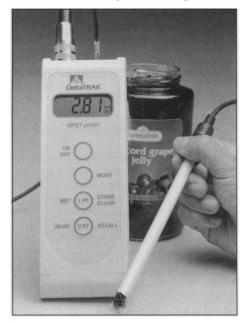
PRODUCTS & MATERIALS

pH Meter

The Model 101 pH Meter is a handheld, portable unit featuring a state of the art ion-sensitive field-effect transistor (ISFET) probe. The ISFET sensor probe is nonglass, rugged, and completely submersible. It stores dry and requires no fill solutions or routine maintenance. The sensor has a 3-s readout with automatic temperature compensation.



It can be used to test clear liquids, semisolids, dirty samples, and bread dough, and can even measure a single drop of sample. DeltaTRAK. Circle 138.

Antibodies

Nuclear matrix proteins (NMPs) are becoming recognized for their potential for cancer detection. A range of NMP antibodies includes specificities for prostate cancer (PRO:4-216.1), breast cancer (NM200.4), apoptosis research (204-41), nuclear pore complex (203-37), and spliceosomes (J82, B4A11, 626, B1C8). The antibodies can be used in protein immunoblotting, immunofluorescence, and immunohistochemistry. Diagnostic BioSystems. Circle 139.

An antibody that detects a surface glycoprotein found only on a subpopulation of circulating B cells, in mantle cell lymphomas, and in differentiated B cell leukemias is formulated for use in flow cytometry. Dako Corp. Circle 140.

PCR Clean Up Kit

The PCR Clean Up Kit separates polymerase chain reaction (PCR) products from impurities that interfere with enzymatic labeling or digestion processes. Under specific salt conditions, the kit binds PCR products and separates them from residual PCR components. The bound products can then be eluted from the silica beads by simple low-salt washes. The kit works with a wide size range of products, purifies them quickly, and recovers them efficiently. Boehringer Mannheim. Circle 141.

Cell Transfection Kit

The Capture-Tec Kit allows the user to create a homogeneous population of transiently transfected cells without creating stable cell lines. The kit features pHook-1 plasmid, which expresses and displays a single-chain antibody to a specific hapten molecule. Users simply cotransfect the pHook-1 plasmid with their own constructs, then isolate transfected cells with hapten-coated magnetic beads to study posttransfection intracellular events. Selected cells can be used for differential display, protein immunoblots, flow cytometry, enzymatic analysis, and pulsechase experiments. **Invitrogen. Circle 142.**

Genomic DNA Isolation Kit

The DNA Multiprep kit provides a novel procedure for the simultaneous processing of multiple genomic DNA samples from whole blood, mammalian cells, and select tissues. The procedure is neither labor-intensive nor time-consuming, nor does it involve the use of hazardous organic solvents. The entire

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

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procedure is performed in one 96-well plate. It entails adding three reagents to the samples with a multichannel pipette. The DNA bound to the plate surface can be used directly for restriction enzyme digest, Southern blot, or polymerase chain reaction. The kit consistently gives high molecular weight DNA preparations of high yield and purity. The DNA prepared is suitable for large-scale screening, forensic testing, medical diagnostics, and reverse genetics. Biotecx Laboratories. Circle 143.

Graphics and Data Analysis Software

Origin 4.0 is a new version of a Windowsbased technical graphics and data analysis program. The redesign includes new analysis and graphics tools, a user-friendly and more powerful nonlinear curve fitter, and a toolbar-based user interface for instant access to analysis tools and common features. The new two-dimensional graphics toolbar allows users to instantly access many graph types, including vector and polar graphs as well as line, scatter, area, bar, pie, and statistical charts. New features include baseline and peak analysis for spectroscopy, improved fast Fourier transform that facilitates digital signal processing, and a powerful nonlinear curve fitter with approximately 200 built-in functions. The program is compatible with Windows 95 and requires only a 386/DX or higher processor, 4 MB random access memory, Windows 3.1 or later, and 4 MB hard drive space. Microcal Software. Circle 144.

Gel Dryers

Model GD 40/50 is a slab gel dryer with a large 40 cm by 50 cm surface capable of quickly drying standard size sequencing gels as well as multiple smaller gels. The design



features a vacuum seal provided by a transparent silicone screen and a porous, polypropylene sheet. The unit has an adjustable heater permitting settings from 30° to 80°C and a timer that runs up to 5 hours adjusted in 5-min intervals. The Model GDS 2000 Gel Dryer combines the attributes of the GD 40/50 with a vacuum pump and chemical trap. Life Technologies. Circle 145.

Literature

496 MOS Multiple Organic Synthesizer is a brochure on an instrument that can perform a variety of solid phase organic syntheses. The unit offers reaction heating and cooling, environmentally controlled reactions, multispeed vortex mixing, and more. Advanced ChemTech. Circle 146.

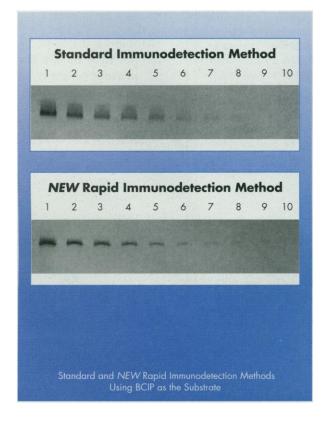
Reagents for Cytoskeletal and Neuromuscular Research highlights a line of these products. Alexis Biochemicals. Circle 147.

A series of application notes covers many facets of rapid kinetics measurements and illustrates an enormous range of applications for the manufacturer's line of equipment. Hi-Tech Scientific. Circle 148.

Fluorescent Gel Mobility Shift Assay is an application note on an assay used to study DNA protein binding in the Escherichia coli DNA mismatch repair system. Fluorescent gel shift assays can also be used to determine the affinity, abundance, binding constants, and binding specificity of DNA binding proteins. Vistra Systems. Circle 149.

Revco Laboratory CO₂ Incubators highlights products designed for growing viruses and cells without desiccation over a broad range of temperatures, humidities, and CO₂ control levels. Revco Scientific. Circle 150.

Call for a free sample.



Eliminate the blocking step in Western blots.

The standard immunodetection method for blotted proteins can be very time-consuming. That's because conventional membranes must be blocked to prevent non-specific antibody binding. Extensive washes are also required to reduce the background for a better signal-to-noise ratio.

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Call or fax to request a free sample of Immobilon-P Transfer Membranes and a copy of the new rapid protocol. U.S. and Canada call Technical Services: 1-800-MILLIPORE; Japan: (03) 3474-9111. In Europe, fax: +33.88.38.91.95.

MILLIPORE

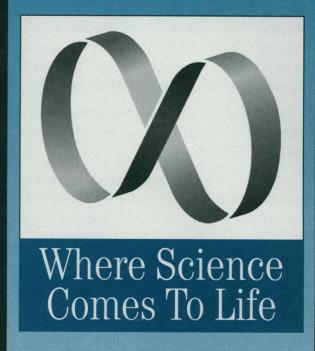
Millipore Lab Catalogue on Internet: access URL menu and type: http://www.millipore.com/noblock

AMSIE 96

AAAS Annual Meeting & Science Innovation Exposition

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Discover recent developments in risk assessment, environmental clean up, and sustainability

Explore the latest in medical research:
AIDS, the human genome,
neuroscience, and
cardiovascular science

Find out about new issues in government science policy and funding

Get full details on science education reform



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AMOTE MALE TO



Where Science Comes To Life

AMSIE'96 Program Committee

Rita Colwell, University of Maryland AMSIE'96 Program Chair

Jane Lubchenco Oregon State University AMSIE'97 Program Chair

Ronald L. Graham AT&T Bell Laboratories

Lawrence Grossman Johns Hopkins University

Richard T. Johnson Johns Hopkins University Hospital

Jerome Kagan Harvard University

Judith Kildow Massachusetts Institute of Technology

Alvin L. Kwiram University of Washington

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Savio L.C. Woo Baylor College of Medicine and Howard Hughes Medical Institute

Harry Woolf Institute of Advanced Study

Science Innovation Organizing Committee

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Baylor College of Medicine and Howard Hughes Medical Institute

Robert M. Nerem Georgia Institute of Technology

William A. Haseltine Human Genome Sciences

Barbara Jasny SCIENCE

Edward Korn National Heart, Lung, and Blood Institute, National Institutes of Health



October, 1995

Dear Colleague:

The **AAAS Annual Meeting and Science Innovation Exposition** is the preeminent multidisciplinary event for scientists. It is my pleasure to invite you to attend AMSIE'96 and to join an array of scientists, educators, and policymakers in examining issues and emerging research from all areas of science.

This year's meeting offers exciting new programming that promises to affirm our interdisciplinary tradition. Researchers from every facet of science — medical, environmental, evolutionary, physical, social and technological — will convene to exchange and publicize new knowledge. In fact, more than 5,000 of your colleagues are expected to be in Baltimore to share their latest research advances, explore the fertile synergies between disciplines, and debate today's critical issues in science policy and education.

The theme for AMSIE'96 – **Where Science Comes to Life** – sets the tone for a unique blend of symposia, topical and plenary lectures, specialized seminars, and poster presentations. Some special highlights:

This year's **Science Innovation** offers exceptional symposia covering progress in neuroscience, cardiovascular science, AIDS, and genome research. Topical lectures will highlight emerging developments in instrumentation and research methodology ... see page 13 of this program.

The Origins Seminar features leading scientists presenting their most recent ideas, research and information on how the universe and the world around us have evolved. Presentations will range from researching the Big Bang and stellar origins to present understanding of biological evolution ... detailed information on page 12.

Other AMSIE'96 highlights include: presentations by senior policymakers on the future of science and technology research funding and a seminar focused on helping scientists master the Internet ... see pages 10 and 12 for more details.

Also of particular interest — field trips to important and educational science centers in the Baltimore area; career development seminars; over 100 exhibits of publishers, computer companies, government agencies, and scientific equipment companies; and Employment Exchange services, which are free to AAAS members.

AMSIE'96 offers numerous opportunities to meet, network and learn from many of the leading figures in various fields of science. Please join us in Baltimore, the city where, indeed, science comes to life. Register now, and take advantage of the advance registration discount rates (see forms on page 16 and 17). I look forward to seeing you at AMSIE'96.

Sincerely,

Ita K. Columbia

AAAS President and AMSIE'96 Program

Chair

AMSIE '96 THE TABLE FEBRUARY 8-13, 1996 BALTIMORE CONVENTION CENTER BALTIMORE, MARYLAND

THURSDAY, 8th	FRIDAY, 9th	SATURDAY, 10th	SUNDAY, 11th	MONDAY, 12th	TUESDAY, 13th
Seminar Registration 7:00 AM - Noon Stouffer Renaissance	Meeting Registration 7:00 AM - 5:00 PM Convention Center	Meeting Registration 7:00 AM - 5:00 PM Convention Center	Meeting Registration 7:00 AM - 5:00 PM Convention Center	Meeting Registration 7:00 AM - 5:00 PM Convention Center	Meeting Registration 8:00 AM - 1:00 PM Convention Center
, ,	Concurrent Sessions 8:30 AM - 11:30 AM Convention Center Hyatt Regency Stouffer Renaissance See program for details.	Concurrent Sessions 8:30 AM - 11:30 AM Convention Center Hyatt Regency Stouffer Renaissance See program for details.	8:30 AM - 11:30 AM Convention Center Hyatt Regency Stouffer Renaissance See program for details.	Concurrent Sessions 8:30 AM - 11:30 AM Convention Center Hyatt Regency Stouffer Renaissance See program for details.	Concurrent Sessions 8:30 AM - 11:30 AM Convention Center Hyatt Regency See program for details.
	Science Innovation Sessions 8:30 AM - 11:30 AM Convention Center	Science Innovation Sessions 8:30 AM - 11:30 AM Convention Center	Science Innovation Sessions 8:30 AM - 11:30 AM Convention Center	Science Innovation Sessions 8:30 AM - 11:30 AM Convention Center	Science Innovation Sessions 8:30 AM - 11:30 AM Convention Center
Seminar: Origins Seminar: Internet 8:30 AM - 11:30 AM Stouffer Renaissance	Seminar: Origins Seminar: Internet 8:30 AM - 11:30 AM Stouffer Renaissance		я .		Field Trip Columbus Science Ctr NASA 8:30 AM - 12:30 PM
Public Science Day 9:00 AM - 2:00 PM Convention Center	AJAS Oral Presentations 8:30 AM - 11:30 AM Convention Center	Exhibition 10:00 AM - 3:00 PM Convention Center	Exhibition 10:00 AM - 3:00 PM Convention Center	Exhibition 10:00 AM - 2:00 PM Convention Center	DelMarVa Poster Sessions 10:30 AM - 2:30 PM
	Student Awards Poster Competition 10:00 AM - 2:00 PM Convention Center	EE Career Seminars 8:30 AM - 5:30 PM Convention Center	EE Career Seminars 8:30 AM - 5:30 PM Convention Center	EE Career Seminars 8:30 AM - 5:30 PM EE Job Fair 10:00 AM - 4:00 PM Convention Center	EE Job Fair 10:00 AM - 4:00 PM Convention Center
Field Trips Columbus Science Ctr Johns Hopkins Lab 1:00 PM - 5:00 PM		Physical/Life Sciences Poster Sessions 10:30 PM - 2:30 PM Convention Center	Social Sci/Education Poster Sessions 10:30 PM - 2:30 PM Convention Center		Field Trip U.S. Dept of Agriculture 12:30 PM - 5:00 PM
Meeting Registration 2:00 PM - 7:00 PM Convention Center	Topical Lectures 1:00 PM - 2:00 PM Sl'96 Topical Lectures 8:30 AM - 9:15 AM 1:30 PM - 2:15 PM See program for details	Topical Lectures 1:00 PM - 2:00 PM Sl'96 Topical Lectures 8:30 AM - 9:15 AM 1:30 PM - 2:15 PM See program for details	Topical Lectures 1:00 PM - 2:00 PM Sl'96 Topical Lectures 8:30 AM - 9:15 AM 1:30 PM - 2:15 PM See program for details	Topical Lectures 1:00 PM - 2:00 PM SI'96 Topical Lectures 8:30 AM - 9:15 AM 1:30 PM - 2:15 PM See program for details	Topical Lectures 1:00 PM - 2:00 PM SI'96 Topical Lectures 8:30 AM - 9:15 AM 1:30 PM - 2:15 PM See program for details
Seminar: Origins Seminar: Internet 2:30 PM - 5:30 PM Stouffer Renaissance	Seminar: Origins Seminar: Internet 2:30 PM - 5:30 PM Stouffer Renaissance	Awards Ceremony Noon - 1:00 PM Hyatt Regency	Science Innovation Poster Sessions 10:30 AM - 2:30 PM Convention Center		
	Concurrent Sessions 2:30 PM - 5:30 PM Convention Center Hyatt Regency Stouffer Renaissance See program for details.	Concurrent Sessions 2:30 PM - 5:30 PM Convention Center Hyatt Regency Stouffer Renaissance See program for details.	Concurrent Sessions 2:30 PM - 5:30 PM Convention Center Hyatt Regency Stouffer Renaissance See program for details.	Concurrent Sessions 2:30 PM - 5:30 PM Convention Center Hyatt Regency Stouffer Renaissance See program for details.	Concurrent Sessions 2:30 PM - 5:30 PM Convention Center Hyatt Regency See program for details.
	Science Innovation Sessions 2:30 PM - 5:30 PM Convention Center	Science Innovation Sessions 2:30 PM - 5:30 PM Convention Center	Science Innovation Sessions 2:30 PM - 5:30 PM Convention Center	Science Innovation Sessions 2:30 PM - 5:30 PM Convention Center	Science Innovation Sessions 2:30 PM - 5:30 PM Convention Center
	Exhibit Grand Opening 4:00 PM - 6:30 PM Reception 5:00 PM - 6:30 PM Convention Center				
	AJAS Poster Session 4:00 PM - 6:30 PM Convention Center				
Opening Session: Allocating Research Funds 6:00 PM - 8:00 PM Hyatt Regency	Plenary Lecture Neal Lane 6:30 PM - 7:30 PM Convention Center	President's Lecture Rita R. Colwell 6:30 PM - 7:30 PM Hyatt Regency	Plenary Lecture Jacqueline Barton 6:30 PM - 7:30 PM Hyatt Regency	Plenary Lecture David Satcher 6:30 PM - 7:30 PM Hyatt Regency	
		President's Reception 7:30 PM - 8:30 PM Hyatt Regency		*	

MEETING-AT-A-GLANCE

Time Schedule All AM sessions: 8:30 AM - 11:30 AM (unless otherwise indicated) All PM sessions: 2:30 PM - 5:30 PM (unless otherwise indicated)

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TRACK	FRII	DAY, 9TH	SAT	URDAY, 10TH	SUI	NDAY, 11TH	MO	NDAY, 12TH	TUE	SDAY, 13TH
and Managing		*Prudent Practices in Laboratory Handling and Disposal of Chemicals *Safety and Pollution Prevention: Maximizing Research Innovation, Minimizing Regulatory Burden	AM PM	Innovative Chemical Separations and the Clean-up of National Nuclear Sites Siting Hazardous Facilities: Views on Fair Process and Outcome		Risk Assessment: The New Panacea Regulatory Morass or Just a Too!? Science of Decision Making in a Complex World		Social Learning in the Manage- ment of Global Environmental Risks Assessing Health and Environ- mental Risks from Long-term Radiation Contamination in Chelyabinsk, Russia	АМ	*Biosafety: Issues of Risk and Responsibility in Biotechnology
Biological Diversity	AM	The Science of Biodiversity	PM	The Ethics of Human Genetic Enhancement	AM AM/ PM	Cultural Diversity in Psychological Structure and Functioning Building Evolutionary Trees: Evidence and Analysis Coral Reefs: Global Change and Biodiversity Loss Diversity of Human Physiological Adaptability	PM AM/	Heterochrony: Merging Evolut- ionary Perspectives in Paleo- anthropology, Paleontology, and Biology Utilizing Africa's Genetic Afflu- ence through Natural Products, Research, and Development	AM	*The Microbial World: Foundation of the Biosphere Ethnogeriatrics: Biodiversity of Disease and Death Among Elderly People of Color *Microbial Diversity: The Unseen Treasure
for the Future	AM PM	Assessing Progress: Lessons Learned from Some Informal Science Education Programs Quantitative Literacy and Science Education Comprehensive School Health Programs: Promoting Public Health Through K-12 Education The National Science Foundation and Urban Science Education		Education	AM PM	Assessing Systemic Reform from National Perspectives to Student Outcomes EFARR Education: Giving Meaning to the Sciences of Life K-12 Math and Science Education: is Change Really Taking Place? What Works: Successful University-based Outreach Programs	AM/ PM PM	The Federal Role in Education: Effects of Changing Attitudes Pseudoscience, Biology and the Education of African American Studies 2:30 PM - 4:00 PM Using Problem-based Learning to Bolster Achievement for all Students 4:00 PM - 5:30 PM Problem-based Learning in Undergraduate Science		"School Crossings" on the Information Superhighway Building Environmental Science Curricula for Youth and Undergraduates
Environment and Science on the Chesapeake	AM	The Middle Atlantic Environmen- tal and Ecological Systems: Strategies for Sustainable Development			PM	Preservation of Farmland and Open Space in the Northeast	AM PM	Our Lancaster County (PA) Neighbors: The Old Order Amish Science, Citizens, and Public Policy in the Chesapeake Bay Program *Biotechnology in Maryland The Restoration of the Chesapeake: A National Paradigm		
Environment and Sustainability		How Many People Can the Earth Support? Consumption and Population Growth: Twin Challenges to Sustainable Development	AM PM PM	International Perspectives on Population, Consumption, and the Environment: Science and Policy Issues Limits to Agricultural Productivity Recovering Tropical Forests: Conservation, Development, and Local Communities		The U.S. Environmental and Natural Resource Research Strategy		Dredged Material Disposal and Waste Management in the Nearshore Environment *Biotechnology and Aquaculture: Finfish Reproduction, Growth, and Development	AM	*Engineering Functionality into Foods: Benefits for the Consumer
Examining Global Change	AM	The Open Exchange of Environmental Information		Climate Change: The Second Assessment Report of the Intergovernmental Panel on Climate Change	AM	Reconfiguration of Floodplain Management Since the Mid- continent Floods Remote Sensing of Climate Sensitive Parameters from Space Social Scientists Contributions to Remote Sensing	AM PM	Assessing Ecological Implications of Changes in Climate Stratospheric Ozone Depletion by Halogens: Recent Achieve- ments, and Continuing Challenges	AM PM	Surface Age Dating in Envoiron- mental Studies and Reconstruc- tion of Global Change Interactions of Karst Geology and Ecology
Industry, Technology, and Engineering	PM	Ocean Science and Engineering: Two Cultures Meet in the Ocean	AM PM	Science and Technology in the NAFTA Framework High-Performance Work Trans- formations in Advanced Manufacturing	PM	Industry/DOE Laboratory Tech- nology Partnerships: Do the Tax- payers Benefits	AM/ PM	*Stimulating the Local Economy With High Tech Jobs: A Status Report		New Directions in Industrial Research and Development
Information Age	AM	*Frontier Applications in Computer Methods for Dynamic Systems	AM PM	*Artificial Life in Cyberspace National Information Infrastructure: Access and Use at the People and Policy Level		Building the Health Information Highway: Prognosis for a Cure Health Research and Education: Information for the Next Century	AM	*Intelligent Agents: Software Assistants in Finding, Retrieving, and Analyzing Information	AM	Cyberscience: Scientific Life Evolving on the Internet
and the	PM	Human Exploration of Space Recent Trends in Japanese Science and Technology	AM/ PM AM/ PM PM	Sciences, 1996	AM PM PM	New Studies of Meteorites 9:30 AM - 11:30 AM *Mathematics for the Next Century: Knots 2:15 PM - 4:15 PM *Mathematics for the Next Century: Pattern Formation 4:15 PM - 6:15 PM *Mathematics for the Next Century: Geometric Arrangements with Applications to Physics and Robotics The Discovery of Radioactivity: The Birth of Nuclear Physics The Search for Extraterrestrial Intelligence	AM PM	*New Directions in Atomic, Molec- ular, and Optical Science: Con- trolling Matter with Light Impact of the Global Positioning System (GPS) *New Physics in the Baltimore/ Washington Area		

