24-28 April. Pharmacology '94 at Experimental Biology '94; Genetic Manipulation in Pharmacology: Therapeutic Implications for Human Gene Therapy, Anaheim, California, USA. (K. Croker, ASPET, 9650 Rockville Pk., Bethesda, MD 20814-3995, USA)

27-29 April. Freezing & Freeze-Drying of Microorganisms, Rockville, Maryland, USA. (ATCC/Workshop Mgr., 12301 Parklawn Dr., Rockville, MD 20852, USA)

*16-20 May. Recombinant DNA: Techniques & Applications, Rockville, Maryland, USA. (ATCC/Workshop Mgr., 12301 Parklawn Dr., Rockville, MD 20852, USA)

*22-29 May. LC/MS: The Art and the Practice, Santa Fe, New Mexico, USA. (J. Sjoberg, American Society for Mass Spectrometry, 815 Don Gaspar, Santa Fe, NM 87501, USA)

22-29 May. GC/MS for Environmental Analysis, Santa Fe, New Mexico, USA. (J. Sjoberg, American Society for Mass Spectrometry, 815 Don Gaspar, Santa Fe, NM 87501, USA)

22-29 May. Practical MS/MS Analysis, Santa Fe, New Mexico, USA. (J. Sjoberg, American Society for Mass Spectrometry, 815 Don Gaspar, Santa Fe, NM 87501, USA)

*24-27 May. Polymerase Chain Reaction (DNA Sequencing PCR) Applications/Cycle, Rockville, Maryland, USA. (ATCC/Workshop Mgr., 12301 Parklawn Dr., Rockville, MD 20852, USA)


*6-10 June. Recombinant DNA Techniques, New Brunswick, New Jersey, USA. (Ofc. of Continuing Professional Ed., Cook Coll., PO. Box 231, New Brunswick, NJ 08903, USA)

*6-10 June. Recombinant DNA Techniques, Bloomington, Indiana, USA. (J. Clay, Div. of Continuing Studies, Owen Hall 204, Indiana U., Bloomington, IN 47405, USA)


*13-17 June. Techniques in Molecular Biology: DNA Sequencing and PCR and RFLP Analysis, Bloomington, Indiana, USA. (J. Clay, Div. of Continuing Studies, Owen Hall 204, Indiana U., Bloomington, Indiana, USA)

19 June-2 July. NATO Advanced Study Institute: Materials Science and Implant Orthopedic Surgery, II, Crete, Greece. (N. Kostovsky, Dept. of Pathology, UCLA Med. Ctr., 10833 Le Conte Ave., Los Angeles, CA 90024-1832, USA)

*21-24 June. Hybridoma Technology & Monoclonal Antibody Product Development, Rockville, Maryland, USA. (ATCC/Workshop Mgr., 12301 Parklawn Dr., Rockville, MD 20892, USA)

*9-12 August. Fermentation Microbiology, Rockville, Maryland, USA. (ATCC/Workshop Mgr., 12301 Parklawn Dr., Rockville, MD 20852, USA)

27-30 October. ASIP Course: Concepts in Molecular Biology, Bethesda, Maryland, USA. (ASIP O. 9650 Rockville Pk., Bethesda, MD 20814-3993, USA)


Reader's Telephone Guide to Publishers

Academic Press, Inc. 800-321-5068
Bio-OS Scientific Publishers, Inc. 44-865-726286
CRC Press, Inc. 407-994-0555
Elsevier Science Publishing Co., Inc. (NY) 212-989-5900
Humana Press, Inc. 201-256-1699
John Wiley & Sons 212-850-6000
Oxford University Press 800-451-7556
R.G. Landes Co. 512-863-7762
Raven Press 212-930-9541
The MIT Press 800-356-0343
VCH Publishers 800-367-8249
The FASEB Journal

Information for Authors*

The FASEB Journal (FJ) is the official publication of the Federation of American Societies for Experimental Biology (FASEB). FJ publishes two types of articles: 1) brief, definitive, and essentially final research communications of fundamental interest and significance that are considered to warrant prompt publication; and 2) state-of-the-art reviews, drawn, as far as possible, from the topics of the FASEB symposia.

Manuscripts containing original communications, or proposals for reviews, should be sent to the Editor-in-Chief, Dr. W. J. Whelan, The FASEB Journal, M823, P.O. Box 106129, Miami, FL 33101-6129, USA, or if a private courier is used, to the University of Miami School of Medicine, Gautier Building, Room 317, 1011 N.W. 15th Street, Miami, FL 33136-1019, USA.

