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.

1995

2-5 April. 4th Annual Wound Care Symposium, Richmond, Virginia, USA. (C. Hettena, Ofc. of Continuing Med. Ed., MCW/VCU, Box 98044, Richmond, VA 23298-0048, USA)

7-9 April. Pharmacology '95 at Experimental Biology '95: ASPET Colloquium: Structure and Function of P2-Purinoceptors, Atlanta, Georgia, USA. (ASPET, 9650 Rockville Pike, Bethesda, MD 20814-3995, USA)

9-13 April. Experimental Biology '95, Atlanta, Georgia, USA. (FASEB Ofc. of Scientific Mtg. and Conf., 9650 Rockville Pike, Bethesda, MD 20814-3996, USA)

23-26 April. Carbohydrate Bioengineering Meeting, Elsinore, Denmark. (M. Eiden, SINTEF UNIMED, MR-Ctr., N-7034 Trondheim, Norway)

14-15 May. First Pan American Conference on Food Safety, Mexico City, Mexico. (International Life Sciences Inst., 1126 Sixteenth St., NW, Washington, DC 20036, USA)

21-25 May. ASBMB Joint Annual Meeting with the Division of Biological Chemistry of the American Chemical Society, San Francisco, California, USA. (FASEB Ofc. of Scientific Mtg. and Conf., 9650 Rockville Pike, Bethesda, MD 20814-3996, USA)

10-11 June. C.I.N.P. Regional Conference, Vienna, Austria. (C.I.N.P. Regional Conference, c/o Austrointerconvention, P. O. Box 30, A-1043 Vienna, Austria)

13-14 June. C.I.N.P. Regional Conference, Prague, Czech Republic. (C.I.N.P. Regional Conference, c/o Austro-interconvention, P. O. Box 30, A-1043 Vienna, Austria)

17-19 June. Dehydroepiandrosterone (DHEA) and Aging, Washington, D.C., USA. (Conf. Dept., The New York Academy of Sciences, 2 E. 43rd St., New York, NY 10017, USA)

19-20 June. Nuclear Acid Therapeutics, San Diego, California, USA. (B. Keddy, Cambridge Healthtech Inst., 1000 Winter St., Ste. 3700, Waltham, MA 02154, USA)

19-20 June. Alzheimer's Disease, Boston, Massachusetts, USA. (B. Keddy, Cambridge Healthtech Inst., 1000 Winter St., Ste. 3700, Waltham, MA 02154, USA)


3-7 July. CYTO '95: Cell Signalling, Southampton, United Kingdom. (Royal Microscopical Society, 37/38 St. Clements, Oxford OX 4 1AJ, United Kingdom)

8-12 July. The Protein Society Symposium, Boston, Massachusetts, USA. (The Protein Society, 9650 Rockville Pike, Bethesda, MD 20814-3996, USA)

8-12 July. APS Conference: Understanding the Biological Clock: From Genetics to Physiology, Hanover, New Hampshire, USA. (APS Natl. Ofc., 9650 Rockville Pike, Bethesda, MD 20814-3996, USA)

23-27 July. 9th International Conference on Cytochrome P450 - Biochemistry, Biophysics and Molecular Biology, Zürich, Switzerland. (W. Woggon, Organisch-chemisches Inst., der U. Zürich, Winterthurstr. 190, 8057 Zürich, Switzerland)

23-29 July. The 9th International Congress of Immunology, San Francisco, California, USA. (FASEB Ofc. of Scientific Mtg. and Conf. 9650 Rockville Pike, Bethesda, MD 20814-3996, USA)

25-27 July. Consensus Symposium on Combined Antiviral Therapy, Lisbon, Portugal. (The Macrae Group, 230 E. 79th St., Ste. 8E, New York, NY 10021, USA)

13-18 August. 23rd Federation of European Biochemical Societies Meeting, Basel, Switzerland. (FEBS '95, Convention Ctr. Basel, Congress Dept., Meesseplatz 21, CH-4051 Basel, Switzerland)


27-31 August. Fourth International ISXX Meeting, Washington, Washington, USA. (Convention Services Northwest, 1809 7th Ave., Ste 1414, Seattle, WA 98101, USA)

27-31 August. 4th International Conference on Thiorideridins and Related Proteins - Structures and Function, Wiesbaden, Germany. (H. Rollman, Fachbereit Biologische Chemie der Univ. D-34099 Kassel, Germany)