							Ali	PM sessions: 2:30 PM - 5:30 PM (un	less ot	newise indicated)
TRACK	FRII	DAY, 9TH	SAT	URDAY, 10TH	SU	NDAY, 11TH	MO	NDAY, 12TH	TUE	SDAY, 13TH
Neuroscience, Behavior, and Language	AM	The Architecture of the Sign in Signed Languages *The Developing Brain: Genes, Environment, and Behavior *The Brains Behind Human Communication: New Approaches to Research		*New Approaches to the Neuro- biology of Language Sexual Differences in Brain and Behavior	AM/	Deterioration or Evolution?: Language Standards and Linguistics Neural Network and Symbolic Approaches to Language	AM	The Mind's Clocks: Circadian and Interval Timing	АМ	Limbic System, Our Mammalian Heritage: Normal/Deviating Emotion, Memory, Homicidal Action
Policy, Science, and Engineering	AM PM PM	Young Scientists in Transition: Career Challenges and Science Policy Implications "Science Studies" and the Ad- vancement of Science *Science and the Editorial Page		Assessing Competitiveness in Research Implementation Strategies for "Platform for Action": The U.N. Conference on Women		Science, Technology, and the States *Impacts of the 104th Congress on Science and Technology		Societal Returns to Investment in Research: New Directions, New Concerns *Communicating with Policy-makers: Strategies for Scientists and Engineers Immigration of Scientists and Engineers: Social and Economic Impacts	AM	*Science Careers in a Changing Economy The Critical Appraisal of Science and Technology Policy Analysis Innovative Collaboration: Student-Faculty Partnerships Explore Curriculum Developmen
Practice of Science	AM PM	Analytic Approaches to Fairness Advances in Peer Review Research		Not Just Mentors: Educating for the Responsible Conduct of Research		Research Ethics: We're All Accountable, So Who's Accounting Ethical Standards for Science and Engineering			AM	Science Survival: A Practicum
Public Health and Medicine	АМ	Entertaining, Educational, or Alarming? Public Health Issues and Popular Perceptions *Medicines Discovery in the 21st Century Health Care Reform and the Future of the Academic Medical Center *Mathematical Problems in the Diagnosis and Treatment of Disease	PM	*Scope of the AIDS Epidemic in the United States *AIDS: Epidemiology, Biology, and Prevention of HIV Infection *Molecular Medicine Enters the Mouth	AM/ PM AM	1995: A Year of Dramatic Shifts in Health Data Policy *Replacement Parts and Implan- tations for People Religious, Social, and Environment Factors that Influence Disease States Life Long Health: Beyond the Medical Model	AM/ PM	*Global Change and Emerging Infectious Diseases	PM	*Challenges in the Development of Medications for Opiate and Cocaine Addictions Alzheimer's Disease: Prospects for the Future
Science and International Security			PM	Ballistic Missile Defense	AM	International Arms Control: Lessons from the UNSCOM Experience		A Comprehensive Test Ban Treaty: Implications for National Security and Non- Proliferation An Assessment of the Nunn- Lugar Cooperative Threat Reduction Program		Environmental Stress and Violence in the Developing World Environmental Refugees and Ecological Restoration
Science and Society	AM	Intersection of Environment, Health, Professional Ethics, and Law The Sense of Justice: Evolut- ionary Origins of Moral and Legal Behavior Science, Technology, and Disability: 20th Anniversary Reflections Women Nobelists: Their Work Their Lives, and Their Impact on Science	AM/ PM	Growing Up American: Dilemmas of the New Second Generation Uncertainty, Science, and the Media Women and Violence: Victims, Offenders, and Prevention Policies	PM	Major Mental Disorder and Crime: New Data, New Policies? Histories and Philosophies Are Women Succeeding in Science?		The General Public's View about Science and Reasoning Life After 65: How Science Can Promote Successful Aging		Whither Research-Intensive Universities?
Science for All	AM/ PM PM	Science for the Naked Eye, XXIII Making the Past Alive through Ceramics: Physical Sciences Meet Anthropology		9:30 AM - 11:30 AM Youth Meets the Masters Science Is Fun!	AM	Contributions of Science to Human Rights Truth Commissions	PM	Mysteries of the American Landscape	AM	Science Museums: Past, Present, and Future
SCIENCE INNOVATION	AM/ PM	DNA Computing Neuroscience and Technology: Non-Invasive Functional Brain Mapping Signal Transduction Quantum Computation	AM PM PM	Neuroscience and Technology: Visual Memory Structural and Molecular Basis of Cancer Vaccines Neuroscience and Technology: Unique Experimental Protocols Chromosomal Instability as a Causal Factor in Cancer Structural Biology	AM/ AM/ PM PM	Genomics: Bacteria and Plants Cardiovascular Science and and Technology: Gene Therapy for Vascular Disease Advances in AIDS Research Cardiovascular Science and Technology: Vascular Biology: Viruses as a Cause of Cardio- vascular Disease Geonomics: Animals	AM/ AM/ PM PM	Cardiovascular Science and Technology: Cardiac MRI Reproductive and Developmental Biology: Innovations in Fertility Advances in AIDS Research Research Cardiovascular Science and Technology: Diseases of the Cytoskeleton and Contractile Apparatus Reproductive and Developmental Biology: Developmental Biology		

SEMINARS

Origins: Thursday, 16th and Friday, 17th, AM/PM Living with the Internet: Thursday, 16th and Friday, 17th, AM/PM

Note: All information as of 9/1/95. Any changes, additions, or deletions received after that date will be included in the next printing of this program.

^(*) = Indicates sessions that may also be of interest to Science Innovation attendees.

PLENARY AND TOPICAL ECTURES

FEBRUARY 8-13, 1996 BALTIMORE CONVENTION CENTER BALTIMORE, MARYLAND

All information is as of 9/1/95. Changes, additions or deletions received after that date will be included in the next printing of this program.



Indicates sessions that may also be of interest to Science Innovation attendees

PLENARY LECTURES

THURSDAY, FEBRUARY 8, 1996

OPENING CEREMONIES AND LECTURE

6:00pm-8:00pm

A panel discussion of the National Academy of Science (NAS) report on research funding featuring Dr. Frank Press*, Carnegie Institution of Washington and former President, NAS; and senior administration and congressional representatives*.

FRIDAY, FEBRUARY 9, 1996

KEYNOTE LECTURE

6:30pm-7:30pm Neal Lane, National Science Foundation SATURDAY, FEBRUARY 10,1996

PRESIDENT'S LECTURE

6:30pm-7:30pm

Rita R. Colwell, President, AAAS and President, University of Maryland-Biotechnology Institute

SUNDAY, FEBRUARY 11,1996

PLENARY LECTURE

Jacqueline Barton, Chemistry Department, California Institute of Technology

MONDAY, FEBRUARY 12, 1996

PLENARY LECTURE

David Satcher*, Director, U.S. Centers for Disease Control and Prevention

TOPICAL LECTURERS

(Tentative List)

FRIDAY, FEBRUARY 9, 1996

1:00pm-2:00pm

Daniel S. Goldin, National Aeronautics and Space Administration

Alvin M. Liberman, Haskins Laboratories

Jocelyn Elders*, Arkansas Children's Hospital

FRIDAY, FEBRUARY 9, 1996

SARTON LECTURE:

1:00pm-2:00pm Jane Maienschein, Arizona State University SATURDAY, FEBRUARY 10, 1996

1:00pm-2:00pm

France Cordova, National Aeronautics and Space Administration and Pennsylvania State University

Teresa Fryberger*, U.S. Department of Energy

Robert T. Watson*, Office of Science and Technology Policy

SUNDAY, FEBRUARY 11, 1996

1:00pm-2:00pm

D. James Baker, National Oceanic and Atmospheric Administration

John H. Conway*, Princeton University

MCGOVERN LECTURE IN THE BEHAVIORAL SCIENCES:

SUNDAY, FEBRUARY 11, 1996

1:00PM-2:00PM

James L. McGaugh, University of California, Irvine

MONDAY, FEBRUARY 12, 1996

1:00PM-2:00PM

Alison Brooks*, George Washington University

Yelena Yesha, University of Maryland

TUESDAY, FEBRUARY 13, 1996

1:00PM-2:00PM

Kristin Shrader Frechette, University of South Florida

Alan Leshner, National Institute on Drug Abuse

Wylie Poag, U.S. Geological Survey

SCIENCE INNOVATION TOPICAL LECTURES

AM = 8:30AM-9:15AM

PM = 1:30PM-2:15PM

FRIDAY AM

Watt W. Webb*, Cornell University

SATURDAY AM

Flossie Wong-Staal, University of California-San Diego

SATURDAY PM

Susanne Ildstad, University of Pittsburgh

SUNDAY AM

Robert Bonner, National Institutes of Health

SUNDAY PM

William A. Haseltine, Human Genome Sciences

MONDAY AM

William Bialek, NEC Research Institute

MONDAY PM

Steven M. Block, Princeton University

(*) = invited, not yet confirmed

PRELIMINARY TOOTS

FEBRUARY 8-13, 1996 BALTIMORE CONVENTION CENTER BALTIMORE, MARYLAND

Assessing and Managing Risk

AM = 8:30AM-11:30AMPM = 2:30PM-5:30PM



Prudent Practices in Laboratory Handling and Disposal of

Chemicals

FRIDAY AM

Org by Edward M. Arnett, Duke Univ, and Tamae Wong, Natl Resch Council



Safety and Pollution **Prevention: Maximizing** Research Innovation,

Minimizing Regulatory Burden

FRIDAY PM

Org by Edward M. Arnett, Duke Univ

Innovative Chemical Separations and the Clean-up of National **Nuclear Sites**

SATURDAY AM

Org by William L. Kuhn, Pacific Northwest Lab

Siting Hazardous Facilities: Views on Fair Process and Outcome

SATURDAY PM

Org by Joanne Linnerooth-Bayer. Intl Inst for Applied Systems Analysis

Risk Assessment: The New Panacea Regulatory Morass or Just a Tool?

SUNDAY AM

Org by William F. Isherwood. Lawrence Livermore Natl Lab, and Don Ritter, Natl Environmental Policy Inst

Science of Decision Making in a **Complex World**

SUNDAY PM

Org by Alice F. Healy, Univ of Colorado, and Francis A. Beer, Univ of Colorado

Social Learning in the Management of Global **Environmental Risks**

MONDAY AM

Org by Miranda A. Schreurs, Univ of Maryland, and William C. Clark, Harvard Univ

Assessing Health and **Environmental Risks from Long**term Radiation Contamination in Chelyabinsk, Russia

MONDAY PM

Org by Elizabeth J. Kirk, AAAS



Biosafety: Issues of Risk and Responsibility in Biotechnology

TUESDAY AM

Org by Dianne Janczewski, U.S. Agency for Intl Development, Vanderlei Perez Canhos, Fundacao Andre Tosello, and Jeff Stann, AAAS

Biological Diversity

AM = 8:30AM-11:30AM

PM = 2:30PM-5:30PM

The Science of Biodiversity

FRIDAY AM

Org by Joan Abrahamson, Jefferson Inst, Peter Crane, Field Museum, and Anna Roosevelt, Field Museum

The Ethics of Human Genetic **Enhancement**

SATURDAY PM

Org by William Gardner, Univ of Pittsburgh, and Erik Parens, The Hastings Ctr

Coral Reefs: Global Change and **Biodiversity Loss**

SUNDAY AM, PM

Org by Gene Rosenberg, **Smithsonian Institution**

Cultural Diversity in Psychological Structure and **Functioning**

SUNDAY AM

Org by Hazel Rose Markus, Stanford Univ

Building Evolutionary Trees: Evidence and Analysis

SUNDAY AM

Org by Martin Farach, Rutgers Univ

Diversity of Human Physiological Adaptability

SUNDAY PM

Org by Peter W. Hochachka, Univ of British Columbia

Heterochrony: Merging Evolutionary Perspectives in Paleoanthropology, Paleontology, and Biology

MONDAY AM, PM

Org by Nancy Minugh-Purvis, Med College of Pennsylvania, and Michael L. McKinney, Univ of Tennessee

Utilizing Africa's Genetic Affluence through Natural Products, Research, and Development

MONDAY AM, PM

Org by Amy Auerbacher Gimbel, AAAS, and Berhanu Abegaz, Univ of Botswana



The Microbial World: Foundation of the **Biosphere**

Org by Rita R. Colwell, Univ of Maryland, and James T. Staley, Univ of Washington

Ethnogeriatrics: Biodiversity of **Disease and Death Among Elderly People of Color**

TUESDAY AM

Org by Haragopal Thadepalli, Charles R. Drew Univ of Med and



Microbial Diversity: The **Unseen Treasure**

TUESDAY PM

Org by Sivramiah Shantharam, U.S. Dept of Agriculture, and L. Val Giddings, U.S. Dept of Agriculture

Educating for the **Future**

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

Assessing Progress: Lessons Learned From Some Informal **Science Education Programs**

FRIDAY AM

Org by Marilee Long, Colorado State Univ, and Jocelyn Steinke, Western Michigan Univ

Quantitative Literacy and Science Education

FRIDAY AM

Org by Cathy Crocker, Amer Statistical Assoc

The National Science Foundation and Urban Science Education

FRIDAY PM

Org by James R. Oglesby, AAAS, and Mary Koppal, AAAS

Comprehensive School Health **Programs: Promoting Public** Health Through K-12 Education

Org by Valerie Setlow, Inst of Med

From Curiosity to Science **Through Linguistic Inquiry**

SATURDAY AM

Org by Maya Honda, Wheelock College, and Wayne O'Neil, Massachusetts Inst of Tech

Scientists and Urban Science Education

SATURDAY AM

Org by Jo Ellen Roseman, AAAS, and Mary Koppal, AAAS

Reforming Elementary Science Education in Urban Districts

SATURDAY PM

Org by Leon Ukens, Towson State Univ

The Textbook of the Future

SATURDAY PM

Org by Caroline M. Eastman, Univ of South Carolina

Assessing Systemic Reform from National Perspectives to Student Outcomes

SUNDAY AM

Org by Jane Butler Kahle, Miami Univ

EFARR Education: Giving Meaning to the Sciences of Life

SUNDAY AM

Org by Vernon B. Cardwell, Univ of Minnesota, and James Ellis, Bio Sci Curriculum Study

K-12 Math and Science Education: Is Change Really Taking Place?

SUNDAY PM

Org by George Campbell, Natl Action Council for Minorities in Engineering

What Works: Successful University-based Outreach Programs

SUNDAY PM

Org by Bonnie Schmidt, Univ of Western Ontario

The Federal Role in Education: Effects of Changing Attitudes

MONDAY AM

Org by George Campbell, Natl Action Council for Minorities in Engineering

Pseudoscience, Biology and the Education of African American Studies

MONDAY AM, PM

Org by Joseph L. Graves, Arizona State Univ - West, and Bernard Ortiz de Montellano, Wayne State Univ

Using Problem Based Learning to Bolster Achievement for All Students

MONDAY 2:30PM-4:00PM

Org by Maxine E. Bleich, Ventures in Education

Problem-Based Learning in Undergraduate Science

MONDAY 4:00PM-5:30PM

Org by Harold B. White, Univ of Delaware, and Barbara Duch, Univ of Delaware

"School Crossings" on the Information Superhighway

TUESDAY AM

Org by Rosanne W. Fortner, Ohio State Univ

Building Environmental Science Curricula for Youth and Undergraduates

TUESDAY PM

Org by Shobha Sriharan, Virginia State Univ, Neil Grigg, Colorado State Univ, and Florence Dunkel, Montana State Univ

Environment and Science on the Chesapeake

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

The Middle Atlantic Environmental and Ecological Systems: Strategies for Sustainable Development

FRIDAY AM

Org by Christopher K. Mooers, Univ of Miami, and Frederick Grassle, Rutgers Univ

Preservation of Farmland and Open Space in the Northeast

SUNDAY PM

Org by Dale Colyer, West Virginia Univ

Our Lancaster County (PA) Neighbors: The Old Order Amish

MONDAY AM

Org by Victor A. McKusick, Johns Hopkins Schl of Med

Science, Citizens, and Public Policy in the Chesapeake Bay Program

MONDAY AM

Org by M. Grant Gross, Chesapeake Resch Consortium



Biotechnology in Maryland

MONDAY PM

Org by William A. Haseltine, Human Genome Sciences

The Restoration of the Chesapeake: A National Paradigm

MONDAY PM

Org by Ray Miller, Univ of Maryland, and Alan W. Taylor, Univ of Maryland

Environment and Sustainability

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

How Many People Can the Earth Support?

FRIDAY AM

Org by Joel E. Cohen, Rockefeller Univ

Consumption and Population Growth: Twin Challenges to Sustainable Development

FRIDAY PM

Org by A.R. Palmer, Inst for Cambrian Studies, Albert A. Bartlett, Univ of Colorado, and E-An Zen, Univ of Maryland

International Perspectives on Population, Consumption, and the Environment: Science and Policy Issues

SATURDAY AM

Org by Victoria Dompka, AAAS

Limits to Agricultural Productivity

SATURDAY PM

Org by Shu Geng, Univ of California-Davis, and Donald A. Holt, Univ of Illinois

Recovering Tropical Forests: Conservation, Development, and Local Communities

SATURDAY PM

Org by David Barton Bray, Inter-American Foundation

The U.S. Environmental and Natural Resource Research Strategy

SUNDAY AM, PM

Org by D. James Baker, Natl Oceanic and Atmospheric Admin, and Ronald Pulliam, Natl Biol Serv

Dredged Material Disposal and Waste Management in the Nearshore Environment

MONDAY AM

Org by Gerald M. Friedman, Brooklyn College



Biotechnology and Aquaculture: Finfish Reproduction, Growth,

and Development

MONDAY PM

Org by Yonathan Zohar, Ctr of Marine Biotech, and Jack Greer, Maryland Sea Grant College



Engineering
Functionality into
Foods: Benefits for the
Consumer

TUESDAY AM

Org by Gerald E. Gaull, Georgetown Ctr for Food and Nutrition Policy, and Robin Yeaton Woo, Georgetown Ctr for Food and Nutrition Policy

Examining Global Change

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

The Open Exchange of Environmental Information

FRIDAY PM

Org by Roberta Balstad Miller, Consortium of Intl Earth Science Infor Networks, and Peter M. Banks, Environmental Resch Inst of Michigan

Climate Change: The Second Assessment Report of the Intergovernmental Panel on Climate Change

SATURDAY AM, PM

Org by Robert Watson, Office of Sci and Tech Policy, and Richard Moss, U.S. Global Change Resch Prog

Reconfiguration of Floodplain Management Since the Midcontinent Floods

SUNDAY AM

Org by John F. Shroder, Univ of Nebraska-Omaha

Remote Sensing of Climate Sensitive Parameters from Space

SUNDAY AM

Org by Kristina B. Katsaros, Univ of Washington

Social Scientists Contributions to Remote Sensing

SUNDAY PM

Org by Emilio F. Moran, Indiana Univ

Assessing Ecological Implications of Changes in Climate

MONDAY AM

Org by Mary Barber, Sustainable Biosphere Office, and Jeremy Eddy, Sustainable Biosphere Office

Stratospheric Ozone Depletion by Halogens: Recent Achievements, and Continuing Challenges

MONDAY PM

Org by Manvendra K. Dubey, SRI Intl, and Darin W. Toohey, Univ of California-Irvine

Surface Age Dating in Environmental Studies and Reconstruction of Global Change

TUESDAY AM

Org by John F. Shroder, Univ of Nebraska-Omaha, and M. Povitch, U.S. Geol Survey

Interactions of Karst Geology and Ecology

TUESDAY PM

Org by Daniel L. Chess, IBM Corp, and David Luckins, Natl Speleological Soc

Industry, Technology, and Engineering

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

Ocean Science and Engineering: Two Cultures Meet in the Ocean

FRIDAY PM

Org by Karl S. Pister, Univ of California, and Peter Brewer, Monterey Bay Aquarium Resch Inst

Science and Technology in the NAFTA Framework

SATURDAY AM

Org by Miguel Jose Yacaman, Univ Natl Autonoma de Mexico, and G. Ahmed Meer, U.S. Embassy, Mexico

High-Performance Work Transformations in Advanced Manufacturing

SATURDAY PM

Org by Joel Yudken, Work and Tech Inst

Industry/DOE Laboratory Technology Partnerships: Do the Taxpayers Benefit?