Original Research Communications

FJ publishes brief, definitive, original, and essentially final research communications that are considered to warrant prompt publication.

The aim of FJ is to illustrate the unity of biology and the interdependence of its constituent disciplines. Therefore, in keeping with this policy, and to qualify for acceptance, an original communication must not only be of outstanding scientific quality but must also be of fundamental interest.

The subject coverage of FJ is illustrated by the following disciplinary areas: biochemistry, biophysics, cell biology, developmental biology, genetics, immunology, neurobiology, nutrition, pathology, pharmacology, and physiology.

Papers should begin with an abstract written for the general reader and be free from jargon. They should continue with an introduction followed by the results and discussion; they should conclude with a succinct bibliography. Methods may be included within the figure legends and tables or as a separate section. Papers may not occupy more than five printed pages (equivalent of 5000 words and inclusive of illustrations and diagrams) and will be returned as unacceptable if they exceed this limitation.

Papers (an original and four copies) should be sent to the Editor-in-Chief. Prompt publication of acceptable papers will be ensured by careful conformity to the instructions to contributors and the expeditious return of proofs.

State-of-the-Art Reviews

FJ devotes a major portion of its pages to research reviews. These originate in three ways. First, the Editorial Board selects from the symposia presented at the annual Experimental Biology or other FASEB Society meetings those cutting edge topics that are considered to be especially suitable for exposure in this broadly based publication medium. The organizers of the symposia, so selected, are invited to review the topic in a succinct form, not as a meeting report, but rather by emphasizing the growing points and directions of the research. Plenary lecturers receive an automatic invitation to record their lecture in the FJ. In this way the journal serves as a window on topics of current interest to the Societies. The Editorial Board then moves to complete the FJ's contemporary coverage of the new biology by inviting reviews on topics not currently covered by Society activities. Finally, volunteered reviews are welcomed that embody the principles of timeliness, topicality, and breadth interest. A proposal for such a review, not a completed review, should be sent to the Editor-in-Chief, who will advise on its acceptability.

Hypotheses

These articles cater to hypotheses on topics of significant current interest that lie within the scope of the journal. Such articles should not depend to any significant extent on unpublished data and are subject to a normal reviewing process. They should conform to the style of the journal and be prefaced by an abstract of 100-200 words. The total length may not exceed 3000 words or the equivalent in terms of illustrations and tabular matter and inclusive of the bibliography.

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Authors will be asked to certify that an original communication has not been published elsewhere as an abstract and is not being considered for publication elsewhere, and that the paper will not be submitted for publication elsewhere until its acceptability for FJ has been decided. Authors of reviews will be asked to certify that the review has not been published, is not being considered elsewhere, and will not be submitted elsewhere until its acceptability for FJ has been decided. If the submitted paper depends significantly on articles in press, copies of those articles should accompany submitted manuscripts for the benefit of the referees.

Style of Manuscript

General Instructions

1) Manuscripts should be typewritten, with double spacing and 1-inch margins, on 8½ × 11 inch bond paper. Computer printouts of manuscripts must be readable; a dot-matrix printer is generally unacceptable. Metric units should be used. An original and four copies, with figures and tables, should be submitted to the Editor-in-Chief. Pages should be arranged and numbered consecutively in the following order: title page, footnotes, abstract of up to 200 words and indexing key words (maximum of five), text, references (double-spaced), figure legends, tables, and illustrations.

2) The title page should show: title of article; author(s); laboratory or institution of origin with city and state or country; complete address for mailing proofs and telephone and fax numbers for corresponding author; and shortened title (maximum of 50 characters and spaces) for the running foot.

3) The title should be brief (no more than 90 characters, including letters, spaces, and punctuation) and informative. Do not use phrases in which more than three words modify another word (use "Renal hemodynamic effects of atrial natriuretic factor" rather than "Atrial natriuretic factor renal hemodynamic effects"). Serial titles, such as "Interferon, IX," are not permitted, except as a footnote.

4) The abstract, a paragraph of no more than 200 words, should be written for the general readership and be free from jargon. It should be self-explanatory and suitable for use by abstracting services without rewriting. It should state the purpose and major findings and conclusions of the study. Citation of references should be avoided; if used, include bibliographic information.

5) Footnotes, double-spaced, should be assembles on one or more separate sheets; they should be numbered consecutively throughout.