3-8 September. AFMC International Medicinal Chemistry Symposium, Tokyo, Japan. (S. Ikemani, Faculty of Pharmaceutical Science, Tokyo U., Sagamiko, Kanagawa 19991, Japan)

10-15 September. International Symposium on Human gene Therapy, Inuyama/Nagoya, Japan. (W. Whelan, U. of Miami Sch. of Med., P. O. Box 06172, MAB23, Miami, Fl 33101, USA)

12-16 September. The 2nd International Congress of the World Federation of Sleep Research Societies, Nassau, The Bahamas. (Global Events, 710 N. Tren ton Dr., Beverly Hills, CA 90210, USA)


21-24 September. Symposium on Stimulating Factor-1: Molecular Mechanisms in Development and Disease, Ames, Iowa, USA. (Growth Factor Conferences, MCDB/ISU Symposium, 3208 Molecular Biology, Bldg. Iowa State U., Ames, IA 50011-3926, USA)


15-15 October. American College of Nutrition 56th Annual Meeting, Washington, DC, USA. (E. B. Amer, American Coll. of Nutrition, Hospital for Joint Diseases, 301 E. 17th St., New York, NY 10003, USA)

17-22 October. Fifth International Conference of Anticancer Research, Corfu, Greece. (J. Delainaisse. Inst. of Anticancer Res., 1st Km Kapandriti-Kalamous Rd., P. O. B. 22, Kapandriti, Attika, 19041, Greece)

8-11 November. APS Conference: New Discoveries within the Pancreatic Polypeptide Family: Molecules to Medicine, Newport Beach, California, USA. (APS Natl. Ofc., 9650 Rockville Pike, Bethesda, MD 20814, USA)


Courses and Workshops 1995

6-8 April. Third International Bilirubin Workshop, Trieste, Italy. (J. Ostor, Rch. Svc., D. V.A. Lakeside Med. Ctr., 400 E. Ontario St., Chicago, IL 60611, USA)

9 April. ASPR Course at Experimental Biology '95: Pathobiology for the Basic Scientist, Atlanta, Georgia, USA. (ASPR, 9650 Rockville Pike, Bethesda, MD 20814-3993, USA)


5-7 May. ASPR Course: Concepts in Protein Chemistry: Practical Aspects, Bethesda, Maryland, USA. (ASPR, 9650 Rockville Pike, Bethesda, MD 20814-2992, USA)


22-30 May. International School of Biological Magnetic Resonance, 2nd Course: Dynamics and the Problem of Recognition in Biological Macromolecules, Sicily, Italy. (O. Jarvus, Stanford Magnetic Resonance Lab, Stanford, CA 94305-3055, USA)

5-11 August. Protein Purification: Isolation, Analysis, and Characterisation, New Brunswick, New Jersey, USA. (Oof of Continuing Professional Ed, Cook Col- lege, P. O. Box 231, New Brunswick, NJ 08903, USA)

26-29 October. ASPR Course: Concepts in Molecular Biology, Bethesda, Maryland, USA. (ASPR Ofc., 9650 Rockville Pike, Bethesda, MD 20814-3993, USA)
Preliminary plans include sessions on the following topics:

- **DISTINGUISHED SPEAKERS' SYMPOSIUM**
  After the Genome Project

- **SYMPOSIA**
  Maternal Serum Screening: Issues in Clinical Practice
  Modern Human Origins: Perspectives from Y Chromosomal, Mitochondrial and Autosomal DNA Studies
  Genetic Disorders of Host Defenses
  Evaluating Genetic Services: Analyzing Outcomes and Cost-Effectiveness
  Cell Cycle Genes and Cancer
  DNA Forensics
  PCR 10 Years Later: Approaching the Inconceivable

- **WORKSHOPS**
  User Friendly Computer Access to Genetics Information
  Effect of Genetic Disease on Reproduction and Pregnancy
  Role of Fibroblast Growth Factor and its Receptors in Human Morphogenesis
  Neural Tube Defects: New Insights into an Old Problem
  Clinical Application of FISH: Are There Diagnostic Standards?
  Genetic Testing in Children and Adolescents: Ethical, Legal and Social Issues
  Genetics of Alcoholism

- **EDUCATION SESSIONS**
  Mendel's Pea Soup: Dissecting the Genetics of Common Disease
  Update on the Genome Project
  Mammalian Embryology and Morphogenesis
  Treatment of Genetic Disease

- **GENETIC AWARENESS SYMPOSIUM**
  Genetic Counseling and Medical Ethics: Into the 21st Century

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Professor of Medicine, Director, Division of Digestive Diseases and Hepatology, Jefferson Medical College and Plosie Wong-Staal, Ph.D., Florence Seeley Riford Professor of Acquired Immune Deficiencies Syndrome Research, University of California.