SUNDAY PM

Org by Tina M. Kaarsberg, Vista Technologies, Inc, and Robert Olson, Inst for Alternative Futures



Stimulating the Local Economy with High Tech Jobs: A Status Report

MONDAY AM, PM

Org by Barry G. Silverman, George Washington Univ, Sally Rood, Natl Tech Transfer Ctr, and Christopher T. Hill, George Mason Univ

New Directions in Industrial Research and Development

TUESDAY AM, PM

Org by Christopher T. Hill, George Mason Univ, and Daniel Berg, Rensselaer Polytech Inst

Information Age

AM = 8:30AM-11:30AM

PM = 2:30PM-5:30PM



Frontier Applications in Computer Methods for Dynamic Systems

FRIDAY AM

Org by Ronald E. Mickens, Clark Atlanta Univ



Artificial Life in Cyberspace

SATURDAY AM

Org by Maureen C. Kelly, BIOSIS, and Caroline M. Eastman, Univ of South Carolina

National Information Infrastructure: Access and Use at the People and Policy Level

SATURDAY PM

Org by Norine Noonan, Florida Inst of Tech, and Melinda Bier, Florida Inst of Tech

Building the Health Information Highway: Prognosis for a Cure

SUNDAY AM

Org by Barry G. Silverman, George Washington Univ, and Bettijoyce B. Lide, Natl Inst of Standards and Tech

Health Research and Education: Information for the Next Century

SUNDAY PM

Org by Marion J. Ball, Univ of Maryland, and Elliot Siegel, Natl Library of Med



Intelligent Agents: Software Assistants in Finding, Retrieving, and Analyzing Information

MONDAY PM

Org by Bonnie C. Carroll, Infor Intl Assoc

Cyberscience: Scientific Life Evolving on the Internet

TUESDAY AM

Org by Alexander Fowler, AAAS

Mathematics and the Physical Sciences

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

Human Exploration of Space

FRIDAY AM, PM

Org by Yoji Kondo, NASA-Goddard Space Flight Ctr

Recent Trends in Japanese Science and Technology

FRIDAY PM

Org by Masa-Toshi Koshiba, Japan Soc for the Promo of Sci, and Richard Getzinger, AAAS



Frontiers of the Physical Sciences, 1996

SATURDAY AM, PM

Org by Rolf M. Sinclair, Natl Sci Foundation



All Eyes on the Universe: Multiwavelength

Astrophysics

SATURDAY AM, PM

Org by Saeqa Vrtilek, Univ of Maryland

The Universe - Views from Space

SATURDAY PM

Org by Ron Allen, Johns Hopkins Univ

New Studies of Meteorites

SUNDAY AM

Org by Rolf M. Sinclair, Natl Sci Foundation



Mathematics for the Next Century: Knots

SUNDAY 9:30AM-11:30AM

Org by Cameron Gordon, Univ of Texas-Austin, and Charles Radin, Univ of Texas-Austin



Mathematics for the Next Century: Pattern Formation

SUNDAY 2:15PM-4:15PM

Org by Martin Golubitsky, Univ of Houston



Mathematics for the Next Century: Geometric Arrangements with

Applications to Physics and Robotics

SUNDAY 4:15PM-6:15PM

Org by Janos Pach, New York Univ, and Charles Radin, Univ of Texas-Austin

The Discovery of Radioactivity: The Birth of Nuclear Physics

SUNDAY PM

Org by Saul Krasner, U.S. Coast Guard Academy

The Search for Extraterrestrial Intelligence

SUNDAY PM

Org by Lori Marino, Emory Univ, and Donald Tarter



New Directions in Atomic, Molecular, and Optical Science:

Controlling Matter with Light

MONDAY AM

Org by John Weiner, Univ of Maryland

Impact of the Global Positioning System (GPS)

MONDAY AM

Org by P. Kenneth Seidelmann, U.S. Naval Observatory, and William Klepczynski, U.S. Naval Observatory



New Physics in the Baltimore/Washington Area

MONDAY PM

Org by Robert L. Park, Amer Physical Soc

Neuroscience, Behavior, and Language

AM = 8:30AM-11:30AM

PM = 2:30PM-5:30PM

The Architecture of the Sign in Signed Languages

FRIDAY AM

Org by Richard P. Meier, Univ of Texas-Austin



The Developing Brain: Genes, Environment, and Behavior

FRIDAY AM

Org by Christine Hohmann, Morgan State Univ



The Brains Behind Human Communication: New Approaches to

Research

FRIDAY PM

Org by James F. Kavanagh, Amer Speech-Language-Hearing Assoc, and Judith L. Lauter, Univ of Oklahoma-Health Sci Ctr



New Approaches to the Neurobiology of Language

SATURDAY AM

Org by David Caplan, Massachusetts Gen Hosp

Sexual Differences in Brain and Behavior

SATURDAY PM

Org by Arthur P. Arnold, Univ of California

Deterioration or Evolution?: Language Standards and Linguistics

SUNDAY AM

Org by Geoffrey Nunberg, Xerox PARC

Neural Network and Symbolic Approaches to Language

SUNDAY AM, PM

Org by Paul Smolensky, Johns Hopkins Univ

The Mind's Clocks: Circadian and Interval Timing

MONDAY AM

Org by John Gibbon, Columbia Univ, and Rae Silver, Barnard College

Limbic System, Our Mammalian Heritage: Normal/Deviating Emotion, Memory, Homicidal Action

TUESDAY AM

Org by Anneliese A. Pontius, Massachusetts Gen Hosp

Policy, Science, and Engineering

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

Young Scientists in Transition: Career Challenges and Science Policy Implications

FRIDAY AM

Org by Eliene Augenbraun, U.S. Agency for Intl Development

"Science Studies" and The Advancement of Science

FRIDAY PM

Org by A. Edward Manier, Univ of Notre Dame



Science on the Editorial Page

FRIDAY PM

Org by Rick E. Borchelt, Exec Offc of the President, and Lynne Friedmann, Friedmann Communication

Assessing Competitiveness in Research

SATURDAY AM

Org by Albert H. Teich, AAAS

Implementation Strategies for "Platform for Action": The U.N. Conference on Women

SATURĐAY AM

Org by Dominique Homberger, Louisiana State Univ, Catherine J. Didion, Assoc for Women in Sci, and Linda Thompson, AAAS

Science, Technology, and the States

SUNDAY AM

Org by David H. Guston, Rutgers Univ



Impacts of the 104th Congress on Science and Technology

SUNDAY PM

Org by Steve Nelson, AAAS and Dana Isherwood, Lawrence Livermore Natl Lab

Societal Returns to Investment in Research: New Directions, New Concerns

MONDAY AM

Org by Kenneth M. Brown, Natl Sci Foundation



Communicating with Policymakers: Strategies for Scientists and

Engineers

MONDAY PM

Org by Steve Nelson, AAAS

Immigration of Scientists and Engineers: Social and Economic Impacts

MONDAY PM

Org by Sharon G. Levin, Univ of Missouri



Science Careers in a Changing Economy

TUESDAY AM

Org by Alan Fechter, Committee on Pros in Sci and Tech, and Paula M. Rayman, Radcliffe Pub Policy Inst

The Critical Appraisal of Science and Technology Policy Analysis

TUESDAY AM

Org by David H. Guston, Rutgers Univ

Innovative Collaboration: Student-Faculty Partnerships Explore Curriculum Development

TUESDAY PM

Org by Susan Higman, Student Pugwash USA

Practice of Science

AM = 8:30AM-11:30AM

PM = 2:30PM-5:30PM

Analytic Approaches to Fairness

FRIDAY AM

Org by Steven J. Brams, New York Univ

Advances in Peer Review Research

FRIDAY PM

Org by Art Stamps, Inst of Environmental Quality

Not Just Mentors: Educating for the Responsible Conduct of Research

SATURDAY AM, PM

Org by Diane Hoffman-Kim, Massachusetts Inst of Tech, and Stephanie J. Bird, Massachusetts Inst of Tech

Research Ethics: We're All Accountable, So Who's Accounting?

SUNDAY AM

Org by C.K. Gunsalus, Univ of Illinois, and Drummond Rennie, Inst for Health Policy Studies

Ethical Standards for Science and Engineering

SUNDAY PM

Org by Mark S. Frankel, AAAS

Science Survival: A Practicum

TUESDAY AM

Org by Susan Higman, Student Pugwash USA

Public Health and Medicine

AM = 8:30AM-11:30AM

PM = 2:30PM-5:30PM

Entertaining, Educational, or Alarming? Public Health Issues and Popular Perceptions

FRIDAY AM

Org by Marcel LaFollette, Ctr for Intl Sci, and Tech Policy, Sharon Dunwoody, Univ of Wisconsin, and James C. Cornell, Harvard-**Smithsonian Ctr for Astrophysics**



Medicines Discovery in the 21st Century

FRIDAY AM

Org by David J. Triggle, State Univ of New York-Buffalo

Health Care Reform and the **Future of the Academic Medical** Center

FRIDAY PM

Org by Barry M. Brenner, Harvard Med Schl



Mathematical Problems in the Diagnosis and **Treatment of Disease**

FRIDAY PM

Org by David Isaacson, Rensselaer Polytec Inst



Scope of the AIDS **Epidemic in the United**

SATURDAY AM

Org by Philip S. Rosenberg, Natl Cancer Inst



AIDS: Epidemiology, Biology, and Prevention of HIV Infection

SATURDAY PM

Org by Richard T. Johnson, Johns Hopkins Hosp, and Thomas C. Quinn, Johns Hopkins Univ



Molecular Medicine Enters the Mouth

SATURDAY PM

Org by Lawrence A. Tabak, Univ of Rochester

1995: A Year of Dramatic Shifts in Health Data Policy

SUNDAY AM

Org by John S. Gardenier, Ctrs for Disease Control, and R. Clifton Bailey, Health Care Financing Admin



Replacement Parts and **Implantations for People**

SUNDAY AM, PM

Org by Robert S. Langer, Massachusetts Inst of Tech. and James G. Martin, Carolinas Med Ctr

Religious, Social, and **Environmental Factors That** Influence Disease States

SUNDAY AM

Org by Harold G. Koenig, Duke Univ-Med Ctr, and David B. Larson, Natl Inst for Healthcare Resch

Life Long Health: Beyond the **Medical Model**

SUNDAY PM

Org by Robert M. Schmidt, California Pacific Med Ctr



Global Change and **Emerging Infectious Diseases**

MONDAY AM, PM

Org by Paul R. Epstein, Harvard Schl of Pub Health, and Rita R. Colwell, Univ of Maryland



Medications for Opiate and Cocaine Addictions

TUESDAY AM, PM

Org by Constance Pechura, Natl Academy of Sci, Charles V. Grudzinskas, Natl Inst on Drug Abuse, and Carolyn Fulco, Inst of Med-Natl Academy of Sci

Challenges in the

Development of

Alzheimer's Disease: Prospects for the Future

TUESDAY PM

Org by Claudia H. Kawas, Johns Hopkins Univ-Schl of Med

Science and International Security

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

Ballistic Missile Defense

SATURDAY PM

Org by Scott D. Sagan, Ctr for Intl Security and Arms Control

International Arms Control: Lessons from the UNSCOM Experience

SUNDAY AM, PM

Org by Raymond A. Zilinskas, Univ of Maryland-Biotech Inst, and Ed Lacey, U.S. Arms Control, and Disarmament Agency

A Comprehensive Test Ban **Treaty: Implications for National** Security and Nonproliferation

MONDAY AM

Org by Gregory van der Vink, IRIS Consortium, and Thomas Wander, AAAS

An Assessment of the Nunn-Lugar **Cooperative Threat Reduction Program**

MONDAY PM

Org by William Potter, Monterey Inst for Intl Studies

Environmental Stress and Violence in the Developing World

TUESDAY AM

Org by Thomas Homer-Dixon, Univ of Toronto

Environmental Refugees and Ecological Restoration

TUESDAY PM

Stuart M. Leiderman, Univ of New Hampshire

Science and Society

AM = 8:30AM-11:30AM

PM = 2:30PM-5:30PM

Intersection of Environment, Health, Professional Ethics, and Law

FRIDAY AM

Org by Colin L. Soskolne, Univ of Alberta, and Laura Westra, Univ of Windsor

The Sense of Justice: **Evolutionary Origins of Moral** and Legal Behavior

FRIDAY AM

Org by Roger D. Masters, Dartmouth College, and Margaret Gruter. Gruter Inst for Law and Behavioral Resch

Science, Technology, and Disability: 20th Anniversary Reflections

FRIDAY PM

Org by Virginia W. Stern, AAAS

Women Nobelists: Their Work, Their Lives, and Their Impact on Science

FRIDAY PM

Org by Jaleh Daie, Univ of Wisconsin, and Catherine J. Didion, Assoc for Women in Sci

Growing Up American: Dilemmas of the New Second Generation

SATURDAY AM

Org by Ruben G. Rumbaut, Michigan State Univ

Uncertainty, Science, and the Media

SATURDAY AM, PM

Org by Carol L. Rogers, Sharon Dunwoody, Univ of Wisconsin, and Sharon M. Friedman, Lehigh Univ

Women and Violence: Victims, Offenders, and Prevention Policies

SATURDAY PM Org by Roland Chilton, Univ of

Major Mental Disorder and Crime: New Data, New Policies?

SUNDAY AM

Massachusetts

Org by Sheilagh Hodgins, Univ de Montreal

Histories and Philosophies

SUNDAY PM

Org by A. Edward Manier, Univ of Notre Dame

Are Women Succeeding in Science?

SUNDAY PM

Org by Mary Frank Fox, Georgia Inst of Tech

The General Public's View About Science and Reasoning

MONDAY AM Org by Susan Losh, Florida State Univ

Life After 65: How Science Can Promote Successful Aging

MONDAY PM

Org by Phyllis Moen, Cornell Univ

Whither Research - Intensive Universities?

TUESDAY AM, PM
Org by C. Judson King,
Univ of California, and Irwin Feller,
Pennsylvania State Univ

Science for All

AM = 8:30AM-11:30AM

PM = 2:30PM-5:30PM

Science for the Naked Eye, XXIII

 $FRIDAY\ AM,\ PM$

Org by Rolf M. Sinclair, Natl Sci Foundation

Making the Past Alive through Ceramics: Physical Sciences Meet Anthropology

FRIDAY PM

Org by Charles C. Kolb, Natl Endowment for Humanities, and Dean E. Arnold, Wheaton College

Youth Meets the Masters

SATURDAY 9:30AM-11:30AM Org by Saul Krasner, U.S. Coast Guard Academy (Ret.)

Science is Fun!

SATURDAY PM

Org by Bassam Z. Shakhashiri, Univ of Wisconsin

Contributions of Sceince to Human Rights Truth Commissions

SUNDAY AM

Ory by Daniel Salcedo, AAAS

Mysteries of the American Landscape

MONDAY PM

Org by Walter Sullivan, The New York Times

Science Museums: Past, Present, and Future

TUESDAY AM, PM

Org by Marc Rothenberg, Smithsonian Institution, and Michele Aldrich, AAAS

AMSIE 196 Seminars

Origins

Org by Stephen P. Maran, NASA-Goddard Space Flight Ctr and Joel S. Levine, NASA-Langley Resch Ctr.

This will be an examination of the latest research into the subject of origins. The first day will be devoted to origins of the universe and its elements. It will include the most current ideas, hypotheses, theories, and information from the Hubble Space Telescope and other instruments. The second day will focus on origins of our solar system, the earth, its atmosphere, and on the prebiotic and biotic origins of life.

THURSDAY, FEBRUARY 8,

The Big Bang and the Origin of the Universe

John C. Mather, NASA-Goddard Space Flight Ctr

Large Scale Structure in the Universe and its Origin Mario Livio, Space Telescope Inst

The Evolution of Galaxies: Protogalaxies to the Milky Way

Anne L. Kinney, Space Telescope Inst

The Orgins of Time

Paul Davies, University of Adelaide

The Birth of Stars

Alan P. Boss, Carnegie Institution of Washington

The Origin of Comets

Anita L. Cochran, Univ of Texas-Austin

Stellar Evolution: From Protostars to Supernovae and Black Holes

Richard C. Henry, Johns Hopkins Univ

FRIDAY, FEBRUARY 9

The Origin of the Solar System George W. Wetherill, Carnegie Institution of Washington

The Origin of the Earth

David J. Stevenson, California Inst of Tech

The Origin of the Atmosphere

Joel S. Levine, NASA-Langley Resch Ctr

The Origin of Life: Prebiotic Organic Synthesis,

Sherwood Chang, NASA-Ames Resch Ctr

Early Life: The Geological Record

J. William Schopf, Univ of California-Los Angeles

Late Life: Biological Evolution

Lynn Margulis, Univ of Massachusetts-Amherst

Living with the Internet

Org by John W. Berry, Univ of Illinois-Chicago, Alice Calabrese, Chicago Library System, and Robert F. Palank, St. Louis Comm College

THURSDAY, FEBRUARY 8 FRIDAY, FEBRUARY 9

What is the Internet? How do I get to it? Once there, what can I do? What software do I need? Simply put, this seminar will equip you to successfully work on the information superhighway. The 1 1/2 day workshop will cover the basics of internet operation, electronic mail, telenet, file transfer, world wide web, netscape, mosaic, gopher, and much more.

In addition, plans are being developed to have hands-on workshops available so that you can try out your new skills. These workshops are presently planned for Saturday, February 10 and Sunday, February 11 in a special facility near the Exhibit Hall. Seminar registrants will be afforded a special opportunity during the seminar to register for these sessions.

•12• HOTEL FORM – SEE PAGE 17



Science Innovation presents advances in neuroscience, cardiovascular science, AIDS, and genome research. Afternoon topical lectures will highlight emerging developments in instrumentation and research methodology. (See topicals on page 6.)

AM = 8:30AM - 11:30AM

PM = 2:30PM - 5:30PM

Neuroscience and Technology: Non-Invasive Functional Brain Mapping

FRIDAY AM, PM

Org by Marcus Raichle, Washington Univ-Schl of Med

Neuroscience and Technology: Visual Memory

SATURDAY AM

Org by Robert Desimone, Natl Insts of Health

Neuroscience and Technology: Unique Experimental Protocols

SATURDAY PM

Org to be announced

Cardiovascular Science and Technology: Gene Therapy for Vascular Disease

SUNDAY PM

Org to be announced

Science Innovation Sessions

Cardiovascular Science and Technology: Vascular Biology: Viruses as a Cause of Cardiovascular Disease

SUNDAY AM

Org by Stephen Epstein, NIH

Cardiovascular Science and Technology: Cardiac MRI

MONDAY AM

Org by Robert Balaban, Natl Insts of Health

Cardiovascular Science and Technology: Diseases of the Cytoskeleton and Contractile Apparatus

MONDAY PM

Org by James Sellers, Natl Insts of Health

Signal Transduction

FRIDAY AM, PM

Org by Kathleen Kelly, Natl Cancer Inst

DNA Computing

FRIDAY AM

Org by Richard Lipton, Princeton Univ

Quantum Computation

FRIDAY PM

Org by Seth Lloyd, Massachusetts Inst of Tech

Structural and Molecular Basis of Cancer Vaccines

SATURDAY AM

Org by Jill O'Donnell-Tormey, Cancer Resch Inst, and Brian Quinn, Cancer Resch Inst

Chromosomal Instability as a Causal Factor in Cancer

SATURDAY PM

Org by Lawrence Grossman, Johns Hopkins Univ

Structural Biology

SATURDAY PM

Org by Michael F. Summers, Univ of Maryland -Baltimore

Advances in AIDS Research

SUNDAY AM, PM; MONDAY AM, PM Org by Steven Wolinsky, Northwestern Univ-Med Schl

Genomics: Bacteria and Plants

SUNDAY AM

Org by William A. Haseltine, Human Genome Sciences

Genomics: Animals

SUNDAY PM

Org by William A. Haseltine, Human Genome Sciences

Reproductive and Developmental Biology: Innovations in Fertility

MONDAY AM

Org by Florence Haseltine, Natl Insts of Health, and Wayne Bardin, Population Council

Reproductive and Developmental Biology: Developmental Biology

MONDAY PM

Org by Florence Haseltine, Natl Insts of Health, and Wayne Bardin, Population Council

REGISTER FOR AMSIE'96 TODAY

Phone: (202) 326-6417

FAX: (202) 289-4021

Internet: http://www.aaas.org

Information

Meeting Locations



Baltimore Convention Center One West Pratt Street,

Baltimore, MD 21201 AMSIE'96 activities include: Concurrent Sessions, Science Innovation, Poster Sessions,

Headquarter's Office, Meeting

Registration, Exhibition, Employment Exchange and Career Development Workshops.

Hyatt Regency Baltimore 300 Light Street, Baltimore, MD 21202

AMSIE'96 activities include: Plenary and Topical Lectures, and Concurrent Sessions.

Stouffer Renaissance Hotel 202 East Pratt Street, Baltimore, MD 21202

AMSIE'96 activities include: Topical Lectures, Seminars, and Concurrent Sessions.

Hotel Information

Hyatt Regency Baltimore

Conveniently located on the Inner Harbor, the Hyatt has been one of the city's foremost hotel since its opening. Connected to the hotel by Skywalk is Baltimore's famous Harborplace, the Gallery, and the Baltimore Convention Center. Other major attractions, including the National Aquarium, the Science Center, and the Imax Theater are all within easy walking distance. The Hyatt Regency offers guests every amenity for a memorable stay: two restaurants, a lounge, health club, incredible views, luxurious comfort, superb service, and more. AMSIE'96 activities located at the Hyatt Regency are Plenary and Topical Lectures and Concurrent Sessions.