6) The text should be readable, clear, and concise. Any corrections should be neat and legible. Standard nomenclature should be used; unfamiliar or new items should be defined at first mention. (See Abbreviations section below.) Foreign words not in general use in the English language should be underlined for italic type; italics should not be used for emphasis. Latin plurals should not be used if the English equivalent has been accepted, e.g., lamellas, not lamellae. Webster's New Collegiate Dictionary (1977) should be followed for spelling, compounding, and word separation.

7) Drugs and trade names. The chemical or generic name should precede the abbreviation of a drug name the first time it appears. Proprietary (trademarked) names should be capitalized and the spelling carefully checked. Trade names of chemicals or equipment should also be capitalized. Authors should supply an acceptable scientific name in every case as an alternative to the trade name. Trade names should not ordinarily be used in titles.

8) Active voice rather than passive voice should be used whenever possible. Present tense is used for references to existing knowledge or accepted concepts, and for proven conclusions from the present work; past tense is used when describing experimental work on which the paper is based.

Abbreviations, Symbols, and Terminology

Each author must include, as a footnote to the first page of text, a list of any new or special abbreviations used in the paper, with the spelled-out form and definition if necessary for clarity. For information on style in general, authors are referred to the CBE Style Manual, 5th ed. (1983), prepared by the CBE Style Manual Committee (Bethesda, Md.). Chemical and biochemical terms and abbreviations should be in accordance with the recommendations for usage by the International Union of Pure and Applied Chemistry (IUPAC), the International Union of Biochemistry (IUB), and their Committee on Nomenclature [see Biochemical Nomenclature and Related Documents, a compendium of IUPAC-IUB documents, available from The Biochemical Society, P.O. Box 32, Commerce Way, Colchester, CO2 8HP, Essex, UK]. Isotope specifications should conform to the IUPAC system, with the mass number placed as a superscript preceding the chemical symbol as ¹²C. Genotypes are italicized; phenotypes are not. Enzymes should be identified with their EC number and recommended name, in accordance with the recommendations of the IUB; see Enzyme Nomenclature: Recommendations (1984) of the Nomenclature Committee of the International Union of Biochemistry (Orlando, FL: Academic; 1984). For specialized fields, see: "Glossary on respiration and gas exchange" (J. Appl. Physiol. 34: 549–556; 1973); "Glossary of terms for thermal physiology" (J. Appl. Physiol. 35: 941–961; 1973); The ACS Study Guide: a Manual for Authors and Editors; edited by J. S. Dodd and M. C. Brogan (Washington, DC: American Chemical Society; 1986); A Manual for Authors of Mathematical Papers (Providence, RI: American Mathematical Society; 1980); Style Manual for Guidance in the Preparation of Papers for Journal Published by the American Institute of Physics and its Member Societies, 3rd ed. (New York: American Institute of Physics; 1978).

The following abbreviations or acronyms may be used without explanation; others should be defined at first use in the text.