For further information, please contact the Digestive Diseases Interagency Coordinating Committee Office, 11426 Rockville Pike, Suite 410, Rockville, MD 20852, tel: (301) 594-5168, fax: (301) 594-1171.

Summer Institute
In Research on Aging

The National Institute on Aging announces the annual Summer Institute in Research on Aging, a week-long workshop for new investigators, focused on current issues in research on aging and on research methodologies. The program will also include consultations on the development of research interests. The 1995 Summer Institute will be held July 15-22 at Airlie Conference Center in Warrenton, Virginia. Support is available for travel and living expenses. Applications are due May 15. Racial and ethnic minority investigators are encouraged to apply. For more information write to:

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The Econo low pressure chromatography system is a complete protein purification workstation that enables you to form a binary gradient, collect protein peaks by time windows or peak threshold, and walk away from the lab bench while the separation is in progress. The standard Econo System includes a peristaltic pump, UV monitor with 280/254 nm detection capabilities, an adjustable rack, a controller, a fraction collector, a chart recorder, plus all the accessories you need to start your separation. Icon-driven programming makes the Econo System easy for everyone in the lab to use. The system can also be upgraded for complete automation, from sample injection to fraction collection. Bio-Rad Laboratories, Life Science Group, Laboratory Products Division, 2000 Alfred Nobel Dr., Hercules, CA 94547, USA.

The biotinylation kit is the first of its kind to offer a simple, one-step routine for labeling DNA. Part of the ULYSISTM range, it is based on the Universal Linkage System (ULS), which is unrivaled in its ability to bind all types of markers to DNA.

The benefits of using the Ulysis kits over traditional DNA labeling techniques include rapidity (30 min instead of the usual 60-120 min); ease of use (with only one pipetting step); consistent results without the need for enzymes; at 0.1 pg, it is more sensitive than any other kit on the market, and it is highly efficient (approaching 100% every time). Ideal for techniques like DNA in situ hybridization (ISH) in tissue sections/smears, RNA ISH, chromosome detection (fISH), or filter hybridization. Serotec, 22 Bankside, Station Approach, Kidlington, Oxford OX5 1JE England.

Nikon has a binocular tilting head for laboratory and research microscopes. Ergonomically designed and affordably priced, the ComfortView™ tilting head offers a traditional non-erect image of exceptional brightness and clarity, and it accommodates all of Nikon's extended family of eyepieces. Once set for individual comfort, the tilting head never sags or slips position, and can easily be reset when desired. Designed for ruggedness and high performance over long periods of use, the new binocular head offers unprecedented comfort. Users will find the customary inverted image familiar and easy to work with, but the enhanced brightness and contrast of the image makes the Nikon tilting head easier and more pleasant to use. It can be retrofitted to a variety of other manufacturers' microscope stands. Nikon Inc., Instrument Group, Biomedical Department, 1300 Walt Whitman Rd., Melville, NY 11747, USA.

Sartcon®-micro crossflow filtration units for concentration or purification applications ranging from 50 ml to 1 l provide individual crossflow systems that are complete, closed, presterilized, pyrogen-free, and ready to connect. These units eliminate the drawbacks of protein and peptide concentration with stirred cells. They feature high flow rates, are easy to clean, require virtually no setup, and eliminate the need for gas pressurization. Easy to clean, yet disposable. Sartorius Corp., 131 Heartland Blvd., Edgewood, NY 11717, USA.
Two monoclonal antibodies for multidrug resistance (MDR) research are now available. Antihuman LRP, clone LRP-56, is specific to the 110 kDa LRP-protein, which is upregulated and strongly overexpressed in various human P-glycoprotein-negative MDR tumor cells. LRP-56 can be used for detecting LRP-associated non-P-glycoprotein MDR in immunohistochemistry and flow cytometry applications. Antihuman P-glycoprotein, MRK16, is specific to a surface epitope of human P-glycoprotein. Research has linked MDR to overexpression of P-glycoprotein, a 170 kDa membrane bound pump. MRK16 shows good reactivity in flow cytometry, immunoprecipitation, and frozen tissue staining. Kamiya Biomedical Co., P.O. Box 6067, Thousand Oaks, CA 91359, USA.