Stouffer Renaissance

Awarded the prestigious AAA Four-Diamond Award and the Mobil Four-Star Award, the Stouffer Renaissance Harborplace surrounds guests with superior comforts and personalized extras. It is located on the gleaming waterfront of the Inner Harbor, just two short blocks from the Baltimore Convention Center. Amenities include bilingual concierge service, full secretarial services, 24-hour room service, a fully equipped health club, and an indoor pool. AMSIE'96 activities located at the Stouffer Renaissance will be Topical Lectures, Seminars, and some Concurrent Sessions.

Sheraton Inner Harbor

The Sheraton is located directly adjacent to the Baltimore Convention Center and just one block from the shops, restaurants, and attractions of Baltimore's scenic Inner Harbor. This deluxe high rise hotel offers first class service and prides itself on maintaining a small intimate hotel atmosphere. Each guest room is attractively designed for maximum guests comfort. A fully stocked honor bar, coffee pot, blow dryer, iron, and ironing board are just a few of the amenities in each room.

Marriott Inner Harbor

Located only two blocks from the Baltimore Convention Center, the Marriott offers a health club with an oversized indoor pool, whirlpool, sauna, and fully equipped exercise room. Excellent dining options include the Promenade, an upscale multi-purpose restaurant and the Bumpers Dance Bar featuring music of the 50s and 60s.

Oversized guest rooms feature individual climate control, remote control cable TV with pay movies, AM/FM radios, and more.

Local Transportation

Airport Taxi: Cabs are available from Baltimore-Washington International Airport (BWI). Taxi stands are located on the airport's lower level near each exit. The fare from BWI to downtown Baltimore is about \$15 (flat rates are illegal).

Airport Super Shuttle: The Super Shuttle departs from BWI Airport for downtown Baltimore hotels every half hour between 6:00 AM and 12:30 AM (except holidays). The price is \$10 one way, and \$15 round trip. For return trips to BWI, reservations are required two hours in advance. For more information call (410) 859-0800.

Rail: Both Amtrak and the local MARC trains provide rail service between BWI Airport and Baltimore's Penn Station. It is a short taxi ride from Baltimore-Penn Station to all downtown hotels. In addition, Amtrak offers

convenient service directly to Baltimore-Penn Station from New York, Newark, Wilmington, Philadelphia, and Washington, DC. For Amtrak rates and schedules call: 1-800-USA-RAIL; or contact MARC at 1-800-325-RAIL.

Parking: All AMSIE'96 hotels have on-site parking. Parking rates for hotel guests range from \$8 to \$10 per day.

Discount Air Fares

Get discount airfares to AMSIE'96 on two major airlines. Make your reservation on either of the following airlines and save money on air fares for travel to and from Baltimore.

American Airlines: Save with special domestic zone fares (2-night stay minimum, no Saturday night requirement) or save 5% off the lowest applicable domestic coach fares – for travel to and from the Baltimore-Washington Area (including Baltimore-Washington International (BWI), National, and Dulles Airports) between February 5-16, 1996. Seats are limited and some restrictions may apply. For details and to make reservations, you or your travel agent can call:

American Airlines 1-800-443-1790 and give the American Airlines agent the AAAS Star Number: 1826AB

Continued

On-Site Registration

 ${\it AMSIE'96 Registration will be located at the Baltimore Convention Center, unless otherwise indicated. Please note operational hours below.}$

Thurs	Feb 8, 1996	7:00 AM - 12:00 PM	Seminar Only Registration Stouffer Renaissance
		2:00 PM - 7:00 PM	General Registration
Fri-Mon	Feb 9-12, 1996	7:00 AM - 5:00 PM	General Registration
Tues	Feb 13, 1996	8:00 AM - 1:00 PM	General Registration

Important Deadlines

Advance Registration: January 5, 1996

Hotel Reservation: January 5, 1996

Call for Poster Papers: November 1, 1995

U.S. Air: Save 10% off unrestricted domestic coach fares (7 day advance purchase required), 5% off the lowest applicable domestic fares, or 5% off first-class fares — for travel to and from the Baltimore-Washington Area (including, Baltimore-Washington International (BWI), National, and Dulles Airports) between February 5-21, 1996. Seats are limited and some restrictions may apply. For details and to make reservations, you or your travel agent can call;

U.S. Air: 1-800-334-8644 and give the U.S. Air agent the AAAS Gold File Number: 11120010

Outside the United States, contact your local representative for either of the airlines above.

Field Trips

The field trips described below will take participants to places in the Baltimore-Washington Area that enrich the scientific content of AMSIE'96. The trips will be kept small (as few as 20 people) so that everyone can talk with the leaders and learn from the sites. Separate registration is required, see the AMSIE'96 Registration Form. Early enrollment is advised due to space limitations. Field trips are limited to AMSIE'96 registrants and their guests. AAAS reserves the right to cancel a scheduled field trip due to insufficient registration. In the event of such cancellations, fees will be fully refunded except where noted.

Columbus Science Center Duration: Half Day Date: Thursday, February 8, 1996 Time: 1:00 PM - 5:00 PM Date: Tuesday, February 13, 1996 Time: 8:30 AM - 12:30 PM Cost: \$5 AAAS Member/\$7.50 All Others. No refund.

A fascinating new science center opening a few months after the meeting. AMSIE'96 has arranged a special tour that includes discussions with the center's researchers and developers about the concept, goals, and plans of the center. Tour participants will be among the first to visit this beautiful, new facility that highlights the importance of the worlds marine environment and its diversity. State-of-the-art interactive exhibits will take the group from the global to the atomic levels in organization. In addition, you will also explore the role of modern molecular biology and view the working laboratories of what is expected to be a world-class research facility.

NASA Goddard Space Flight Center

Duration: Half Day
Date: Tuesday, February 13,
1996 Time: 8:30 AM - 12:30 PM
Cost: \$25 AAAS Member/\$30 All
Others. Price includes
transportation.

In cooperation with the NASA Goddard facility a specially-developed tour is being prepared for AMSIE'96 registrants and their guests. Participants will not take the regular public tour, but instead will meet NASA staff scientists and will examine important areas of the research and development activities of this major aerospace center.

Johns Hopkins Applied Physics Laboratory

Duration: Half Day
Date: Thursday, February 8,
1996 Time: 1:00 PM - 5:00 PM
Cost: \$25 AAAS Member/\$30 All

Others. Price includes transportation.

Special arrangements are underway for a tour of the Applied Physics Laboratory at Johns Hopkins University. Participants will have the opportunity to meet staff scientists; discuss the ongoing work of the facility; and view specific research projects.

U.S. Department of Agriculture -

Beltsville Agricultural Research Center

Duration: Half Day
Date: Tuesday, February 13,
1996 Time: 12:30 PM - 5:00 PM
Cost: \$25 AAAS Member/\$30 All
Others. Price includes

transportation.

Modern agriculture is rapidly moving towards low-input, sustainable methods that are environmentally responsible. This specially designed tour of a major USDA facility will provide the opportunity for participates to examine the newest and emerging agricultural methods and to view the ongoing research in sustainable agriculture.

Special Events

AAAS Public Science Day

Thursday, February 8, 1996 This year's Public Science Day will bring together thousands of Baltimore citizens, especially K-12 students and local science resources. Participants will enjoy a full day of events that include special programs, activities and field trips that emphasize the importance of science and technology in our daily lives. Students will learn about scientific careers and course selections: they will participate in technologies of the future through workshops and activities conducted by scientists, such as hands-on science and mathematics experiments; scientists will be linked to classrooms throughout the state via interactive video; and grandparents will take preschoolers to the National Aquarium to see how the fish and other animals are cared for and trained. The grand finale includes an exciting Family Night

For more information contact: Amie Hubbard at (202) 326-6760; or on the internet at: ahubbard@aaas.org.

American Junior Academy of Science (AJAS)

The 1996 AJAS Meeting will be held in conjunction with AMSIE'96. Over the course of four days, the AJAS will showcase the work of promising future scientists from across the country. These premier high school students will share

their award winning work in oral and poster presentations. Students will participate in a host of academic, social and cultural events including visits to the **Smithsonian Environmental** Research Center, Maryland Science Center, National institute on Drug Abuse Addiction Research Center, University of Maryland Center of Marine Biotechnology, and the Baltimore National Aquarium. The grand finale includes an Awards Banquet where students will be recognized for their accomplishments followed by a moonlight cruise on the Chesapeake Bay. For more information contact: Gloria J. Takahashi at (213) 744-3384 or in California, call (818) 333-2173

Barrier-Free Environment

Accommodations for people with disabilities are provided upon request at all general lectures and other sessions. Services include interpreters for the deaf or hearing impaired, audiotaped highlights for the blind or visually impaired, and mobility assistance. In addition, a resource room for people with disabilities will be available in Room 315 of the **Baltimore Convention Center.** Please make sure to check the special needs box on the registration form. AAAS will contact you before the meeting.

AAAS Employment Exchange

The AAAS Employment
Exchange/Job Fair and the Career
Development Seminars and
Workshops will take place at the
Baltimore Convention Center.

Career Development Seminars and Workshops:

February 10 -12, 1996 8:30 AM - 5:30 PM

Employment Exchange/Job Fair February 12 -13, 1996 10:00 AM - 4:00 PM

REGISTRATION FORM – SEE PAGE 16 • 15•

ADVANCE REGISTRATION FORM

Advance Deadline: January 5, 1996

Copy this form for a friend

The AAAS Annual Meeting	y & Science Innovat	ion Exposition*	• February 8-13	, 1996 • Baltimore, MD
. REGISTRANT INFORMATION (Please	se type or print clearl	y; allow 40 charac	ters per line for name and	institution)
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Institution/Company				
Mailing Address			City/State/Zip_	
Country			_ Internet Address	
Daytime Phone Number			FAX Number	
AAAS Membership Number				
II. PATRON/SPECIAL NEEDS/SPECIA			•	
☐ Check here if AAAS Patron		cial needs due to disab	ility	RECISTED NOW & CAVE
To qualify for Student or *Special 1	•		•	REGISTER NOW & SAVE! Late & On-Site Fees Are
☐ Student: Institution Name:				V90 @@@ 1 :
☐ Postdoc: Chairperson's Name:_			_ Phone Number:	
☐ K-12 Teacher: Principal's Name	:		_ Phone Number:	
☐ Retired: Year of Retirement			Year of Birth:	
III. Advance Registration Fees	(*Special = Retired, K-12 Te	acher. Postdoctorals.)	IV. Payment 3	
A. CONFERENCE	AAAS Member	Non-Member	Check appropriate boxes u	nder section III A, B, C or D and write in
AMSIE '96 Passport: Unlimited a			Advance Fees below. A. CONFRENCE HES:	
Meeting, Science Innovation, exhibition hall and workshop		opical lectures,	AMSIE '96 Passport (Unlimited Ad	cess)\$
Registrant Special* Registrant	☐ \$195 ☐ \$150	□ \$245 □ \$180	Note: Seminars and Science Innov must indicate below the program(s	ration are free to AMSIE'96 Passport registrants, but you
Special*¹ Registrant Student¹ Registrant	\$110	□ \$130	Origins Seminar Living	with the Internet Seminar
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Special*1 Registrant	□ \$85 □ \$30	□ \$115 □ \$50	☐ Living with the Internet Sem	\$ inar\$
Student' Registrant Science Innovation Symposia:	Entry to the Science Innov	ation symposia,	C. ONE DAY ONLY	\$
plenary and topical lectures, All Registrants	exhibition hall and worksho	ops only. \$155	D. MEMBERSHIP DUES (if joining nov E. Option fees	v)\$
* Special = Postdoc, retired,		4 \$100	Exhibit Only Pass	\$
B. EACH SEMINAR	AAAS Member	Non-Member		\$ \$
Please specify seminar below.				
All Registrants Origins Seminar	□ \$100	\$ 155	Payment Method: Check	enclosed
Living with the Internet Seminar			- Credit Card Number:	(no other cards accepted)
C. ONE DAY ONLY	AAAS Member	Non-Member	- Great Gara Number.	
Please specify day below. All Registrants	□ \$100	□ \$155	Signature:	Exp. Date:
Thurs Fri Sat		Tues	V. How to Register	
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Postdoc Member 🔲 \$72	\$133.75	□ \$165	Important Notes:	Baltimore, MD 21263
Retired Member	\$113.42	\$146	at the special registration rates.	d retired members must complete the verification information to be accepted
E. OPTIONAL	AAAS Member Non-Me	mber No. of People	[2] Membership dues indicated herein are	the 1995 rates. Although dues will increase on January 1, 1996, the 1998, 1996 for registration of the annual meeting. \$50 of dues plus international
Exhibit Only Pass Field Trips: Please specify field trip(s) and r	\$30 \$25 \$30 square of people. Prices are per pers	son.		Please allow up to 4 weeks for receipt of your first issue of SCIENCE
Columbus Sci Ctr	□\$5 □\$7.5		[3] Cancellations must be received in writing	ng by January 5, 1996. No refunds will be made for cancellations receive
Check date for Columbus Center: NASA Goddard	<i>2-8-96</i>			\$25 cancellation charge and will be processed after the meeting. loy and must be payable on a United States bank. SCI-1096
Johns Hopkins	\$25 \$30		American Associati	on for the Advancement of Science
U.S.D.A	□ \$25 □ \$30		American Assuciati	TOTAL THE METALLOCAL OF SCIENCE

HOUSING FORM

Deadline: January 5, 1996

The AAAS Annual Meeting & Science Innovation Exposition

Changes/cancellations: reservation changes should be made directly with your assigned

hotel. Cancellations must be made through your assigned hotel no later than 72 hours prior

to arrival to receive a refund of your deposit.

February 8-13, 1996

Baltimore, MD

Instructions: Please complete section 1, 2 and 3 below (if not legible, form will not be processed). All reservations must be made through the Baltimore Area Convention and Visitors Association (BACVA) Housing Bureau by mail or fax. NO PHONE REQUESTS WILL BE ACCEPTED. The bureau will acknowledge receipt of your reservation within 10 days by mail. No fax acknowledgments possible. Room confirmation will be mailed by the hotel. Confirmations will be sent to the individual below. Reservations must be made by January 5, 1996. After this date, hotel space and convention rates may not be available.

Name:					
Institution:	Last Name			First Name	
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Country:					
Daytime Telephone Numbe	er: ()				
Room Request: ☐1 bed, 1 p	person 1 bed, 2 people	e □2 be	ds, 2 people	☐ 2 beds, 3 people	☐ 2 beds, 4 people
Special Needs: Wheelch	air accessible room	☐ Non-smoking r	oom	☐ Other	
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<u>HOTELS</u>	CODE Single Doubl			Baltimore	Harborplace
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Stouffer Renaissance*	STOUF \$ 126 \$ 141	\$15	Oriole Park at	SHERI	da National
Sheraton Inner Harbor Marriott Inner Harbor	SHERI \$115 \$135 MARIH \$115 \$130	\$15 \$15	Camden Yards	Conway Street	Aquarium Aquarium
Room rates include \$1 per n * Meeting activities will take the Hyatt Regency and the	night surcharge to help defray A place in the Baltimore Conver Stouffer Renaissance.	AAAS meeting costs. ntion Center,			INNER HARBOR Science Center Key Highway
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For more information, contact Kevin Bullock Mail: AMSIE'96 Job Fair, 1333 H. Street, NW, Washington, DC 20005 FAX: (202) 289-4021 E-mail: kbullock@aaas.org

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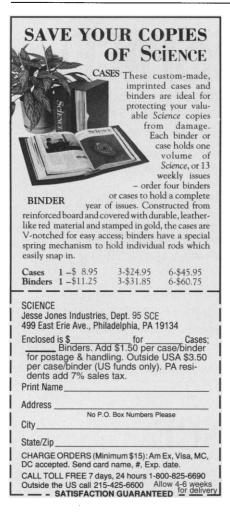
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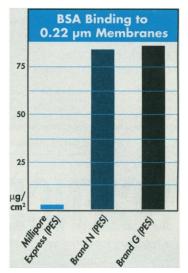
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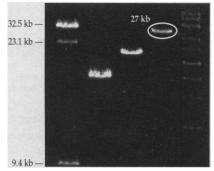
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By Jeremy Bernstein Introduction by David Cassidy

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October 1995, 1-56396-258-6, 6x9, cloth, 400 pp., photographs, \$34.95

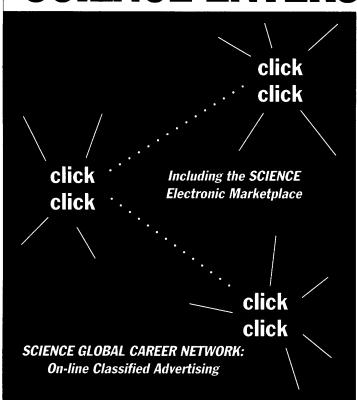
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Science

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POSITIONS OPEN

ASSOCIATE DIRECTOR FOR RESEARCH

The Markey Cancer Center at the University of Kentucky is seeking candidates at the Associate or full Professorial level to serve as ASSOCIATE DIRECTOR for Research. This individual will coordinate cancer related research activities involving more than 150 faculty from 24 departments and six colleges at the University of Kentucky, providing leadership in the definition, articulation, and promotion of interdisciplinary research programs of the center. The successful applicant should have a demonstrated record of accomplishment in a cancer-related field of research, an interest in fostering the development of new projects and collaborations in all areas of cancer research, and leadership abilities. The applicant will receive a primary appointment in an appropriate department of the College of Medicine of the University of Kentucky. This position carries substantial opportunities for professional growth and development while coordinating a rapidly expanding program of excellence. The Markey Cancer Center is a newly developing comprehensive center for cancer research, education, patient care, and community outreach programs serving the state of Kentucky and the surrounding region. Special features include eight core research facilities: Macromolecular Structure Analysis, Flow Cytometry, Transgenic Cell Production, Specialized Animal Care, Biostatistics, Tissue Procurement and Banking, a Magnetic Resonance Imaging and Spectroscopy Center, and a Clinical Research Office. Applicants with the Ph.D. or M.D. degree should send their curriculum vitae, copies of reprints, a brief summary of research accomplishments, future research plans, and three letters of reference to: Dr. Lewis Kelly, Administrator, Associate Director Search Committee, Markey Cancer Center, 800 Rose Street, Lexington, KY 40536-0093. The University of Kentucky is an Affirmative Action/Equal Opportunity Employer.

TENURE-TRACK ASSISTANT PROFESSOR TUFTS UNIVERSITY CONSERVATION BIOLOGIST

Conservation Biologist. The Biology Department invites applications from ecologists addressing questions related to biological diversity and conservation at the population or community level. The position will begin in fall 1996. Applicants must have a Ph.D.; teaching and post-doctoral experience desirable. Research should emphasize community structure and ecological interactions in any terrestrial or aquatic habitat. Duties will include partici pation in university-wide environmental programs, and teaching introductory and upper-level courses in environmental and conservation biology. Candidates will be expected to develop an active research program involving undergraduate and graduate students in biology. Applications should include curriculum vitae, reprints of up to three publications, and statements of 1) present and future research plans, 2) teaching interests, and 3) interest in interdisciplinary environmental programs. Please send application and have three letters of recommendation sent to: Professor Jan A. Pechenik, Biology Search Committee, Tufts University, Medford, MA 02155. Completed applications must be received by December 18, 1995. Tufts University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ENVIRONMENTAL PLANT BIOLOGIST

The Department of Biology, University of South Florida (USF), anticipates a nine-month tenure-track, AS-SISTANT PROFESSOR position starting fall 1996. Candidates must have a Ph.D., postdoctoral experience preferred, and be able to teach undergraduate courses in ecology, evolution, or genetics, including a team-taught course in environmental science, and graduate courses in specialty areas. Supervision of M.S. and Ph.D. students is expected. Areas of particular interest are physiological, molecular, or landscape ecology, or conservation or evolutionary biology. USF, the second largest university in Florida, is a comprehensive research/teaching university. The Department has 32 faculty members and over 65 ecologically oriented graduate students. Applicants should forward a letter of intent, curriculum vitae, reprints, statements of research interests and teaching goals, and arrange for three letters of recommendation to be received by January 15, 1996 to: Environmental Plant Biologist Search, Department of Biology, University of South Florida, Tampa, FL 33620-5150. USF is an Equal Opportunity/Affirmative Action/Equal Access Institution. For disability ассониноdation call Dr. Romeo (813-974-3250) a minimum of five working days in advance.