80 A
A ampere; blood group; chromosome group
a angstrom
a acceleration; activity, relative
AB blood group
ac alternating current
A + h amper-hour
AMP, ADP, ATP
AMPase, ADPase, ATase
AMPase, ADPase, ATase
adeno phosphates
ag aqueous
atm standard atmosphere
at. wt. atomic weight
BGG bacille Calmette-Guérin
bp boiling point
Bq becquerel
Btu British thermal unit
Coulomb
C °C Celsius
c centi-
calorie
cAMP, cGMP, etc.
cyclic AMP, cyclic GMP, etc.
CD circular dichroism
cd candela
cDNA complementary DNA
cf compare
cG curie
cm, cm², cm³ centimeters
CMP, CDP, CTP CoA
CoASAc acetyl coenzyme A
cpm counts per minute
cps counts per second
cp centipose
cri cycles per second
cRNA complementary RNA
cubic use exponent 3
° degree, angle
d diffusion, coefficient
dex dextro configuration
dec- density
d, (+) dextrorotatory
Da dalton
dca decibel
dc direct current
DDT 1,1,1-trichloro-2,2-bis-(p- chlorophenyl)ethane
DEAE-cellulose O-(diethylaminoethyl)cellulose
df degrees of freedom
dNA deoxyribonucleic acid
DNase deoxyribonuclease
disintegrations per minute
disintegrations per second
dTMP, dTDP, dTTP
dyn dyne
e electromotive force; exa-electrode potential; energy
ed effective concentration, 50%
ed. editor
EDTA effective dose, 50%
edime diethylenetriaminepta-acetic acid
e.g., for example
EGTA ethyleneglycol bis(β-aminoethyl ether)N,N,N’,N’-tetraacetic acid
emf electromotive force
ePR electron paramagnetic resonance
eq. equation(s)
eq. equivalent
ESR electron spin resonance
etc. and others
et al. and so forth
etc. and electron volt
exp farad; filial generations
F Fahrenheit
FAD, FADH₂ flavin adenine dinucleotides
fc foot-candle
Fig., Figs. figure(s)
FMN, FMNH flavin mononucleotides
fp freezing point
ft foot
ft lb foot-pound
G gauss; general; giga-
g gravitational constant
GMP, GDP, GTP guanosine phosphates
GSH, GSSG greater than
 glutathiones
H Henry
H hectar-, hour
Hb heterogenous nuclear RNA
Hb horse power
Hz hertz
IC₅₀ inhibitory concentration, 50%
ID₅₀ infective dose, 50%
I.d. inside diameter
I.E. that is
lg immunoglobulin
i.m. intramuscular
IMP, IDP, ITP inorganic phosphates
inch
intrapertional
IR infrared
IU international unit
i. v. intravenous
J joule
K Kelvin
Kₙ Michaelis constant
K₁ kilo-
Kcal kilocalorie
kg kilogram
km kilometer

Illustrations

Illustrations should be kept to a minimum. Those submitted should be identified lightly with pencil on the reverse side with the figure number and author name(s); when necessary, the top should be clearly marked. They should be referred to as figures in the text, and should be numbered with Arabic numerals; each should have a legend.

When preparing figures, particularly graphs, authors might follow the suggestions of H. G. Hers (Nature 307: 205, 1984). They are included in the following:

1) Illustrations should be sharp, contrasty, unmounted photographs on glossy paper. Photographs should be the width of one column (3½ inches) or two columns (7¼ inches). All drawings for reduction to a given size should be drawn and lettered to the same scale.

2) Lettering should be in black ink and must be legible after reduction (i.e., at least 1.5 mm high). The smallest elements (subscripts or superscripts) should be readable when reduced. Typewritten or computer-generated lettering is not preferred.

3) Graphs such as electrocardiograms, kymograms, and oscillograms should be prepared so that the dark cross-hatched background is eliminated, the faint portions of the graphs are intensified, and sharp prints are obtained. To avoid this processing, use blue-rulled instead of black-rulled recording paper for the original records.

4) A figure containing several panels with the same axes, usually denoted a, b, etc.: authors should indicate on each panel its experimental specificity and should label axes as precisely as possible: e.g., 'Time after drug additions rather than 'Time.' Also, express results in mol rather than cpm or absorbance units. If results are given in percent, define 100% in standard units in the legend.

5) When possible, all lettering should be within the framework of the illustration; likewise the key to symbols should be on the face of the chart. Use one symbol for the same experimental conditions in all comparable figures in the article. When the figure is so filled that it is necessary to explain symbols in the legend, only these standard characters should be used: □ ■ ○ ● △ □ ○△ △ △ ■ △ ● △ • △ x

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Tables should not duplicate material in text or illustrations. They should be prepared for printing either 3½ or 7¼ inches wide.

Nonsignificant figures in tabular data should be omitted. Short or abbreviated column heads should be used. Statistical measures of variation, P, SD, SE, etc., should be identified as such.

The approximate position of each table should be indicated in the margin of the text.

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Structural chemical formulas, process flow diagrams, and complicated mathematical expressions should be precisely and carefully arranged, but they should be kept to a minimum because in typesetting they are composed by hand and are expensive. Glossy prints of complicated formulas and expressions suitable as line drawings are preferred. All subscripts, superscripts, Greek letters, and unusual characters must be clearly identified.

Acknowledgments

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**COORDINATOR FOR RESEARCH DEVELOPMENT.** The Texas Agricultural Experiment Station seeks candidates to provide assistance to researchers and administrators in proposal preparation, review, and submission to federal and state granting agencies, private foundations, and major business firms. Candidates must have a Ph.D. in Agriculture or Life Sciences or a related field and ten or more years of progressively responsible experience in an academic research position, in a biotechnology firm or in agribusiness. Extensive travel is required. Send letter of application, resume, official transcripts, and a list of three references before February 15, 1994 to Dr. R. Daniel Lineberger, Search Committee Chair, Texas Agricultural Experiment Station, College Station, TX 77843-2133. Affirmative Action Employer.