The Mighty Slim SX 250 power supply for electrophoretic instrumentation delivers up to a maximum of 250 volts and 200 milliamps (50 watts) at constant current or constant voltage. The SX 250 is ideally suited for vertical or horizontal submarine mini gel and pulsed field electrophoresis applications. Either current or voltage is shown via an LED display. Two sets of recessed power outlets are available for the simultaneous running of gels. The instrument is compact (11 cm wide, 16 cm tall, and 24.5 cm deep) and attractively priced. Hoefer Scientific Instruments, 654 Minnesota St., San Francisco, CA 94107-3027, USA.

Maine Biotechnology Services, Inc. (MBS) now offers custom polyclonal development in rabbits, sheep and goats. This service is a complement to custom hybridoma development, processing, and testing in which the company has specialized. MBS offers a comprehensive range of high-quality specialty services and reagents for customers who require polyclonal and monoclonal development, production, processing and testing, and has an inventory of polyclonal and monoclonal antibodies available. Maine Biotechnology Services, Inc., 383 Presumpscot St., Portland, ME 04103, USA.

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NEW PRODUCTS & LITERATURE

The Magnetic Immuno Staining Tray simplifies the immunostaining of cells and tissue with enzyme or fluorochrome conjugates. Up to 12 glass microscope slides are placed in the MIST and secured by means of a magnetic strip that hold the slides firmly in place during all incubation and washing stages. The tray functions as a humidity chamber for all incubation steps. When the lid is removed, the MIST can be tilted and the slides washed without the need to remove or handle the slides. Slides are washed "face-on" to avoid cross contamination and ensure removal of unbound material. The Binding Site Inc., 5889 Oberlin Dr., Ste. 101, San Diego, CA 92121, USA.

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The LASERTRAK™.3000 is a high performance, cost-effective imaging system that uses laser-induced fluorescence to detect and quantitate DNA and proteins separated by gel electrophoresis. It also functions as a laser transmission densitometer for scanning visible stained gels or autoradiographs. Powerful, easy-to-use software with unique data-processing features runs under OS/2® Warp 32-bit multitasking operating system. The system scans a sample up to 25 cm × 20 cm in minutes. DNA fragments between 0.005 ng and 400 ng (nearly five orders of magnitude sample dynamic range) can be detected on a gel in a single scan using ethidium bromide as the fluorescent stain.

Instrumentation Development, Inc., 180 Harvard Ave., Stamford, CT 06902, USA.

MacDNASIS 3.5, an accelerated sequencing software program, provides an easy user interface for analyzing large amounts of research data on the Apple Power Macintosh. Its performance is greatly enhanced through its native PowerPC code and through the use of the rigorous RISC chip. Release 3.5 runs DNA and protein sequence analyses orders-of-magnitude times faster than the previous version of MacDNASIS, which operated in the PowerPC emulation mode. Hitachi Software Engineering America, Ltd., 1111 Bayhill Dr., Ste. 395, San Bruno, CA 94066, USA.

Literature

The HPLC Application Handbook features 270 application chromatograms, more than 175 published literature references, and 1200 compounds, alphabetically indexed by samples and compounds. The methods section guides you in column selection, mobile phase selection, controlling analyte retention, and detector selection for analysis, separation, and purification. Hamilton specializes in unique, durable, polymeric HPLC columns and packings for reversed phase, anion exchange, ion exclusion, cation exchange, and other specialty applications. Columns are available in Narrowbore (2.1 mm) to preparative sizes (up to 4" ID). PEEK columns and PEEK Guard columns are also available for applications requiring inert flow paths. Hamilton Co., PO Box 10030, Reno, NV 89520-0012, USA.

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Incorporating all new and updated products, the 1995 Amersham Life Science catalog is completely revised to its most accessible format; the catalog will enable scientists to make a fast and fully informed choice of method and product for the labeling, detection and analysis of biomolecules. The catalog is divided into 11 color-coded, easy-to-reference sections, each representing a different application area, such as nucleic acid labeling and detection, protein studies, and cellular communication assays. Included in each section is clear and comprehensive information on specific applications, products and user guidelines. Amersham Life Science, Inc., 2636 S. Clearbrook Dr., Arlington Heights, IL 60005, USA.