POSITIONS OPEN

ASSISTANT PROFESSORS CHEMISTRY AND PHYSICS Southeastern Louisiana University (SLU)

The Department of Chemistry and Physics at Southeastern Louisiana University invites applications for three tenure-track ASSISTANT PROFESSORS of Chemistry available August 1996. Qualifications: undergraduate degree in chemistry and Ph.D. in either chemistry or biochemistry from an accredited university. Preference will be given to applicants in analytical, physical, and biochemistry. Applicants must possess a strong commitment to undergraduate teaching, not only in their area of specialization, but also in introductory and service courses, and be prepared to develop a vigorous, independent research program that will attract outside funding. Additional emphasis will be placed on instrumental and labo-ratory skills. Responsibilities: teach undergraduate courses in chemistry and/or biochemistry; develop active research program involving undergraduates in area of espertise; establish record of scholarly activity and publications; serve as academic adviser to chemistry majors; participate in department, college, and university service. Salary: commensurate with experience and qualifications. Applications will be accepted until the positions are filled. Send letter of application, a complete curriculum vitae including telephone numbers and addresses, and a listing of all publications, copies of all transcripts (originals required upon employment), three current letters of recommendation, a brief statement of teaching experience and philosophy, and a brief statement of research interests to: Dr. Linda Munchausen, Department of Chemistry and Physics, Southeastern Louisiana University, SLU 878, Hammond, LA 70402. SLU is an Affirmative Action/ Americans with Disabilities Act/Equal Employment Opportunity Employer

POPULATION GENETICIST

The Division of Biological Sciences at the University of Missouri-Columbia (MU) continues a multi-year hiring program with a tenure-track ASSISTANT PROFES-SORSHIP for a population geneticist with a strong background in evolutionary theory. The ideal candidate will employ theoretical or molecular techniques in the study of natural or experimental populations with an emphasis on the mechanisms of evolutionary change. Opportunities for collaboration abound: MU has strong interdisciplinary programs in genetics and molecular biology, and the Division has major research programs in the evolution of behavior and plant population biology. A highly competitive salary, excellent start-up package, modern research laboratories, and an active graduate program provide an extremely supportive environment. Candidates should have postdoctoral experience, demonstrated potential for creative research, and a commitment to teaching at the undergraduate and graduate levels. Send curriculum vitae, reprints of publications, statement of research and teaching interests, and three letters of refer-

Dr. John David Division of Biological Sciences 105 Tucker Hall University of Missouri-Columbia Columbia, MO 65211

Applications should be received by December 1, 1995 to receive full consideration. MU is an Equal Opportunity/Affirmative Action/Equal Access Institution. We are firmly committed to fostering ethnic and racial diversity on our faculty and strongly encourage applications from minorities and women.

VERTEBRATE BIOLOGIST/ECOLOGIST

The Department of Biology of Carroll College, a coeducational, small, Catholic, liberal arts college, invites applications for a full-time (academic year), tenure-track ASSISTANT PROFESSOR beginning fall 1996. Ph.D. is required. Teaching responsibilities include Ecology, Comparative Anatomy, Life Science for non-majors, and a portion of a team-taught Introductory Biology course for majors. Candidates should be committed to undergraduate teaching with high academic standards, research and thesis programs, and student advising. Aggressive grant seeking and research not required. Send cover letter, curriculum vitae, transcripts, and three letters of recommendation by December 1, 1995 to: Dr. Bruce Busby, Academic Vice President, Carroll College, 1601 North Benton Avenue, Helena, MT 59625-0002. Equal Employment Opportunity.

POSITIONS OPEN

FACULTY POSITION IN BACTERIAL PATHOGENESIS

The Department of Microbiology at the College of Physicians and Surgeons of Columbia University is soliciting applications for a tenure-track faculty position at the level of ASSISTANT PROFESSOR. Applicants should have a strong background in prokaryotic genetics and experience in an area related to the interaction of pathogens with host cells. Applicants should have demonstrated a high level of academic achievement and the potential for developing an active research program. The Department has an active graduate program, supported by a training grant, and all faculty are expected to maintain a strong commitment to graduate education. Substantial start-up resources are available. Interested individuals should send a curriculum vitac and a statement of research interests and should also arrange to have three letters of reference sent to: The Microbiology Search Committee, Department of Microbiology, College of Physicians and Surgeons, Columbia University, 701 West 168th Street, New York, NY 10032. Email: horan@cumbib.bmb. columbia.edu.

Columbia University is an Affirmative Action/Equal Opportunity Employer.

TWO ASSISTANT PROFESSORS

The Department of Biological Sciences of the University of Arkansas, Fayetteville is searching for a PLANT PHYSIOLOGIST and a PLANT GENETICIST for tenure-track appointments beginning 15 August 1996. Preference for the geneticist position will be given to candidates using molecular approaches in the areas of developmental or population genetics. Candidates must have a Ph.D. and postdoctoral experience. Appointees must be prepared to participate in freshman, upper, and graduate-level courses, and to establish an independent research program that incorporates Master's and Ph.D. students. Salary and start-up are competitive. Review of applicants begins December 1, 1995 and continues until the positions are filled. Submit letter of application, curriculum vitae, statements of research and teaching interest, reprints, and have three letters of recommendation sent to: Dr. Richard L. Meyer, Chair, Plant Physiologist Search Committee, or Dr. Edwin B. Smith, Chair, Plant Geneticist Search Committee, Department of Biological Sciences, SCEN-629, University of Arkansas is an Equal Opportunity/Affimative Action Institution. Women and Minorities are encouraged to apply.

RESEARCH FACULTY POSITION

The Division of Medical Oncology, Department of Medicine, at the University of Texas Health Science Center at San Antonio (UTHSCSA) has a Research FACUL-TY POSITION available in its nationally-recognized and NIH-funded breast cancer program. Participation by the investigator in existing research areas including mechanisms of tamoxifen resistance, growth factors in breast cancer, oncogenes and suppressor genes, estrogen receptor variants, signal transduction, and transgenic mouse models, as well as development of an independent research area are desired. Minimum requirements are a Ph.D. degree in molecular and/or cell biology, postdoctoral training, and one to two years of experience preferred. The position requires U.S. citizenship or permanent residency status. Appointment will be at the Instructor or Assistant Professor level. Send curriculum vitae, letter of research interests, and names of three references to: C. Kent Osborne, M.D., Department of Medicine/Medical Oncology, UTHSCSA, 7703 Floyd Curl Drive, San Antonio, TX 78284-7884. The UTHSCSA is an Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR, tenure-track. Primary teaching responsibilities in molecular biology and developmental biology. Other teaching responsibilities include participation in core courses. Requirements: Ph.D. by September 1996, demonstrated teaching ability, broad training in biology, commitment to undergradute teaching and research, and an active research record. Send curriculum vitae, copies of transcripts, copies of recent publications, and at least three references by January 15, 1996 to: V. Sullivan, Department of Biology, University of Michigan-Flint, Flint, MI 48502-2186. This campus is a 6,300 student, urban regional unit of the University of Michigan and is a non-discriminatory/Affimative Action/Equal Access Employer that specifically invites women and minorities to apply.

POSITIONS OPEN

BIOORGANIC/BIOMEDICAL CHEMISTRY University of California-San Francisco (UCSF)

The Departments of Cellular and Molecular Pharmacology and Pharmaceutical Chemistry at UCSF invite applications from uniquely qualified individuals with research interests at the chemistry/biology interface. We anticipate filling up to two tenure-track positions at the ASSISTANT PROFESSOR level, but applications from more senior candidates may also be considered. Candidates should have a strong background in synthetic organic chemistry, and the ability and desire to use chemical approaches to study contemporary problems of biomedical interest. To apply please submit a curriculum vitae, including a list of publications and a brief outline of proposed research projects, and arrange to have three letters of recommendation forwarded. The deadline for applications is January 10, 1996. All application materials should be sent to: Faculty Search Committee, Department of Cellular and Molecular Pharmacology, University of California, San Francisco, CA 94143-0450. Women and members of other underrepresented groups are particularly encouraged to apply.

ASSISTANT PROFESSORS

The Department of Zoology and Physiology at Louisiana State University anticipates two tenure-track AS-SISTANT PROFESSOR positions, "Pending Final Ap-proval." The openings, starting August, 1996, are in any area of (1) Vertebrate Physiology, but with special con-sideration given to those who work in the areas of endocrinology or neurobiology using non-mammalian models, and (2) Cell Biology, but with special consideration given to those who use molecular techniques in conjunc-tion with other approaches to study cytoskeletal regulation/molecular motors, signaling events or trafficking, protein targeting/modification. Ph.D. or equivalent degree in a biological science and postdoctoral experience required. Successful applicants are expected to develop a strong, independent research program with extramural support and have a commitment to excellence in undergraduate and graduate instruction. Candidates should submit a statement of research interests and teaching philosophy, curriculum vitae, and the names of three references by December 5, 1995, or until the position is filled, to: Chairman, Department of Zoology and Physiolo-Louisiana State University, Baton Rouge, LA gy, Louisiana State University, Daton 2005, - 70803-1725. LSU is an Equal Employment Opportunity/ Affirmative Action Employer

Monmouth College seeks applications for two tenure-track ASSISTANT PROFESSOR positions in biology beginning fall 1996. Candidates with a Ph.D. and a strong commitment to undergraduate teaching in a liberal arts setting are encouraged to apply. Participation in general education courses and supervision of undergraduate research projects is expected. Candidates with interdisciplinary teaching experience preferred. Two positions: a Botanist and a Physiologist, each to teach at least three of the following six courses: Botany, Animal Physiology, Cell Biology, Mendelian Genetics, Microbiology, Molecular Biology. Opportunity to develop upper-level courses in specialty and/or courses to enhance our innovative general education program. Skills and experience to augment our Environmental Science program are desirable. Send letter of application, curriculum vitae, and at least three professional references with telephone numbers to: Michael McNall, Director of Personnel, Monmouth College, 700 East Broadway, Monmouth, IL 61462 Formal review of applications will begin December 15, 1995, and continue until positions are filled. Moumouth College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates

TWO TENURE-TRACK POSITIONS

1) Plant Physiological Ecologist to teach botany, plant physiology, and general ecology. 2) Comparative Animal Physiologist to teach human physiology and anatomy, pathophysiology for nurses, and specialty courses. ASSISTANT PROFESSORSHIPS; Ph.D. required. Available September 1, 1996. Application deadline December 1, 1995. For detailed descriptions and instructions contact: Department of Biology, California State University, 9001 Stockdale Highway, Bakersfield, CA 93311. Telephone: 805-664-3089; FAX: 805-664-2040; Email: epedroza@academic.csubak.edu. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ENVIRONMENTAL BIOCHEMIST

The Biology Department at Rensselaer Polytechnic Institute invites applications for a tenure-track faculty position at ASSISTANT or ASSOCIATE PROFESSOR level, to start September 1996, from biochemists utilizing a combination of molecular genetic and biochemical approaches for research in an area related to the environment, such as toxicology, xenobiotics, aquatic biology, or water-born diseases. Development of an independent research program is expected. Requirements include two years of postdoctoral research experience or equivalent, and ability to teach undergraduate and graduate courses in biochemistry, molecular biology, and environmental science. Send curriculum vitac, statement of research plans and teaching interests, publication list, and names of three references, by December 15, 1995 to: Prof. Joyce Diwan, Search Committee Chair, Biology Department, Science Center, Rensselaer Polytechnic Institute, Troy, NY 12180-3590. Rensselaer is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR Molecular/Developmental Biology

The University of Rochester anticipates an opening for an ASSISTANT PROFESSOR of Biology. Applicants must have demonstrated outstanding potential for independent work in the area of Molecular or Developmental Biology. The Biology department consists of 22 faculty who employ genetic and molecular approaches to problems in cell, molecular, and developmental biology; evolutionary biology; and ecology. Additional faculty with allied interests are located in the adjacent Medical School. Applicants should submit before December 1, 1995, a curriculum vitae, bibliography, description of research and teaching interests, and should request three references to send letters of recommendation to: Chair, Molecular/Developmental Search Committee, Department of Biology, University of Rochester, Rochester, NY 14627.

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

FACULTY POSITIONS Department of Biochemistry, Molecular Biology, and Cell Biology Northwestern University

The Department of Biochemistry, Molecular Biology, and Cell Biology seeks outstanding candidates for full time faculty appointments at the junior or senior level. We particularly seek applicants in the areas of signal transduction, cell cycle regulation, macromolecular sorting, immune response, mammalian developmental genetics, yeast genetics, and structural biology. Candidates should submit a curriculum vitae, a list of publications, statements of research accomplishments and future research objectives, and letters of reference from three persons knowledgeable of the candidate's research and teaching abilities, to: Chairman, Faculty Search Committee, Department of Biochemistry, Molecular Biology, and Cell Biology, 2153 North Campus Drive, Evanston Lt. 60208-3500. To ensure full consideration, complete applications should be received by December 31, 1995.

Women and minority scientists are especially encouraged to apply. Northwestern University is an Affirmative Action/Equal Opportunity Employer.

NMR FACULTY POSITION

The Biophysics Department of the University of Rochester Medical Center is seeking applicants for a tenure-track faculty position in high resolution NMR spectroscopy as applied to structural biology. Currently, Biophysics has two macromolecular crystallographers, one NMR spectroscopist, and modern x-ray and NMR facilities, including a new fully equipped 600 MHz spectrometer. While rank and salary will be commensurate with experience, the search is targeted at the ASSISTANT PROFESSOR level. Send complete curriculum vitae, future research plans, and the names and addresses of three references to: W. Bernhard, Chair, NMR Search Committee, Biophysics Department, University of Rochester Medical School, Rochester, NY 14642-8408. Email: wabern@biophysics.rochester.edu. Review of applications will begin December 8, 1995 and continue until the position is filled. The University of Rochester is an Affirmative Action/Equal Opportunity Employer.

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"Diversity and the Scientific Community"

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SCIENCE Global Career Network address: http://www.aaas.org

For more information or to reserve your space, call Janis Crowley, (202) 326-6532.



POSITIONS OPEN

ASSISTANT PROFESSOR Signal Transduction/Protein Structure

The Division of Signal Transduction at Beth Israel Hospital seeks to hire an ASSISTANT PROFESSOR with expertise in solving the structures of signaling proteins. Send résumé and the names of three referees to: Lewis Cantley, Division of Signal Transduction, Warren Alpert 152, Harvard Medical School, 200 Longwood Avenue, Boston, MA 02115. Women and minority candidates are encouraged to apply.

ENVIRONMENTAL SCIENTIST ASSISTANT PROFESSOR

The Environmental Science Program of DePaul University seeks to fill a full-time, TENURE-TRACK position. Areas of interest include applied ecology or conservation biology. The successful candidate will need to make a significant commitment to undergraduate education, including teaching courses to non-majors. An active research program is expected and supported. A letter indicating interest in the position, your teaching philosophy, and possible research interests should be sent, along with a curriculum vitae, to: The Program Director, Environmental Science Program, DePaul University, 2320 North Kenmore, Chicago, IL 60614-3298. The review and selection process will begin on December 15, 1995, although applications received after that date may be considered. DePaul University practices Equal Opportunity in Employment and Education.

Biology: Cornell College, a private undergraduate liberal arts college, invites applications for a TENURE-TRACK appointment in its Department of Biology. Responsibilities include teaching introductory biology, ecology, seminar in evolution, and upper-level courses in botany (plant physiology, plant taxonomy/systematics, and biological problems). The successful candidate will be expected to teach introductory level courses for majors and to develop introductory level courses for non-majors. Appointment at the assistant professor level to begin in the fall of 1996. Shared appointment will be considered. Ph.D. required; postdoctoral experience and college teaching experience preferred. Cornell College has attracted national attention for its distinctive academic calendar under which faculty teach and students take one course at a time in month-long terms. The College is committed to excellence in teaching and encourages interdisciplinary interests among its faculty. Candidates for this position should have the ability to develop a research program that incorporates undergraduate students. Send letter, curriculum vitae, and three letters of reference to: Ms. Ann Opatz, Assistant for Academic Recruitment, Cornell College, 600 First Street West, Mount Ver non, IA 52314-1098. Formal consideration of applications begins December 1, 1995. Cornell College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates

Chemist. Sarah Lawrence College, a liberal arts college dedicated to individualized education, is recruiting a broadly trained individual for a TENURE-TRACK position in general or organic chemistry, beginning fall 1996. Working closely with students on a daily basis is essential. Candidates will also be expected to develop additional courses of interest to liberal arts undergraduates. Ability to teach courses in related areas, such as environmental chemistry, is desirable. Send curriculum vitae or résumé, three letters of recommendation, and statement of teaching interests by December 15, 1995 to: Dr. Gene Rinchik, Sarah Lawrence College, Bronxville, NY 10708. Equal Opportunity Employer. Applications from women and minorities are encouraged.

PLANT TAXONOMY/BIOLOGY

TENURE-TRACK position commencing August 1996. Earned doctorate in plant systematics or closely related area required; knowledge of mid-western and tropical flora and teaching experience with evidence of superior teaching performance preferred. Rank and salary commensurate with qualifications. Teaching responsibilities include: vascular plant taxonomy, general botany, and general biology. Send curriculum vitae, letter of application, and three letters of recommendation to: Dr. J. Larry Martin, Dean, School of Arts and Sciences, Missouri Southern State College, 3950 East Newman Road, Joplin, MO 64801-1595. Questions may be addressed to: Dr. John Messick, Telephone: 417-625-9617; Email: messic@vm.mssc.edu. Closing date: December 31, 1995. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

HEAD. Department of Forestry and Wildlife Management, University of Massachusetts at Amherst. Includes the administration of teaching, research, and public outreach activities for a productive multidisciplinary program in natural resources. Candidates must have a demonstrated record of accomplishment in scholarly work, a talent for organization, and an ability to work with faculty representing a wide variety of natural resource and life science disciplines. A doctorate with at least one advanced degree in natural resources, and administrative experience, are required. The position is available July 1, 1996, subject to funding. Applications should be received by January 19, 1996 to receive priority consideration. Send nominations or applications (résumé, letter of intent, and names of three references) to: **David B. Kittredge, Chair, Search** Committee for the Head, Department of Forestry and Wildlife Management, Holdsworth Natural Resources Center, University of Massachusetts, Amherst, MA 01003. Telephone: 413-545-2943; FAX: 413-545-4358; Email: dbk@forwild.umass.edu. The University of Massachusetts is an Affirmative Action/Equal Opportunity/Americans with Disabilities Act Employer.

Tenure-track faculty position available in structural biology in the Department of Biochemistry at the rank of ASSISTANT or ASSOCIATE PROFESSOR beginning July 1, 1996. We seek a candidate who will develop an active teaching and research program in the application of x-ray diffraction analysis to problems in the field of structural biology. Candidates should have a Ph.D. or M.D. degree, a minimum of two years of postdoctoral experience, with evidence of significant research accomplishments, and, for appointment at the associate level, a demonstrated ability to attract extramural funding. Send curriculum vitae, a short description of research plans, and the names and telephone numbers of three references to: Dr. Marilynn S. Doscher, Department of Biochemistry, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, MI 48201. Wayne State University is an Affirmative Action/Equal Opportunity Employer.

Research Ecologist, TENURE-TRACK, University of Puerto Rico. We are seeking an individual to serve as scientific director of the El Verde Field Station, one of two focal study sites in the Luquillo Long-Term Ecological Research Program. The successful candidate will be expected to manage the field station and supervise its personnel, coordinate activities of visiting researchers, and develop a strong research program of his or her own. Area of research expertise is open but preference will be given to candidates studying invertebrate ecology. Preference will also be given to candidates with an ability to communicate in Spanish. Send curriculum vitae, statement of research interests, and names of three references by 30 November 1995 to: Robert B. Waide, Terrestrial Ecology Division, P.O. Box 363682, San Juan, PR 00936.

ASSISTANT PROFESSOR, Chemistry, tenure-track, starting August 1996. Must have completed Ph.D. by July 1, 1996. Approved since 1957, department awards ACS-certified degrees in chemistry, chemistry with biochemical emphasis, and interdisciplinary degree in biochemistry. Four full-time faculty utilize modern instrumentation such as GC, HPLC, AA, FTIR, and UN/Vis and fluorescence spectrophotometers. Will teach physical and analytical chemistry, share responsibilities in introductory chemistry. Specialty in physical or analytical chemistry, practical experience with a wide variety of computer-controlled instrumentation. Collaborative research with undergraduates expected. Chair: Dr. Linda Hodges, Agnes Scott College, Campbell Hall.

VISITING PROFESSOR (rank open), Women in

VISITING PROFESSOR (rank open), Women in Science, during 1997–98, full-time or half-time. Responsibilities include teaching and faculty development seminars. Salary commensurate with rank and qualifications. Desirable opportunity for Faculty on Sabbatical. Candidates for junior rank must have completed Ph.D. by July 1. 1997. Chair: Dr. Gail Cabisius. Box 736.

1, 1997. Chair: Dr. Gail Cabisius, Box 736.
Application deadline November 30, 1995. Mail letter of application describing teaching philosophy, research plans, curriculum vitae, and names, addresses, and telephone numbers of three professional references to: Search Chair, Agnes Scott College, 141 East College Avenue, Decatur, GA 30030-3797. Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION CELL BIOLOGY University of Texas Southwestern Medical Center at Dallas

The Department of Cell Biology and Neuroscience of The University of Texas Southwestern Medical Center at Dallas seeks applications for a tenure-track ASSISTANT PROFESSOR to direct the microscopy and imaging service center for The University. Applicants must have a relevant Ph.D. or M.D. degree, appropriate postdoctoral experience, and be trained in the microscopic sciences. We are particularly interested in creative and highly motivated individuals who have a background using electron microscopy to solve problems in structural biology. The duties of the successful candidate will be to operate a fully equipped imaging facility and to participate in graduate student teaching. Send curriculum vitae, a brief description of proposed research, and three letters of reference to:

Richard G. W. Anderson, Ph.D.
Department of Cell Biology and Neuroscience
UT Southwestern
5323 Harry Hines Boulevard
Dallas, TX 75235-9039

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OPTICS/RESEARCH FACULTY POSITION

The New England College of Optometry (NEW-ENCO) is currently seeking applications for a full-time, tenure-track faculty position at the rank of ASSISTANT or ASSOCIATE PROFESSOR. Responsibilities include teaching geometric and visual optics, conducting research in an optics area relevant to optometry, and obtaining external sources of support. Required qualifications include a Ph.D., a strong research record, and teaching excellence. Salary and faculty rank are negotiable. Applications will be accepted until January 15, 1996.