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**DEPARTMENT OF PHARMACOLOGY**

**THE UNIVERSITY OF MICHIGAN**

The Department of Pharmacology is seeking applications for three tenure-track positions at the assistant, associate, or full professor level. Applicants should have a Ph.D. and/or M.D., significant postdoctoral experience, and a record of excellent research accomplishment. We are seeking outstanding individuals with research experience and interests which augment current departmental programs in the areas of cancer biology and therapeutics, cardiovascular pharmacology, drug metabolism and pharmacogenetics, endocrinology and receptor pharmacology, neuropharmacology, and site-specific drug delivery. The successful candidates will be expected to establish and maintain active, externally funded research programs and to participate in teaching medical students and other health professionals, as well as graduate and postdoctoral students. An attractive start-up package including new facilities and generous start-up funds will be available. Send curriculum vitae, a brief description of current and future research directions and request at least three letters of reference to be sent to:

Dr. Paul F. Hollenberg, Chair Designate Department of Pharmacology Search Committee Department of Pharmacology The University of Michigan Medical School 6322 Medical Science I Ann Arbor, MI 48109-0626.

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ASSISTANT PROFESSOR - MOLECULAR ANIMAL SCIENCE. The Department of Animal Science at Cornell University invites applications for two 12-month, tenure-track positions of Assistant Professor of Molecular Animal Science. Responsibilities include 50% research and 50% teaching in the area of applying contemporary molecular approaches to problems in domestic animal biology. The primary teaching components consist of new offerings in methodology and laboratory-based instruction. Research responsibilities are to develop a strong innovative program in any of the disciplines supported by the department. In the broadest of terms, these include: quantitative/molecular genetics of commercially important traits; embryology/developmental biology; and endocrinology/metabolism/nutritional biochemistry of processes such as growth, reproduction and lactation. The Department of Animal Science has approximately 30 faculty with responsibilities divided about equally between teaching (~500 undergraduate students), research (~70 graduate students), and extension. Excellent opportunities exist for collaboration within the Department and University. Successful candidates will need Ph.D., postdoctoral training and experience in a wide array of current molecular techniques. A solid background in Animal Science is preferred and demonstrable skills or potential for teaching and contributing to the total departmental program are essential. Salary will be commensurate with training and experience. An attractive fringe benefits package is available. Applicants should send a letter of application, statement of research and teaching interests and goals, resume, academic transcripts and names and addresses of three referees to H.F. Hintz, Chair, Department of Animal Science, 149 Morrison Hall, Cornell University, Ithaca, NY 14853-4801 (Tel: 607-255-2862; FAX 607-255-9829). Application deadline is January 31, 1994. Positions available July 1, 1994. Cornell University is an Equal Opportunity, Affirmative Action employer; minorities and the handicapped are encouraged to apply.

ASSISTANT PROFESSOR - NONRUMINANT NUTRITION. The Department of Animal Science at Cornell University invites applications for the position of Assistant Professor in Nonruminant Nutrition. This position is a 12-month, tenure-track appointment with approximately 50% teaching and 50% research responsibilities. The successful candidate will have a Ph.D. in animal nutrition, with emphasis on nonruminant farm or companion animal species, and demonstrable ability and desire to teach. Teaching responsibilities will include an intermediate/upper level course on animal nutrition and significant contributions to courses on the nutritional management of domestic animals, as well as advising undergraduate and graduate students. The candidate will be expected to develop a strong, innovative research program in an area of applied nutrition, digestive physiology or metabolism in the area of the candidate's expertise. The Department of Animal Science has approximately 30 faculty with responsibilities divided about equally between teaching (~500 undergraduate students), research (~70 graduate students) and extension. Excellent opportunities exist for teaching cooperatively within a well-developed curriculum and for collaborative research with strong existing programs in animal nutrition. Salary will be commensurate with training and experience. An attractive fringe benefits package is available. Applicants should submit a letter of application, including a statement of teaching and research interests and goals, resume, academic transcripts, and the names of three referees to H.F. Hintz, Chair, Department of Animal Science, 149 Morrison Hall, Cornell University, Ithaca, NY 14853-4801 (Tel: 607-255-2862; FAX 607-255-9829). Application deadline is January 31, 1994. Positions available July 1, 1994. Cornell University is an Equal Opportunity, Affirmative Action employer; minorities and the handicapped are encouraged to apply.