A mini-brochure describes a line of ALC centrifuges, ranging from small benchtops through high capacity benchtops and includes a high speed/high capacity refrigerated model. The brochure describes each model with general accessories available and details the capabilities of each model. Astel Enterprises, Inc., 110-D Industrial Dr., Winchester, VA 22602, USA.
An 8-page color brochure details the various types of CCD cameras, advantages and disadvantages, recommended applications, and price/performance trade-offs for each type of electronic camera. This guide covers six types of CCD cameras including several video cameras (intensified, integrating, and scientific), uncooled "megapixel" cameras, and high performance, cooled CCD cameras. It is a perfect guide for individuals who want to better understand today's digital electronic technology. Photometrics Ltd., 3440 East Britannia Dr., Tucson, AZ 85706, USA.

RBI's 1995 Catalog/Handbook describes over 1100 pharmacologically active compounds, over 200 new listings. Also included are activity tables, pharmacological and chromatographic reference standards, chemical structures, physical properties, CAS numbers, technical references, and storage and disposal codes. Research Biochemicals International, One Strathamore Rd., Natick, MA 01760-2441, USA.

An 8-page product guide concisely describes Isco instruments and systems for separation and analysis. In addition to prep and analytical chromatography—including low pressure LC, HPLC, and SFC—the guide also covers supercritical fluid extraction (SFE), capillary electrophoresis, and high pressure syringe pumps for pulseless fluid delivery. Among the new instruments is an expanded line of automated SFE systems. Isco, Inc., 4700 Superior, Lincoln NE 68505, USA.
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Opening Lecture
Richard Henderson

Monday, May 22
Plenary Lectures
Joseph L. Goldstein  Michael S. Brown
Peter G. Schultz
Symposia
EVOLUTION OF ENZYMATIC ACTIVITIES
Chair, John A. Gerlt
Barry G. Hall  Debra Dunaway-Mariano
L. Nicholas Omston

THE PROTEIN FOLDING PROBLEM
Chair, Lila M. Gierasch
Sheena Radford  George Rose
Robert Sauer

GENETIC INSTABILITY AND CANCER
Chair, Paul A. Pitchach
Lawrence A. Loeb  Thea Tisty
Bert Vogelstein

RAS
Chair, Melanie Cobb
Ira Herskowitz  Jonathan Cooper
Paul Sternberg

Tuesday, May 23
Plenary Lectures
Sydney Kastu  Richard Axel

Symposia
DETECTION OF NOVEL ENZYME INTERMEDIATES
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JoAnne Subbe  Richard B. Janssen
Joseph Villafranca

TRANSCRIPTION ACTIVATION
Chair, Richard L. Gourse
Arnold Berk  Mimi Susskind
Richard Ehrlich

INTRACELLULAR CALCIUM
Chair, Frederic Fay
Tobias Meyer  Tulio Pozzan
Roger Tsien

EMERGING TECHNIQUES IN
ATOMIC FORCE MICROSCOPY
Chair, Stephen Sigler
David Braunstein  Carlos Bustamante
Deborah Leckband  Hirohuki Sasaie

Wednesday, May 24
Plenary Lectures
R. John Collier  Richard D. Klausner
Symposia
NUCLEIC ACID ENZYMES
Chair, Stephen J. Benkovic
Michael O'Donnell  Gregory Verdine
Samuel Wilson

CHROMATIN
Chair, Alan P. Wolfe
Daniel E. Gottschling  Rudolf Grosschedl
Carlos Wu

PROTEIN DESIGN
Chair, William F. DeGrado
P. Leslie Dutton  Jeffrey W. Kelly
James A. Wells

BIOCHEMISTRY OF CELLULAR ADHESION
Chair, Timothy Springer
A. Neil Barclay  Steven D. Rosen
Mark Ginsberg

Thursday, May 25
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Symposia
MOLECULAR RECOGNITION
Chair, Frank M. Kauhsel
Richard N. Armstrong  Hazel M. Holden
S. James Remington

NITRIC OXIDE SYNTHASE: STRUCTURE,
MECHANISM AND REGULATION
Chair, Michael Marletta
Betty Sue Masters  Thomas Michel
Qiao-wen Xie

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