Applicants should submit a letter of application providing a concise description of research interests and goals, a curriculum vitae, and three professional references to:

James Comerford, Ph.D., O.D.
Chair, Department of Vision Science
and Public Health
The New England College of Optometry
424 Beacon Street
Boston, MA 02115

NEWENCO is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR POSITION IN MICROBIOLOGY Louisiana State University

Applications are invited from candidates with a background in the use of molecular tools to study the ecology, evolution and/or systematics of prokaryotes. Opportunities are available to interact with LSU's strong interdisciplinary programs in systematics and evolutionary biology. Applicants must have an earned doctorate, postdoctoral research experience, and the ability to develop a strong independent research program. Send curriculum vitae, a statement of research interests, relevant reprints, and the names of three references to: Search Committee, Department of Microbiology, Louisiana State University, Baton Rouge, LA 70803. Deadline is November 30, 1995 or until candidate is selected. Louisiana State University is an Equal Opportunity/Affinnative Action Employer.

ANIMAL PHYSIOLOGIST

Southern Oregon State College invites animal physiologists to apply for a tenure-track-ASSISTANT PROFESSOR of Biology position. Duties include teaching animal physiology and participating in a human anatomy-physiology sequence and in introductory biology courses starting September 1996. Ph.D. required. The college focuses on undergraduate education and strongly encourages research involving undergraduates. Send letter of application, curriculum vitae, statement of teaching experience, approach to teaching animal physiology, research plans, list of pertinent courses taken, and names, addresses and telephone numbers of three professional references to: Dr. Carol Perguson, Department of Biology, Southern Oregon State College, Ashland, OR 97520. Email: ferguson@wpo.sosc.osshe.edu; FAX: 503-552-6415. An Affirmative Action/Equal Opportunity Employer committed to development of an inclusive, multicultural community.

THE 1996 LOUISA GROSS HORWITZ PRIZE

The Louisa Gross Horwitz Prize was established under the will of the late S. Gross Horwitz through a bequest to Columbia University, and is named to honor the donor's mother. Louisa Gross Horwitz was the daughter of Dr. Samuel David Gross (1805-1889), a prominent surgeon of Philadelphia, and author of the outstanding "Systems of Surgery," who served as president of the American Medical Association.

Each year, since its inception in 1967, Columbia University has awarded the Louisa Gross Horwitz Prize for outstanding basic research in the fields of Biology or Biochemistry. The purpose of this award is to honor a scientific investigator, or group of investigators, whose contributions to knowledge in either of these fields is deemed worthy of special recognition.



The prize consists of an honorarium and a citation which are awarded at a special presentation event. Unless otherwise recommended by the Prize Committee, the prize is awarded annually. The 1995 awardee was Leland H. Hartwell, Ph.D., Professor of Genetics at the University of Washington, in Seattle, WA.

QUALIFICATIONS FOR THE AWARD

The Prize Committee recognizes no geographical limitations. The prize may be awarded to an individual or a group. When the prize is awarded to a group, the honorarium will be divided among the recipients, but each member will receive a citation. Preference will be given to work done in the recent past.

Prospective recipients should be nominated to the Chairman of the Louisa Gross Horwitz Prize Committee, Dr. David I. Hirsh. Nomination letters should include:

- 1. A summary, preferably less than 500 words, of the research on which this nomination is based.
- 2. A summary, preferably less than 500 words, of the significance of this research in the fields of biology or biochemistry.
- 3. A brief biographical sketch of the nominee, including positions held and awards received by the nominee.
- 4. A listing of up to ten of the nominee's most significant publications relating to the research noted under Item 1.
- 5. A copy of the nominee's curriculum vitae.

An original and twelve (12) copies of each nomination should be sent to: Dr. David I. Hirsh, Chairman of the Louisa Gross Horwitz Prize Committee, Office of the Vice President for Health Sciences and Dean of the Faculty of Medicine, Columbia University, 630 West 168th Street, New York, New York 10032.

Deadline for receipt of nominations is January 19, 1996.

BASIC + APPLIED R&D POSITIONS

KAIROS Scientific has recently opened an ultramodern facility in the heart of Silicon Valley to pursue research and development in the following areas:

Multispectral Fluorescent Proteins
Massively Parallel Microspectrophotometry
Macromolecular Scaffolds for Energy Transfer
Directed Evolution and Solid Phase Screening

KAIROS currently markets a turn-key digital imaging spectrophotometer and software for guiding combinatorial mutagenesis (*Nature* 369:79, *Methods in Enzymology* 246:732).

KAIROS will fill five new positions in the next year with scientists and engineers trained in:

Optical Spectroscopy and Instrument Design
C Programming and Digital Image Processing
Combinatorial Mutagenesis/Protein Engineering

Curriculum Vitae and the names of three references should be mailed to:

Dr. Douglas C. Youvan, CSO KAIROS Scientific Inc. 3350 Scott Blvd., Bldg. 62 Santa Clara, CA 95054 USA

KAIROS

Screening Sciences

COR Therapeutics, Inc. is a publicly-held biopharmaceutical company located in the San Francisco Bay Area. We are focused on the discovery and development of novel therapeutics for the treatment of severe cardiovascular disease.

We are seeking an individual with creative skills in bioassay research and development to work in our Screening Sciences Group. The position will be responsible for the management of COR's high throughput screening (HTS) operation of chemical and natural product libraries and will include development of an automated screening program, supervision of COR's HTS assays, and research in new areas of assay technology. Candidates should have a Ph.D. in Biochemistry or related field with 2-3 years postdoctoral experience in bioassay development and/or characterization. Experience with assay robotics and computer assisted data analyses are required as well as a solid understanding of biochemical reaction mechanisms. A background in enzymology or molecular pharmacology is required. Familiarity with the use of statistical models in the development of assay validation protocols is highly desirable. Previous supervisory experience would be a plus. Qualified non-Ph.D.s are encouraged to apply.

COR Therapeutics, Inc. offers competitive salaries and benefits, attractive equity positions and the opportunity to make significant research contributions. Please reference job code #R63-95 and send resume to: COR Therapeutics, Inc., Human Resources, 256 East Grand Ave., So. San Francisco, CA 94080. COR is an equal opportunity employer.



OR THERAPELITICS INC

POSITIONS OPEN

ASSISTANT PROFESSOR **ENVIRONMENTAL SCIENTIST**

Illinois Benedictine College is seeking a tenure-track environmental scientist at the ASSISTANT PROFES-SOR level, to begin August 1996. Ph.D. required. Successful candidate will have terrestrial ecology background and experience. Responsibilities are to teach introductory biology courses and upper-level courses in speciality and to develop a research program involving undergraduates. Cover letter should address applicant's interest in undergraduate teaching in a liberal arts environment. Send curriculum vitae, statement of teaching philosophy and research experience, three letters of recommendation, and all transcripts to: Dr. Alfred R. Martin, Search Committee, Department of Biology, Illinois Benedictine College, 5700 College Road, Lisle, IL 60532. Deadline for completed application is December 15, 1995. Illinois Benedictine College is an Equal Opportunity Employer. Women and minority candidates are especially urged to apply.

INTEGRATIVE BIOLOGIST

Tenure-track, ASSISTANT PROFESSOR, beginning fall 1996. Preference will be given to broadly trained applicants who use modern approaches to study integrative processes at the organismal or population level. Areas of particular interest are evolution, environmental physiology, or behavior. The successful candidate will be expected to establish a vigorous, extramurally funded research program and participate in teaching at the undergraduate and graduate level. Generous set-up funds are available. Applicants should send a statement of research and teaching experience and interests, curriculum vitae, and three letters of recommendation by 15 January 1996, to: Chair, Integrative Biology Search Committee, Department of Zoology and Genetics, Iowa State University, Ames, IA 50011-3223. Iowa State University is an Affirmative Action/Equal Opportunity Employer.

PROFESSORSHIP ECOLOGICAL/ENVIRONMENTAL **ECÓNOMICS**

The University of Minnesota invites applications and nominations for the Interdisciplinary Fesler-Lampert Professorship, an ENDOWED CHAIR to be filled in the field of ecological/environmental economics. Applicants should have (1) strong analytical skills in economics that facilitate the application of economic theory and models to significant problems in ecological/environmental economics, (2) a record of substantial research accomplishments reflected in publications in leading journals, (3) experience in and a commitment to incorporating ecological and conservation knowledge into a program of research and teaching that supports a wide range of undergraduate majors, graduate students, faculty and professionals.

The University of Minnesota is a land-grant, research

university with strengths in relevant fields such as ecology, economics, natural resources, business management, political science, and international development. The professorship is tenured but rank is open. Salary is competitive. The department(s) in which tenure is held and the teaching and other responsibilities will be negotiated with the successful candidate. Applicants should send a curriculum vitae, a cover letter describing their research, teaching, and service interests, and the names of four references to: Robert T. Holt, Chair, Fesler-Lampert Search Committee, University of Minnesota Graduate School, 420 Johnston Hall, 101 Pleasant Street S.E., Minneapolis, MN 55455-0421. The University of Minne sota is an Equal Opportunity Educator and Employer.

The Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, is seeking a PROFESSOR to develop and administer a basic research program in the molecular biology, pharmacology or genetics of Mood Disorders. The applicant must have a strong scientific and administrative background and be qualified for university appointment at the full professor level. Board eligibility or board certification in general psychiatry is preferred. A tenured appointment at the professor level will be conferred and the appointee may be named to an endowed professorship. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates. Please sub mit your curriculum vitae to: Alan F. Schatzberg, M.D., Chairman of Search Committee, Department of Psychiatry, Stanford University School of Medicine, Stanford, CA 94305-5548.

POSITIONS OPEN

ASSISTANT PROFESSORS DEPARTMENT OF BIOLOGY Valdosta State University

The Department of Biology is seeking applicants with Ph.D. for the following four tenure-track positions at the level of ASSISTANT PROFESSOR: (1) Entomologist; (2) Geneticist, must be able to develop a molecular genetics course; (3) Plant Pathologist, must be able to develop a course in mycology; (4) Aquatic Biologist, must be able to develop a course in toxicology. Research preferences are open for all positions. Appointments are for the fall of 1996. Applicants should submit a letter of application identifying the position for which they are applying, statements of their teaching philosophy and research interests, a curriculum vitae, and three letters of reference by 2 January 1996 to: Dr. David L. Bechler, Department of Biology, Valdosta State University, Valdosta, GA 31698. Valdosta State University is an Equal Opportunity/Affirmative Action Employer.



THE CLEVELAND CLINIC FOUNDATION

The RESEARCH INSTITUTE of the CLEVELAND CLINIC FOUNDATION

Faculty Position in Inflammatory Bowel Disease Research

We are seeking an individual at the level of ASSIST-ANT or ASSOCIATE PROFESSOR to develop a basic laboratory research program in inflammatory bowel disease. The position is jointly sponsored by the Research Institute and the Departments of Gastroenterology and Colorectal Surgery. The successful candidate will possess or exhibit the potential to develop an outstanding national reputation as a basic scientist using cellular and molecular approaches to study the pathogenesis of IBD, including, but not limited to, cytokine and growth factor action, signaling pathways, and immune cell function. This position will be provided with generous startup support. Salary and fringe benefits are highly competitive. The Cleveland Clinc Research Institute has a long standing commitment to excellence in basic and applied biomedical research with an annual research budget in excess of \$50 million.

A curriculum vitae and names and addresses of three references shoudl be sent to: Dr. Thomas A. Hamilton, Department of Immunology, Research Institute, Cleveland Clinic Foundation, NN1, 9500 Euclid Avenue, Cleveland, OH 44195.

The Cleveland Clinic Foundation is an Equal Opportunity Employer.

BIOMEDICAL SCIENCE

Hampshire College is expanding its program in biomedicine and health science with the appointment of two faculty positions at the Assistant Professor level (Ph.D. required), beginning September 1996, pending funding: 1) HUMAN BIOLOGIST working in disciplines such as epidemiology, immunology, reproduction, or endocrinology: 2) MOLECULAR/CELLULAR BIOLO-GIST working in areas such as immunology, organic toxicology, or molecular genetics.

Hampshire College offers a stimulating and supportive environment for interdisciplinary teaching and collaborative research. We are looking for scientists to help develop our curriculum through the creation of courses combining their research and teaching interests. Courses are designed to engage students in hands-on research. Current faculty have research interests in areas such as women and AIDS, food security in Africa, international health, tourism and health in the Yucatan, undernutrition in local inner city schools, water quality in Sri Lanka, and maternal mortality in Native Americans.

Application review begins on January 2, 1996. Send letter of application, vitae and the names of three referees to the search secretary: Laurie Smith

Hampshire College School of Natural Science Amherst, MA 01002 Email questions to: ljsNS@hamp.hampshire.edu

Hampshire College is an Equal Opportunity Employer and has

a vigorous Affirmative Action Program. We especially encourage minorities and women to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR, Life Sciences, two positions: Washington State University: tenure-track, start August 16, 1996. Position1) Ecology; position 2) Physiology/Biochem. Ph.D. in appropriate discipline required by 8/16/ 96. Ability to conduct innovative, externally funded research program and effectively teach upper-division and graduate courses also required. Substantial, published research, postdoctoral research, and (for position 1) research potentially relevant to the Pacific NW preferred. Position 1 to teach Ecology and the Ecosystem and part of Human Ecology course. Position 2 to teach Mammalian Physiology, Biochemistry, and part of a Biological Methods lab Those hired will join the rapidly growing faculty at the new 348 acre Vancouver campus (Portland, Oregon metro area) and help develop the B.S. and M.S. degree programs. Letter of application, vita, statement of research plans, and three letters of reference to: Dr. Martin Pall, Chair of the Ecology Search Committee or Chair of the Physiology/Bio-chemistry Search Committee, College of Sciences, Washchemistry Search Committee, College of Sciences, ington State University, Vancouver, WA 98663-3597. Telephone: 360-737-2038; Email: pall@vancouver. wsu.edu. Screening to begin December 15, 1995. WSU is an Equal Opportunity/Affirmative Action Educator and Employer. Members of protected groups are encouraged to apply.

Ecologist/Natural Resource Management-Brigham Young University anticipates filling a tenure-track tion at the ASSISTANT/ASSOCIATE PROFESSOR level. Position is available September 1, 1996. Position qualifications include Pt. D. qualifications include Ph.D. or equivalent. Primary responsibilities include teaching and research. Send curriculum vitae, statements of research interests and teaching experience to: Dr. W. M. Hess, Chair, Department of Botany and Range Science, Brigham Young University, Provo, UT 84602. Brigham Young University is an Equal Employment/Affirmative Action Employer. Preference is given to members of the sponsoring church.

NEUROGERONTOLOGY INSTITUTIONAL **PHYSICIAN** SCIENTIST PROGRAM

The University of Southern California has recently received an award from the National Institute on Aging for a Physician/Scientist Program for the development of basic and clinical research skills for the study of disease related to the aging nervous system. This is a five-year salary award with appointments in the Department of Neurology of the School of Medicine and in the School of Gerontology. The candidate must be a U.S. Citizen or have permanent U.S. Resident status and be board eligible in neurology, psychiatry, neuropathology, or internal medicine. The first two to three years are spent in basic research at the Andrus Gerontology Center or the Hedoo Neuroscience Neural Information and Behavioral Science Program. He or she continues clinical training in neurogerontology and develops an individual research program. Clinical responsibilities are limited to 25% of time and include teaching students, residents, and fellows in neurogerontology throughout the five years. Depending on the background, the candidate could be appointed as ASSISTANT PROFESSOR (tenure-track). This position is open immediately. To apply, send a curriculum vitae and three letters of recommendation to: Leslie P. Weiner, M.D., Department of Neurology, University of Southern California School of Medicine, 1510 San Pablo Street, Suite 646, Los Angeles, CA 90033-4606, and arrange for two days of interviews. For further information, Telephone: 213-342-5793.

PLANT MOLECULAR GENETICIST

The Department of Molecular Genetics and Cell Biology at the University of Chicago is seeking applications for a faculty position at the ASSISTANT or ASSOCI-ATE PROFESSOR level in the general field of plant genetics, development and cell biology. The Department seeks an individual who will establish an active research program and participate in both undergraduate and graduate teaching. Particular consideration will be given to highly interactive candidates whose interests complement existing research efforts in pollen-pistil interactions, biochemical genetics, lipid biosynthesis, chloroplast biogenesis and vascular tissue development. Applicants should submit a curriculum vitae, reprints, a summary of current and proposed research work, and should arrange to have three letters of recommendation sent by December 15, 1995 to: Dr. Anthony P. Mahowald, Department of Molecular Genetics and Cell Biology. The University of Chicago, 920 East 58th Street, Chicago, IL 60637. Affirmative Action/Equal Opportunity Employer.

ARES ADVANCED TECHNOLOGY

THE STRENGTHS OF SERONO

The Ares Serono Group is a pioneering organization widely recognized for turning specific challenges into achievements.

At Ares Advanced Technology, we employ state of the art methods in Structural Biology, Cell Biology, Molecular Biology and Protein Chemistry to discover and evaluate new biopharmaceutical agents of clinical importance. The exciting, ongoing success of our product portfolio and research projects has triggered the need to add gifted individuals to our staff. Financial stability, innovative products, an entrepreneurial environment and our emergence as a fully integrated company means Ares Advanced Technology can offer you what no one elsecan-The Best of Biotech.

PRINCIPAL INVESTIGATOR Protein Purification

In this position, you will take a lead role in the design, execution and optimization of purification methods used to isolate natural and/or recombinant proteins in support of ongoing projects. In addition, you will participate in the evaluation of new proteins as novel therapeutic agents or targets for drug development. Through literature research and attendance at meet-

Financial Stability ovel therapeutic agents or targets for drug development.

Through literature research and attendance at meetings, you will help maintain a state-of-the-art
Protein Chemistry Laboratory, making significant contributions to drug discovery and research.

Record experience expertise in provincin include a Ph.D., a mini-

Entrepreneurial

Environment

mum of 4 years' experience, expertise in profein isolation, and familiarity with HPLC and ligand- and immuno-affinity techniques. A knowledge of GLP/GMP guidelines is desirable but not required. Excellent oral and written communications skills are essential. Reference Dept. PC45

PRINCIPAL INVESTIGATOR Experimental Therapeutics

We seek an individual with a proven record in the application of immunological techniques to the discovery and development of novel molecules. The responsibilities of this position are to design and implement in vitro and in vivo experimental procedures for the discovery and explanation of conditional control of the discovery and explanation of conditional conditions.

procedures for the discovery and evaluation of candidate molecules. Minimum requirements include a Ph.D. in Immunology, Cell Biology, or a related field with a minimum of 3 years' post doctoral research experience. The successful candidate will have the ability to work in a multidisciplinary environment, maintain clear and accurate records, and have a strong knowledge of immunology with experience applying these techniques at the cellular and molecular level. Experience with in vivo models of autoimmunity and transplantation is highly desirable. Reference Dept. ET29

SENIOR SCIENTIST Experimental Therapeutics

Fully Integrated

Contributing intellectually and technically, you will play a major role in the discovery and evaluation of lead candidates in the areas of oncology, hematology and immunology research. Responsibilities will include the design and implementation of experimental procedures for

biologic evaluation of novel compounds such as peprides, small organic molecules and recombinant molecules, as well as in vitro and in vivo assays of immune cell function and hematopoietic cell differentiation. To qualify, you must possess an MS degree and a minimum of 4 years' experience (or a BS degree with a minimium of 6 years' experience) in immunology/hematology or a cell biology related discipline. You should also have a proven track record of technical and

Innovative Products

ou should also have a proven track record of technical and theoretical expertise in lymphocyte isolation, cell proliferation assays, flow cytometry and animal modeling. Clear, accurate record keeping is essential, while industrial experience is desired.

Reference Dept. ET49

For consideration, please forward your CV to Ares Advanced Technology, Inc., Human Resources, 280 Pond Street, Randolph, MA 02368. Please reference Department. An Equal Opportunity Employer.





Purdue University

HEAD, DEPARTMENT OF MEDICINAL CHEMISTRY AND MOLECULAR PHARMACOLOGY School of Pharmacy and Pharmacal Sciences

The Department of Medicinal Chemistry and Molecular Pharmacology, a unique, newly consolidated multidisciplinary unit of twenty-eight faculty with research in the areas of Biochemistry, Bioorganic Chemistry, Medicinal Chemistry, Molecular Pharmacology, Natural Products, Radiopharmaceutical Chemistry, and Toxicology, invites applications and nominations for Department Head.

The preferred candidate will be an outstanding scientist with a distinguished record in research and education. Applicants will be expected to have an established independent research program in at least one of the above-mentioned areas.

The role of the new chair will be to provide scientific, academic and administrative leadership to the Department, as well as to participate in defining the future development of the Department and coordinate the department's interactions with interdisciplinary research programs on the Purdue campus.

Nominations and applications should be sent to:

Professor D.E. Bergstrom, Chair Department Head Search Committee Department of Medicinal Chemistry and Molecular Pharmacology Purdue University West Lafayette, IN 47907-1333

Candidates should include in their applications a *Curriculum Vitae*, the names of three references and a letter indicating their interest in the position. Review of applications will begin on December 15, 1995 and continue until the position is filled.