POSTDOCTORAL. Position available to study regulation of protein kinase C expression by retinoic acid (JBC 267:13356). Work includes cloning of PKC regulatory elements, construction of stable transfectants and mechanism/significance of RA-induced PKC nuclear translocation. Experience in molecular biology desirable. Position is open until filled. Send curriculum vitae and names of two references to Dr. Richard M. Niles, Ph.D., Professor & Chair, Department of Biochemistry & Molecular Biology, Marshall University School of Medicine, 1542 Spring Valley Dr., Huntington, WV 25755. Marshall University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR - CELL BIOLOGY. The Department of Physiology and Cell Biology at The University of Texas-Houston Medical School seeks to fill a tenure-track position at the assistant professor level in one of the following areas of cell biology: extracellular matrix; cytoskeletal elements; growth factors and cytokines. Preferences will be given to candidates who take a multidisciplinary approach to studying how these cellular properties impact on physiological and pathophysiological mechanisms. Please send the names and addresses of three references, curriculum vitae, two reprints/preprints and a statement of research interests to the Chair of the Search Committee, Dr. Lenard M. Lichtemberger by March 1, 1994, at the following address: Department of Physiology and Cell Biology, The University of Texas-Houston Medical School, P.O. Box 20708, Houston, TX 77225. The University of Texas is an equal opportunity, affirmative action employer. Women and minorities are encouraged to apply.

MOLECULAR IMMUNOLOGIST. A postdoctoral position is available for an independent investigator who will work closely with a biomedical chemist and a pharmacologist to develop immunosensors for use in pathogen detection, environmental monitoring and drug testing. The person will be responsible for cloning antibodies in hybridomas and E. coli. The research team has close working relationships with a strong molecular immunology group in the Medical School and the Biotechnology Division of the U.S. Army, Edgewood Research, Development and Engineering Center. The proximity to other major research centers (NIH, EPA, NIST, Walter Reed, Navy, USDA, Johns Hopkins University) contribute to a rich scientific atmosphere. This is an excellent opportunity for a young investigator to develop expertise in a fast-growing area of biotechnology. Salary (25-40K) is commensurate with experience. Send curriculum vitae as well as names and addresses of three references to Professor Mohyee Eldefrawi, Department of Pharmacology and Experimental Therapeutics, University of Maryland, School of Medicine, Baltimore, MD 21201 (Tel: 410-706-3564; FAX 410-706-8012).

HEAD OF DEPARTMENT OF VETERINARY BIOSCIENCES. The University of Illinois College of Veterinary Medicine at Urbana-Champaign is seeking an outstanding academician to provide direction and leadership for the Department of Veterinary Biosciences which includes the disciplines of morphology, physiology, pharmacology, toxicology and nuclear medicine. Candidates must have a D.V.M. and/or Ph.D. degree and a distinguished record of scholarship to qualify for a tenured, professorial position in the Department. Candidates must also have a sensitivity to student concerns and leadership qualifications. Experience in teaching in a veterinary environment is desirable. Administrative skills and a proven record of success in grantsmanship are required as are strong interpersonal skills and a commitment to excellence in teaching, research, and service. Candidates should have experience and an interest in the recruitment and training of graduate students as well as have expertise in one of the discipline areas represented in the department. A background indicating talent for collaborative and interdisciplinary work is desirable. The Head of the Department of Veterinary Biosciences reports to the Dean and interacts with faculty, staff, professional and graduate students, and College- and University-level administrators. The appointment is 100% time on a 12-month basis with the Department of Veterinary Biosciences. The position is largely administrative, but the incumbent will be encouraged to teach and conduct research in their area of expertise. Salary and starting dates are negotiable. Applications should submit their professional resumes and the names and addresses of three referees to Dr. J.E. Hixon, Chairperson, Search Advisory Committee, Office of the Dean, College of Veterinary Medicine, University of Illinois, 2001 South Lincoln Avenue, Urbana, IL 61801, 217/333-2760. In order to ensure full consideration, applications must be received by February 15, 1994. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.
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NATIONAL CENTER FOR HUMAN GENOME RESEARCH
Francis S. Collins, M.D., Director

Ph.D.'s and M.D.'s

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Director, Intramural Research Program
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Bethesda, MD 20892