Purdue University is an Equal Opportunity/Affirmative Action Employer and especially encourages applications from interested minority and female candidates.





Faculty Positions in Developmental Biology

Harvard Medical School Molecular Medicine Unit Beth Israel Hospital

The Molecular Medicine Unit of Beth Israel Hospital is seeking applications for the position of Assistant Professor. The successful candidate will hold the Ph.D. and/or M.D. degrees, and have completed a minimum of two years of postdoctoral training in molecular cell biology, physiology, or genetics. Applicants will be expected to establish a funded independent research program in the broad area of developmental biology. Generous startfunds and some ongoing support will be provided. The Molecular Medicine Unit faculty currently investigate inductive signaling in early vertebrate development, protein translocation and targetting, signal transduction and ion homeostasis. Candidates should send CVs and names of three references to:

Robert D. Rosenberg, M.D., Ph.D. Faculty Search Committee Molecular Medicine Unit Beth Israel Hospital, RW663 330 Brookline Avenue Boston, MA 02215

The Beth Israel Hospital is an Equal Opportunity employer.



The AAAS Employment Exchange presents...

AMSIE'96 JOB FAIR

1996 AAAS Annual Meeting & Science Innovation Exposition (AMSIE'96) Baltimore Convention Center • February 12-13, 1996

EMPLOYERS:

If you have multiple positions to fill or just one...Not enough qualified candidates to choose from...Low search budget...the AMSIE'96 JOB FAIR can help you.

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If you are looking for senior scientists, research investigators, tenure tracked-faculty, deans and department heads, research assistants and postdocs, grant administrators...AMSIE'96 Job Fair offers:

- Hundreds of top-notch candidates from an exclusive list of scientists—the AAAS/SCIENCE membership file
- Various scientific disciplines, top level degrees: PhD, MD, BS
- 80% in the life sciences
- Captive audience of 5,000 scientists from across the U.S. and abroad
- Special rates for Academic Employers, Non-Profit Organization, AMSIE'96 Exhibitors, and AAAS Corporate Members
- Unlimited Job Postings (Special rates for SCIENCE advertisers)
- No meeting fee required
- FREE, on-site interview facilities
- Employers can conduct Career Development Seminars: topics include resume writing, interviewing, and other job-hunting skills, as well as the latest information and issues related to scientific careers
- FREE resume book of all participating candidates

FOR MORE INFORMATION, CONTACT

MAIL: Kevin Bullock

AMSIE'96 Job Fair, 1333 H Street, NW,

Washington, DC 20005

PHONE: (202) 326-7049 **FAX:** (202) 289-4021 **E-mail:** kbullock@aaas.org

American Association for the Advancement of Science



The AAAS Employment Exchange presents...

AMSIE'96 JOB FAIR

1996 AAAS Annual Meeting & Science Innovation Exposition (AMSIE'96) Baltimore Convention Center • February 12-13, 1996

CANDIDATES:

If you are starting your scientific career or at a pivotal point...looking for a better paying job...switching from academia to industry...the AMSIE'96 JOB FAIR can help you.

JOBS, JOBS, JOBS,

Biology, Chemistry, Medical Sciences, Agricultural, Earth Sciences, Engineering, Mathematics, Computer Science, Physics, Astronomy, Social and Behavioral Sciences

- Employers will be on-site in Baltimore to talk to you about real job openings.
- Position Postings: various positions and levels of experience for you to review on-site.
- Bring multiple copies of your resume and visit as many employers as you wish
- Bonus for all on-site JOB FAIR registrants: FREE Career Development Seminars on Saturday and Sunday (February 10-11, 1996). Seminars will be conducted by top science recruiters and human resource professionals. Topics include: resume writing, interviewing, and other job-hunting skills, as well as the latest information and issues related to scientific careers
- You can register in advance and just pick up your badge on-site
- You don't have to attend to participate, all resumes will be given to all employers
- FREE to AAAS Members and AMSIE'96 registrants
- FREE pass to the AMSIE'96 Exposition
- Non-member, non-meeting attendees only \$25, on-site

FOR MORE INFORMATION, CONTACT

MAIL: Kevin Bullock

AMSIE'96 Job Fair, 1333 H Street, NW,

Washington, DC 20005

FAX: (202) 289-4021 **E-mail:** kbullock@aaas.org

American Association for the Advancement of Science

AMSIE'96 JOB FAIR

1996 AAAS Annual Meeting & Science Innovation Exposition (AMSIE'96) Baltimore Convention Center • February 12-13, 1996



CANDIDATE Advance Registration Form

Name			File No.
 			
Contact Address			· · · · · · · · · · · · · · · · · · ·
City	State/Countr	y	Zip/Post Code
Phone-B ()		H ()	
EMAIL	Visa	Type (if non-US citizen)	
Do you plan to attend AMS	SIE'96? 🔲 Yes 🔲 No	AAAS Membership No.	ound on SCIENCE label. NEW member enter new)
FEES	Member or AMSIE'96 Regi		
Candidates On-Site	FREE	\$25	_
Candidates Not Attending	FREE	\$10	
Payment Method: Chec	k enclosed DVISA D	MasterCard Card #	
Signatur	e	E	Expiry Date
DISCIPLINE (please	check the <u>one</u> option	which best describes y	your primary discipline)
Agricultural, Biological,	& Medical Sciences		
Agric. Sciences	Biochemistry	Botany	Cell Biology
☐ Ecology	☐ Endocrinology	☐ Genetics	☐ Immunology
☐ Marine Biology	Medicine	Microbiology	☐ Molecular Biol.
☐ Neuroscience	☐ Pharmacology	☐ Physiology	☐ Zoology
Chemistry Analytical	☐ Biochemistry	Inorganic	☐ Nuclear
Organic	☐ Physical	□ morganic	- Nucleal
Earth Sciences			
☐ Atmospheric	☐ Geology/Soil Sci.	Oceanography	
Engineering Aeronautical Nuclear	☐ Biomedical	☐ Chemical	☐ Electrical/Electronic
Mathematics & Compute	r Science		
☐ Computer Science	■ Mathematics	☐ Statistics	
Physics & Astronomy			
Astron./Astrophys.	Atomic/Molecular	☐ Plasma	☐ Nuclear
Optics & Laser	☐ Particle	☐ Condensed Matter	
Social & Behavioral Scie	<u></u> -	□ -	
Anthro./Sociol.	Econ./Poli. Sci.	☐ Education	☐ Psychology
☐ Language Sciences	☐ Science Policy	☐ History & Philosophy of \$	

INSTRUCTIONS: Complete the AMSIE'96 Advance Registration Form. Enclose a current curriculum vitae (including a listing of three professional references), and mail to: Kevin M. Bullock, Project Coordinator, AAAS Employment Exchange, 1333 H Street, NW, Suite 1159, Washington, DC 20005. NOTE: Faxed forms and resumes are not acceptable. If you are planning to be on-site at AMSIE'96, please remember to bring multiple copies of your current curriculum vitae. Incomplete forms will not be accepted.

American Association for the Advancement of Science

Research Specialists. The Genetics and Biotechnology Section of Westvaco Forest Research has openings for four research specialists; one each in tissue culture, transformation, sterility and stress resistance of tree species. Responsibilities include assisting in all phases of research including planning, preparation, conducting, evaluation, analysis, and reporting. Qualifications for the tissue culture and transformation positions include a B.S. or M.S. degree in Biological Science, Botany, Forestry, Horticulture or a closely related field. A strong background in plant cell and tissue culture is essential. Experience in plant transformation and genetic engineering is highly desirable. Qualifications for the sterility and stress resistance positions include a B.S. or M.S. degree in Biological Science, Molecular Biology, Biotechnology, or a closely related field. A strong background in plant molecular biology is essential. Experience in nucleic acid isolation, cloning, PCR, and different types of electrophoresis is essential. Preference will be given to candidates with experience in genetic engineering and gene regulation. For all four positions, working experience in woody plants is helpful, but not required. Send resume, college transcripts, and three letters of recommendation before December 15, 1995, to: Cindy McCord, Westvaco Corporation, P.O. Box 1950, Summerville, SC 29484. For more information contact Cindy McCord at (803) 851-4733, or Fax (803) 875-7185 or E-mail: cmccord@awod.com.

Westvaco is an equal opportunity employer m/f.

DGI BIOTECHNOLOGIES (DGI)

DGI is a newly formed biopharmaceutical company focused on developing a novel, small molecule drug discovery platform. This new technology will identify promising drug assays and drug leads for license. Specially designed new laboratory space in Edison, NJ.

MOLECULAR PHARMACOLOGISTS

Experienced in cloning, expressing and asssaying targets such as G-coupled protein, protein hormone, growth and differentiation and transcription factor receptors.

MOLECULAR BIOLOGISTS

Experienced in molecular immunology (including cloning, constructing, expressing and isolating recombinantly derived antibodies). Experience with various protein/peptide phage display system is also desired.

TECHNICAL SUPPORT POSITIONS

For Molecular Biology: strong background in PCR, cloning, digonucleotide based constructions, and auto sequencing.

For Molecular Pharmacology: Receptor isolation, ligand binding with experience with in vitro and in situ reconstruction.

Reply (with Salary Requirements)

Dr. Arthur Blume DGI BioTechnologies P.O. Box 424 Edison, NJ 08818-0424 (FAX 908-287-5566)

DIAGNOCURE INC.

Located in the heart of Québec City, DiagnoCure is a young rapidly growing medical company developing products for cancer diagnosis and treatment. DiagnoCure will employ up to 25 scientists and technologists and has immediate openings for experienced scientists to lead its research unit in the following fields:

Immunodiagnostics: Biotechnology/pharmaceutical experience in development of diagnostics kits. Experience with labeling of monoclonals and fluorescence-based assays would be an advantage.

Recombinant Vaccines: Experience in recombinant vaccine techniques with different vectors, familiarity with anti-idiotypic approaches and synthetic peptides.

Recombinant Peptides: Experience in screening of peptide libraries and reagent development.

Molecular Biology: Experience in characterization of proteins, cDNA cloning and protein structure-function studies.

Each head scientist will report to the Vice President R & D and will play a key role with its scientific advisory committee in determining research strategies. The head scientists will be responsible for the implementation and management of the research programs with the help of support staff. The candidates must have the skills to lead and motivate the staff to perform effectively in a multidisciplinary team under tight schedules.

We offer a highly competitive salary, commensurate with experience, along with the advantages of a progressive, entreprenurial environment.

Please send your c.v. to the:

Vice President of R&D DiagnoCure Inc. 70, rue Dalhousie, bur. 110 Québec (Québec) G1K 4B2 Canada

Committed to quality, diversity and equal employment opportunities.

POSTDOCTORAL RESEARCH POSITIONS

Two to three year positions are available immediately in the molecular genetics laboratory of Richard Straub in the Department of Psychiatry at the Medical College of Virginia. Two projects are funded for the next five years:

Molecular Genetics of Schizoprhrenia in Irish Pedigrees; project goals are to a) clone the schizophrenia vulnerability locus on chromosome b) identify and confirm additional loci by linkage analysis and other methods and c) clone the additional loci. The primary collaborators are Kenneth Kendler and Charles MacLean.

Detecting Susceptibility Genes for Nicotine Addiction: project goals are to identify genetic loci that influence the susceptibility to cigarette smoking and nicotine dependence. The primary collaborators are Kenneth Kendler, Lindon Eaves and Joanne Meyer.

Applicants should have training and experience in some of the following areas: genotyping, physical mapping, gene identification, mutation detection and DNA sequencing. Experience with the Applied Biosystems DNA sequencer, robotics, and genome informatics is strongly preferred. Salary range is \$25,000 and up depending on experience. The Medical College of Virginia offers a generous benefits package, and the laboratory will soon be located in the new Virginia Biotechnology Research Park.

Please send (do not email) curriculum vitae, summary of research experience and interests, and three letters of reference to: Richard E. Straub, Director, Molecular Genetics Laboratory, Department of Psychiatry, Box 980710, Medical College of Virginia, Richmond, VA 23298-0710. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer.

REGENERON

Postdoctoral/Staff Scientist Positions in Neurobiology

REGENERON is a world leader in elucidating the role of neurotrophic factors in the ontogeny and maintenance of the nervous system and in the development of these factors as therapeutic agents for the treatment of neurodegenerative disorders and neurotrauma. REGENERON has an established reputation for scientific excellence, vigorously encourages publication, and has extensive collaborations with leading academic groups throughout the world. We seek ambitious, career-oriented individuals interested in joining a team involved in cutting edge research.

To augment our multidisciplinary team exploring in vitro and in vivo actions of neurotrophic factors on the peripheral nervous system (PNS), REGENERON has openings for several Ph.D.-level scientists in the Neurobiology Group. We are interested in candidates who have a broad interest in both basic and clinical aspects of the action of neuronal growth factors on the PNS and animal models of sensory and motor neuron dysfunction.

Scientist/Staff Scientist: Electrophysiology/Behavior

Seeking a Ph.D. with 3 - 6 years postdoctoral training in peripheral nervous system function. Particular emphasis will be given to candidates with the ability to integrate electrophysiological, behavioral or anatomical techniques as they pertain to the normal and pathophysiological function of the PNS

Postdoctoral Fellow: In vivo studies Seeking a Ph.D. with 0 - 3 years postdoctoral experience in peripheral nerve studies in vivo. Special emphasis will be given to candidates who show an integrated approach using cellular, molecular and biochemical tools to evaluate the role of neurotrophic factors in the normal maintenance of the PNS and their potential use as treatments for peripheral nerve trauma and neuropathies. Candidates with a specific interest in the system are encouraged to apply.

Postdoctoral Fellow: Cell Biology Seeking a Ph.D. with 0 - 3 years postdoctoral experience with in vitro approaches to studying peripheral neurons and glial cells. Particular consideration will be given to candidates with an interest in in vitro models of neuron-glia interactions.

Successful candidates for all of these positions will have a proven publication record and demonstrate the ability to integrate into and work well with a project team, and possess good oral and written communication skills. Scientist/Staff Scientist candidates will also have demonstrated ability to initiate independent lines of research.

REGENERON PHARMACEUTICALS, INC. is located in a modern facility in a suburban setting with ready access to the cultural and business centers of New York City. Please send your resume to: BIN N, Regeneron Pharmaceuticals, Inc., Human Resources Dept., 777 Old Saw Mill River Road, Tarrytown, NY 10591. EOE/M/F/H/V

WYETH-AYERST RESEARCH

Wyeth-Ayerst Research, a major division of American Home Products Corporation, has several opportunities available to work in the areas of Neurobiology, Behavioral Pharmacology and Neuronal Molecular and

Cell Biology in the Central Nervous System Research Center located in Princeton, NJ.

Central Nervous System Research

Our goal is to assemble highly motivated multi-disciplinary teams dedicated to the discovery of drugs for the treatment of psychiatric, neurological and neurodegenerative disorders.

Molecular Biologists

B.A./B.S. or M.S. degree with strong background in molecular biology and experience in cell biology and tissue culture techniques, gene cloning and expression, DNA and RNA hybridization, PCR, isotope labeling and mammalian cell transfection. Experience with Western blotting, immunoprecipitation, RNase protection assays and enzymatic assays would be advantageous. Position #1436

Neuronal Cell Biologists

B.A./B.S. with experience in cell culture and molecular biology. Candidates will be responsible for maintaining primary and permanent cell lines and will also develop cellular models for CNS disorders. Experience and/or knowledge of the construction of expression vectors, mammalian cell transfections and optimization of heterologous gene expression is required. **Position #1614**

B.A./B.S or M.S. positions to assist with discovery research in neuronal apoptosis, amyloid-related neurodegeneration and growth factor control of neuronal differentiation and survival. These positions will require adaptation and development of culture systems to promote long-term survival of neurons; appropriate support will be provided for high-throughput screening. A working knowledge of neuroanatomy and previous experience in microdissection, neuronal cell culture, cell transfection techniques, fluorescence imaging and cytotoxicity assays is desirable. Position #1637

Pharmacologists/Molecular Neuroanatomists/Neurochemists/ Biochemists

Brain Microdialysis: B.A./B.S. or M.S. positions with experience and training in the methodology of brain microdialysis. Working knowledge of modern HPLC techniques with electrochemical and fluorometric detection, familiarity with neuronal histological techniques and small animal surgery. Position #1581

Molecular Neuroanatomy – Antibody production: B.A./B.S. positions for production of antibodies for identification, characterization and localization of novel molecular targets. Candidates should have experience with a variety of immunological techniques, including peptide conjugation, ELISA, SDS-PAGE, affinity purification, immunoblotting and immunoprecipitation. Additional experience in cell culture including transient transfection of mammalian cells is highly desirable. Position #1638

Candidates with B.S./M.S. degrees and experience in histological processing of brain tissue, brain immunohistochemistry, light microscopy, small animal surgery and behavioral testing for programs in stroke. Position #1639

Neuropharmacologist/Senior Biochemical Pharmacologist: B.S./B.A. or M.S. degree with background in one or more of the following areas: receptor binding, second messenger system assays, neurotransmitter release and/or methodology involving the quantification of neurochemical parameters. Experience with cell/tissue culture techniques, small animal surgery, animal-handling and/or in vivo physiological and pharmacological assays, RIAs and/or protein biochemistry is desirable. Candidates with strong backgrounds in enzymology, proteases and protease inhibitors are also invited to apply for these positions. Position #1611

B.S./M.S. applicants are sought with skills in immunocytochemistry/in situ hybridization applied to the CNS as well as experience in fluorescence microscopy of living cells in culture. Previous experience with a confocal microscope would be an advantage; knowledge of tissue culture techniques is essential. This position will be responsible for a study of neuro-adaptive changes in the G-protein-mediated signal transducing events underlying psychiatric and neurodegenerative disorders primarily in transfected/mutated cell lines. Position #1640

B.S.,M.S. individuals with skills in receptor radioligand and autoradiographic binding assays are required for study of regional neuro-adaptive changes in G-protein-coupled receptor-ligand interactions and in signal transduction mechanisms using relevant animal models and transfected/mutated cell lines. Practical experience of protein electrophoresis (1 and 2 dimensional) as well as in vitro second messenger/protein phosphorylation measurements is also required. A knowledge of tissue culture techniques is essential. Position #1641

CNS Electrophysiologists

In Vitro Electrophysiologist: Ph.D. with 3 or more years of postdoctoral experience in electrophysiology and neurobiology. Candidates must have extensive experience with recording and analyzing specific ion currents from neurons, cell lines, or oocytes using patch clamp or two electrode voltage clamp recording techniques. Experience with extracellular recording will be considered. Familiarity with generating primary neuronal cultures and cell lines, or preparing brain slices and freshly isolated neurons for electrophysiological recordings is essential. Position #1642

In Vivo Electrophysiologist: Ph.D. with 3 or more years of postdoctoral experience in electrophysiology and neurobiology. Candidates must be experienced in measuring and analyzing the effects of various psychotropic drugs on electrical activity in specific brain regions, using either single unit or multielectrode recording techniques and microiontophoretic application of drugs. Position #1643

Associate/Senior Pharmacologist: B.A./B.S. with 2-4 years experience or M.S. with 2-4 years experience in electrophysiology from a neurobiology background are also required. Position # 1388

Behavioral Pharmacologists

Positions available for behavioral pharmacologists with a B.S. or M.S. in neuroscience, psychology, pharmacology, or animal behavior and approximately 1-5 years of experience. Responsibilities involve pharmacological studies using basic and complex operant conditioning procedures in rodents, pigeons, and monkeys. Strong analytical, computer and communication skills required. Experience with small animal surgery is a plus. **Position # 1590**

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please respond by sending your resume with salary requirements and Position # of interest to:

Wyeth-Ayerst Research, Human Resources, P.O. Box 8299, Philadelphia, PA 19101. Or you may fax your resume directly into our centralized Research resume database at (610) 989-4854. Principals Only. Equal Opportunity Employer, M/F/D/V.



Leading the way for a healthier world.



Faculty Position in Tumor Immunology

Applications are invited to fill **two tenure-track positions** in Tumor Immunology at the Assistant/Associate Professor level in the Department of Pathology, University of Connecticut School of Medicine. Successful candidates are expected to provide leadership to an interdepartmental program in immunology, develop an independent, externally funded research program in the general area of tumor immunology, and participate in the teaching of medical students. To apply, send curriculum vitae, description of research interests, and the names of three references before November 1995 to:

Tumor Immunology Search Committee Medical Dean's Office University of Connecticut School of Medicine 263 Farmington Avenue Farmington, CT 06030-1920

(Search Code 95-186)
An Affirmative Action/Equal Opportunity Employer M/F/Pwd/V



FACULTY POSITION IN CANCER GENETICS

The Fred Hutchinson Cancer Research Center is developing multidisciplinary capabilities to investigate the role of genetics in the etiology of common cancers. We are seeking a molecular geneticist to fill a newly created position at the rank of assistant, associate, or full member (equivalent to assistant, associate, or full professor at a University), with an interest in collaborating with colleagues in conducting population based epidemiologic research. The person hired will be expected to both initiate independent research projects and provide leadership for the development of an active center-wide program that will involve high-volume characterization of known genes in specimens collected from participants in human studies. Resources available include existing population-based studies that involve collection of biological specimens and laboratory facilities. The position can carry a joint appointment at the University of Washington. Send inquiries and curriculum vitae and the names of at least four references by not later than December 15, 1995 to: David S. Thomas, Program in Epidemiology, Fred Hutchinson Cancer Research Center, 1124 Columbia Street, WA, 98104. The Fred Hutchinson Cancer Research Center and the University of Washington are equal opportunity/affirmative action employers. Both institutions are building culturally diverse faculty and strongly encourage applications from female and minority candidates.