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CHAIRPERSON - DEPARTMENT OF INFECTIOUS DISEASES AND MICROBIOLOGY. Applications and nominations are invited for the position of Professor and Chairperson of the Department of Infectious Diseases and Microbiology at the Graduate School of Public Health at the University of Pittsburgh. This is a research and teaching department at a major University and Medical Center dedicated to the prevention, epidemiology and molecular pathogenesis of major infectious and communicable diseases. The successful candidate will have the unique opportunity of participating in and initiating collaborative programs with investigators in other Departments of the Graduate School of Public Health, the Schools of Medicine, Dentistry and Arts and Sciences. Candidates must have a distinguished record of scholarly activity, a strong commitment to graduate education and proven administrative skills. The salary range will be commensurate with experience. Applications will be accepted until the position is filled. Send curriculum vitae, publication list, references, and brief synopsis of research, teaching and administrative experience to Dr. Herbert S. Rosenkranz, Chairperson, Infectious Diseases and Microbiology Search Committee, Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, 260 Kappa Drive, Pittsburgh, PA 15238. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR/PHARMACOLOGY. Applications are being accepted for the tenure-track position of Assistant Professor of Pharmacology, University of the Pacific School of Pharmacy; this is an 11-month appointment. The school, located in the Delta Region near the center of the state, is part of a private university which is California's first institution of higher learning. The successful applicant should have a working understanding of basic pharmacology and a commitment to establishing an active, independent research program. He/she will participate in team teaching of human pharmacology and physiology courses to pharmacy students. Other responsibilities will include active involvement in the graduate program (M.S., Ph.D.) and university and community service. A doctoral degree and appropriate experience are essential. Applications will be received until the position is filled; however, an August starting date is desired. Candidate reviews will begin on March 15, 1994. Submit curriculum vitae and three letters of reference to Robert B. Supernaw, Pharm.D., Associate Dean, School of Pharmacy, University of the Pacific, Stockton, CA 95211. University of the Pacific is an equal opportunity/affirmative action employer.

GERIATRICS DEPARTMENT. Mount Sinai Medical Center is seeking an individual to study the role of proteoglycans in diseases. The successful candidate must have a Ph.D. or equivalent degree, postdoctoral research experience in the areas of proteoglycan biochemistry and immunology and a knowledge of cell biology. Salary is $31,500 per year. Send letter of application, curriculum vitae and three letters of reference to Betty Jones, Box 1070, Mount Sinai Medical Center, 1 Gustave L. Levy Place, New York, NY 10029. Mount Sinai Medical Center is an affirmative action/equal opportunity employer.

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Over 30 new products have been added in response to customer input and demand including MacIndad, a molecular modeling package designed for handling complex biological macromolecules; HelixScan, an automated DNA base calling package; and MapKit for Windows, a Windows-based plasmid map drawing program. Europa Scientific Software Corporation, 14 Clinton Dr., Hollis, NH 03049-6595, USA.

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An 8-page, 4-color brochure highlights Model 270A-HT high throughput capillary electrophoresis system for enhanced sensitivity, reproducibility, and flexibility. The fully automated system can be used to complement high performance liquid chromatography or for implementing a quantitative method that facilitates and automates slab gel electrophoresis protocols. The thermostatted, programmable autosampler provides precise temperature control, flexible heating, cooling, and evaporation control for both samples and buffers, and high speed and throughput. The Perkin-Elmer Corp., 761 Main Ave., Norwalk, CT 06859-0012, USA.

A data sheet describes the Olympus BHWI microscope for use in cell research and electrophysiology. The microscope features an erect image and fixed "overstage" platform with rigid supports directly to the microscope base, over the XY rotatable stage. It is pre-drilled to mount and rigidize the heaviest micromanipulator system. Designed for use in electrophysiological experimentation on cells and tissues, the BHWI expedites delicate micromanipulation and patch clamping. Olympus America Inc., Precision Instrument Division, 4 Nevada Dr., Lake Success, NY 11042-1159, USA.

The 1994 ANALTECH Thin Layer Chromatography (TLC) catalog features a complete line of TLC plates, accessories, and instrumentation. TLC UNIPLATES are made in a wide variety of adsorbents including hard layer and soft layer silica gel, HPTLC, reversed phase, alumina, and cellulose. Formats include preadsorbent spotting areas, channeled adsorbent, and scored "snap apart" plates. Analtech, PO. Box 7558, Newark, DE 19714, USA.
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