The deadline for applications is December 15, 1995.



The Department of Biology; Georgia Southern University seeks applications for two tenure track openings at the level of Assistant Professor to begin September 1, 1996. Salary is competitive and commensurate with experience and qualifications. Candidates for both positions must have received a Ph.D. before January 1996. Postmark deadline for both positions is January 2, 1996.

Systematic Biologist utilizing-modern molecular techniques as a primary research tool. Teaching responsibilities may include participation in introductory biology and one or more of the following specialty courses: molecular biology, biometry, genetics, systematics, and cell biology, Applicants should send a letter of application, curriculum vita, a statement of teaching and research interests, and the names of three references to: Dr. Denson K. McLain, Systematics Search, Department of Biology, Landrum Box 8042, Georgia Southern University. Statesboro, GA 30460-8042, USA.

Physiological Ecologist / Aquatic Biologist able to work in the wetlands or estuaries of the Southeastern Coastal Plain. Teaching responsibilities may include participation in introductory biology and one or more of the following courses: Physiology, Human Anatomy and Physiology, and upper level courses in the area of specialty. Applicants should send a letter of application, curriculum vita, a statement of teaching and research interests, and the names of three references to: Dr. John W. Parrish, Physiology Search, Department of Biology, Landrum Box 8042, Georgia Southern University. Statesboro, GA 30460-8042, USA.

The names of applicants and nominees, resumes and other general non-evaluative information are subject to public inspection under the Georgia Open Records Act. Georgia Southern University is an Equal Opportunity/Affirmative Action Institution. Persons who need accomodations(s) in the application process under the Americans with Disabilities Act should notify Dr. John Averett, Department Chair.

Dean of Natural Sciences and Mathematics California State University, Long Beach

The College of Natural Sciences and Mathematics, consisting of the Departments of Biological Sciences, Chemistry and Biochemistry, Geological Sciences, Mathematics, Physics and Astronomy, and Science Education, are recruiting for the posi-tion of Dean. The University enrollment approximates 27,000; there are about 1,500 majors in the College served by 175 faculty. All departments in the College, except for Science Education offer the bachelor's and master's degrees. The successful candidate must possess an earned doctorate and be eligible for appointment as a tenured faculty member in one of the College's departments. The candidate must be committed to research and have a strong publication record, have had College or University teaching experience, be open to faculty gover nance and consultation, have successful academic administrative experience, have been involved in fiscal management and fund raising efforts, and have the ability to communicate effectively with an ethnically and culturally diverse campus com-munity. Review of applications will begin on January 9, 1996; the position will remain until filled. Preferred starting date is July 1, 1996. Applications must include a resume, a letter of interest that addresses qualifications, and a list of at least three professional references including names, addresses, and telephone numbers. Nomi nations are also invited. Send applications, nominations, and requests for more detailed information about the position to Dr. Kenneth Marsi, Chair, Dean Search Committee, Office of the Vice President for Academic Affairs, California State University, Long Beach, 1250 Bell-flower Blvd., Long Beach, CA 90840. California State University, Long Beach is an Equal Oppor-tunity/ Affirmative Action, Title IX Employer, and is in compliance with the Civil Rights Act of 1964 Title VI and Title VII), Title IX of the Education Amendments of 1972, the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990.

Grand Valley State University, a regional comprehensive university which emphasizes excellence in teaching, outreach endeavors within its geographic region, and faculty/student research collaboration, is seeking a chair for the Biology Department of 15 full time faculty. This is a tenure track position at the Associate or Professor rank. Qualifications include a Ph.D. in biology or related field as well as demonstrated success in teaching, academic leadership, and research. The successful candidate will have demonstrated experience in managing budgets, developing curricula, nurturing faculty development, and providing opportunities for scholarly activity.

The Biology Department is a dynamic unit offering degrees in biology and natural resources management to approximately 400 majors. This department is in a growth phase, in the process of moving into a newly constructed science facility, considering new curricular options, and adding new faculty positions.

Grand Valley State University, the fastest growing educational institution in Michigan, is a fully accredited, state supported, four year and graduate degree granting institution with a current enrollment of nearly 14,000 students. The main campus comprises 900 acres conveniently located near the city of Grand Rapids and the shores of Lake Michigan. This region of west Michigan offers diverse cultural and leisure activities, and prides itself on a high quality of life enhanced by a moderate cost of living.

Applicants should submit a letter of interest describing how their qualifications meet the position requirements, a statement that describes their academic and administrative philosophy, a curriculum vita and name/addresses/phone numbers of three references to:

P. Douglas Kindschi, Dean of Science and Mathematics 312 Padnos Hall of Science Grand Valley State University Allendale Michigan 49401

The position is available starting Fall 1996. Consideration of completed applications will begin on Nowember 27, 1995, and the position will remain open until it is filled. *EEO/AA/ADA*

TOXICOLOGIST

Midwest Research Institute (MRI), a leading research organization, is seeking an experienced toxicology professional to join our Life Sciences Department.

This individual will conduct animal toxicology studies, prepare and review protocols and reports, monitor financial performance of projects, supervise staff, evaluate training needs of staff and arrange for appropriate training. Schedule personnel and facilities, contribute to scientific literature, develop new methods and technologies as appropriate to new markets, interact and communicate with clients. Requires a Ph.D. in pharmacology, toxicology or related discipline plus a minimum of three years experience in toxicology studies with a minimum of one year as a study director. Supervisory and project management experience a must. Excellent understanding of GLP requirements, contract research, business development and client orientation essential. DABT desirable.

MRI offers competitive compensation and a comprehensive benefits package and a unique environment to meet personal challenges and enhance career growth. If you are interested in being a part of this select group of professionals, please send your resume marked 95-342-3 to: Midwest Research Institute, 425 Volker Boulevard, Kansas City, MO 64110-2299, or fax it to (816) 753-2304, EEO/AA, M/F/D/V. A Drug Screening Employer

Faculty Positions in Neurobiology

University of Maryland School of Medicine Department of Anatomy

The Department of Anatomy is undergoing major expansion and rebuilding. New faculty are being recruited in neurobiology. Positions are available at all ranks.

The Department is located in a newly opened building. Significant expansion of research resources is underway, including core laboratories in molecular biology, tissue culture, neuroanatomy, imaging, and neurophysiology.

Successful candidates will have a Ph.D. or equivalent, outstanding ability in teaching, and exceptional achievement in their field of research, including the potential attract external funding. Investigators in the Department use approaches ranging from molecular biology to behavior but the common focus is understanding the organization, function and development of neural networks. We particularly encourage applicants investigating the:

- •interplay of gene expression and neural activity in neural network development.
- •neurobiological bases of learning and memory.
- •development and functional organization of chemosensory systems.

The Department teaches a 9.5 week course - "Structure & Development" - in the medical school curriculum. New faculty are expected to participate 3-5 weeks in this team taught course. Graduate teaching is also encouraged.

For best consideration, applications should be received before February 1, 1996. Candidates should send a C.V., summary of research accomplishments and goals, and the names of 3-5 individuals from whom recommendations may be obtained to:

Dr. David V. Smith
Chair, Faculty Search Committee
Department of Anatomy
University of Maryland School of Medicine
655 West Baltimore Street
Baltimore, MD 21201-1559

The Department is eager to diversify its faculty. We encourage minorities and women to apply. The University of Maryland is an AA/EEO/ADA employer.

DIRECTOR

BELLE W. BARUCH INSTITUTE FOR MARINE BIOLOGY & COASTAL RESEARCH

THE UNIVERSITY OF SOUTH CAROLINA invites nominations and applications for the position of Director of the Baruch Institute, a major research facility at the University of South Carolina. The Search Committee will begin reviewing applications on January 8, 1996.

The Baruch Institute for Marine Biology & Coastal Research is a free-standing unit of the College of Science and Mathematics that provides facilities and resources for faculty and student research. Since the Baruch Institute was founded in 1969, associates have attracted \$24.4 million in external funding; this year's funding is \$4.1 million. Over 1050 scientific articles covering a variety of disciplines have been published, and 250 theses have been generated from student research. There are currently about 60 graduate students and 70 associated faculty conducting research and providing public education on basic and applied problems related to the marine sciences. Utilizing a multidisciplinary approach, the Institute participates in a wide range of studies that involve many departments, institutions, and government agencies. Current projects encompass molecular biology, geochemistry, ecotoxicology, sedimentology, spatial and coastal processes, watershed hydrology, and ecology.

The Institute is housed at the main campus of the University of South Carolina in Columbia and operates the Baruch Marine Field Laboratory on the 17,500 acre Hobcaw Barony near Georgetown on the South Carolina coast. Additional facilities under the Institute's purview are located in Charleston Harbor and at Pritchard's Island near Beaufort.

The Director will be an accomplished, respected scientist with demonstrated excellence in marine research, administration, and communication, as well as entrepreneurial abilities. The successful candidate will be appointed at the rank of Professor in an appropriate academic department and in the Marine Science Program. The Director reports to the Dean of the College of Science and Mathematics.

Letters of Nomination should include the nominee's name, current position, address, tel/fax number(s), and e-mail address. Applications should include a letter of interest, a summary of the applicant's qualifications, a curriculum vitae, and the names of five individuals who have been asked to supply references (include each referee's address, tel/fax number(s), and e-mail address). Nominations and applications should be sent to:

Prof. Bruce C. Coull
Chair of Baruch Institute Search Committee
College of Science and Mathematics
University of South Carolina
Columbia SC 29208

Tel: 803-777-3940 • Fax: 803-777-9385 • E-mail: bccoull@sc.edu

The University of South Carolina is an Equal Opportunity / Affirmative Action Employer.

Executive Dean of Agriculture and Natural Resources

Executive Director of the New Jersey Agricultural Experiment Station and Dean of Cook College

Rutgers, The State University of New Jersey seeks candidates for Executive Dean of Agriculture and Natural Resources with responsibilities for George H. Cook College and the New Jersey Agricultural Experiment Station (NJAES). Cook College serves over 3,500 students, offering undergraduate and graduate professional programs across seventeen academic departments. The Agricultural Experiment Station encompasses sixteen research centers and field stations and maintains a network of outreach and service, including Rutgers Cooperative Extension (RCE).

Together, Cook and NJAES epitomize the modern land-grant college and experiment station. The mission is to educate students and to address and resolve the social, economic, physical, biological, and policy dimensions of contemporary and future issues in agriculture and natural resource areas. These include agricultural production and competitiveness, food science and engineering; nutrition, health, and safety; marine and coastal resources; natural resources and environment; and human and community resources and development. The annual appropriated budget is \$40 million and there are approximately 300 full-time faculty.

As executive dean and director, the individual reports for NJAES to the president of the university, and for Cook College to the provost of the New Brunswick Campus. The successful candidate should be an established scholar of international stature. In addition, evidence of administrative achievement; excellence in research and teaching; experience in outreach, extension, and service and demonstrated leadership ability at both the governmental and university level are expected.

Applications and nominations will be accepted until **December 15**, 1995, or until a suitable candidate is found. Letters of application or nomination, including a current vita, should be sent in confidence to:



Dr. Harry Janes Chair, Search Committee c/o Office of the Provost and Graduate Dean Rutgers, The State University of New Jersey 18 Bishop Place New Brunswick, NJ 08903

Employment eligibility verification is required An Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

MICHIGAN STATE UNIVERSITY Department of Biochemistry

The Department of Biochemistry seeks applications for a tenure-track position at the ASSISTANT PROFESSOR level. Applicants should have demonstrated productivity and evidence of potential for independent research on aspects of the biochemistry of the cell nucleus. We are particularly interested in candidates with research programs in nuclear structure, nuclear transport, nuclear signaling, regulation of transcription, DNA replication or RNA processing. The successful applicant will be expected to participate in the Program for Studies on the Biochemistry of the Cell Nucleus, an area of emphasis in the Biochemistry Department developed with support from the Michigan State University Cancer Center. The Biochemistry faculty has explicitly endorsed efforts to increase the diversity of its ranks, and accordingly, candidates from groups currently underrepresented in academic science are encouraged to apply.

The Department of Biochemistry has a large faculty conducting research in most areas of contemporary biochemistry and molecular biology, providing both a stimulating scientific atmosphere and opportunities for research collaboration. The Department occupies a modern research building with well-equipped research and teaching laboratories, and has vigorous undergraduate, graduate, and postdoctoral training programs.

Applicants should submit a curriculum vitae, a description of research accomplishments and future interest, and have three letters of recommendation sent on their behalf to: Dr. William L. Smith, Chairperson, Department of Biochemistry, Box S, Michigan State University, East Lansing, MI 48824-1319. To ensure consideration, applications should be received by December 1, 1995. Michigan State University is an Affirmative Action/Equal Opportunity Employer. Handicappers have the right to request and receive reasonable accommodation.

POSTDOCTORAL POSITION MASSACHUSETTS GENERAL HOSPITAL

Harvard Medical School Cutaneous Biology Research Center

A POSTDOCTORAL RESEARCH POSITION is available immediately to study mechanisms of TGF-ß signaling during *Drosophila* development. Work involves molecular genetic approaches to study novel proteins required for maximum *decapentaplegic* function. Our goal is to elaborate the molecular pathways regulating *dpp* signaling and understand how this signal can elicit different developmental events. The position requires a Ph.D. and experience in molecular techniques. Salary is negotiable according to experience and institutional guidelines. Send curriculum vitae, one publication, and three letters of reference to:

Laurel Raftery, Ph.D. Massachusetts General Hospital Cutaneous Biology Research Center (CBRC) Building 149, 13th Street Charlestown, MA 02129

The Massachusetts General Hospital/Harvard Cutaneous Biology Research Center is a committed Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped and veterans are encouraged to apply.

POSTDOCTORAL POSITION VASCULAR AND MOLECULAR BIOLOGY

We are pursuing the cellular and molecular mechanisms by which endothelium-derived nitric oxide regulates oxidant-responsive transcriptional pathways mediating endothelial-monocyte interactions. Our lab is vertically integrated, with molecular, cellular, whole animal, and human research capabilities. Background in cell/mol/biol and U.S. citizenship required. Send curriculum vitae and reprints to: John P. Cooke, M.D., Ph.D., Division of Cardiology, Stanford University School of Medicine, 300 Pasteur Drive, Stanford, CA 94305-5246.

HARVARD UNIVERSITY Postdoctoral Position

Applications are invited for a POSTDOCTORAL POSITION to study intracellular transduction of the insulin signal. Candidates should have a recent Ph.D. or Ph.D./M.D. with experience in biochemistry or molecular biology. Please send curriculum vitae and the names, addresses and telephone numbers of three references to: Dr. David Sacks, BWH, Thorn 430, 75 Francis Street, Boston, MA 02115. U.S. citizenship or permanent residency required.

POSITIONS OPEN

FACULTY POSITIONS DEPARTMENT OF MICROBIOLOGY NEW YORK UNIVERSITY SCHOOL OF MEDICINE

The Department of Microbiology of NYU School of Medicine is seeking to fill one to two tenure-track positions at the ASSISTANT/ASSOCIATE PROFESSOR level within the next one to two years. We are particularly interested in attracting outstanding, researchers with a Ph.D. or M.D. degree working in the fields of viral and bacterial pathogenesis but will also welcome applications from individuals interested in the molecular analysis of viral and bacterial function in general. Participation in the Department's graduate teaching is expected. Start-up funds are available.

ing is expected. Start-up funds are available.

The Department of Microbiology is housed in the Medical Science Building at NYU Medical Center, with additional faculty located in the adjacent Skirball Institute of Biomedical Research and nearby Aaron Diamond AIDS Research Center and Public Health Research Institute. This research interests of the faculty are diverse with an emphasis on mechanisms of microbial pathogenesis including the study of AIDS and retrovirology, host defense mechanisms, microbial and molecular genetics, oncogenesis, growth factors, cytokines and the regulation of gene expression. The Department has an active NIH-supported graduate training program and also participates in interdisciplinary NIH-funded programs in the Kaplan Cancer Center and the Center for AIDS Research. Applicants should send their curriculum vitae, names of three references and a brief statement of research interests to: Microbiology Search Committee, Department of Microbiology, NYU Medical Center, 550 First Avenue, New ogy, NYU Medical Center, 550 First Avenue, Ne York, NY 10016. NYU is an Equal Opportunity Employer.

ASSISTANT PROFESSORSHIPS BIOLOGY

The Department of Biology at West Virginia University invites applications for two tenure-track positions at the level of beginning ASSISTANT PROFESSOR in the area of Cellular and Molecular Biology. Subject to funding approval, these positions will be available August 15, 1996. Applicants must have a Ph.D., or equivalent, with appropriate postdoctoral training. Teaching is an important consideration and the successful candidates will be expected to teach in the undergraduate and graduate programs. Each candidate will be required to establish a strong externally funded research program. We are seeking scientists whose research interests are in the bioregulation of aging, bone, *Drosophila* genetics, or reproduction, but strong candidates in other areas will be considered. Please submit a curriculum vitae, a statement of teaching and research interests, and provide the names, addresses, and telephone numbers of three referees to: Cellular and Molecular Biology Search Committee, P.O. Box 6057, Department of Biology, West Virginia University, Morgantown, WV 26506-6057. Review of applications will begin on December 15, 1995. West Virginia University is an Equal Opportunity Employer. Women, individuals with disabilities and minority candidates are encouraged to apply.

POSTDOCTORAL POSITION available immediately for NIH-funded research that is directed at defining the molecular target(s) of alcohol and volatile general anesthetics. Our approach is to use gene targeting in embryonic stem cells to create novel mouse lines that harbor modifications in genes putatively identified as critical to the physiologic response to ethanol and/or anesthetics. Prior experience in molecular biology, transgenic animal technology, and/or pharmacology is preferred but not required. Send letter of interest and curriculum vitae to: Gregg E. Homanics, Ph.D., University of Pittsburgh, Department of Anesthesiology, W1356 Biomedical Science Tower, Pittsburgh, PA 15261. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW/RESEARCH AS-SISTANT/ASSOCIATE to work on the molecular regulation of nitric oxide-guanylyl cyclase signalling pathway in the context of vascular physiology and pathophysiology with dynamic vascular biology research group at the University of Virginia. Molecular biology expertise essential, promoter analysis experience and cardiovascular background preferable. Applications detailing molecular biology experience and names of three references to: Roger A. Johns, M.D., University of Virginia Health Sciences Center, Box 238, Charlottesville, VA 22908 U.S.A. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

MICHIGAN STATE UNIVERSITY
Department of Biochemistry
National Food Safety and Toxicology Center

The Department of Biochemistry in conjunction with the National Food Safety and Toxicology Center (NFSTC) at Michigan State University seeks applicants for a tenure-track position at the ASSISTANT PROFESSOR level in biochemical toxicology. Applicants should have postdoctoral experience demonstrating unusual productivity and further potential to develop a strong externally-funded research program in the toxicological aspector of gene regulation and the biochemistry of the cell nucleus. The research focus should be directed to contemporary problems of food-borne toxicants. The motivation to act as a team member in collaborative and interdisciplinary research groups will be an important characteristic of the successful candidate.

The Department of Biochemistry has a large faculty conducting research in most areas of contemporary biochemistry and molecular biology. It occupies a modern research building with well-equipped research and teaching facilities and vigorous undergraduate, graduate, and postdoctoral training programs. The NFSTC expects to open its new laboratory building nearby in 1997. It will provide an outstanding environment for food toxicology research with many possibilities for collaboration with other scientists in toxicology, pathology, epidemiology and the food and agricultural sciences.

This is primarily a research position with some additional teaching responsibilities. It is expected that through graduate teaching activities, the successful candidate will contribute to the campus-wide program in Environmental Toxicology.

Applications should submit a curriculum vitae, a de-

Applications should submit a curriculum vitae, a description of research accomplishments and future interests, and have three letters of recommendation sent to: Dr. William L. Smith, Chairperson, Department of Biochemistry, Box ST, Michigan State University, East Lansing, MI 48824-1319. Review of applications will begin December 1, 1995 and will continue until a suitable candidate is found. Michigan State University is an Assimative Action/Equal Opportunity Employer. Handicappers have the right to request and receive reasonable accommodation.

NMR SPECTROSCOPY

The Cardiovascular NMR Section at Columbia University seeks applicants for the position of POSTDOGTORAL RESEARCH SCIENTIST with an M.D. or Ph.D. degree and one to two years of postdoctoral experience in NMR spectroscopy, with interest in becoming involved in studies of perfused hearts and isolated cardiac myocytes. Expertise with NMR studies of cell systems and with multiple-quantum NMR is especially desirable. Our current interests are in pursuing multinuclear spectroscopy including proton, sodium, and phosphorus. In addition, the candidate will have the opportunity to become involved in multinuclear MR imaging. This is primarily a research position with no clinical responsibilities. Please send curriculum vitae, a reprint of a key publication, and the names of two references to: Dr. Jose Katz, Division of Cardiology, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS, available immediately, to study an adhesive multicomponent system expressed by an enterobacterial pathogen. Requires experience in 1) molecular genetics (bacterial genetics, recombinant DNA, mutagenesis, PCR) or 2) glyco-protein/lipid biochemistry and use of antibody probes. Send curriculum vitae, description of previous experience and references to: Dr. Dieter M. Schifferli, University of Pennsylvania, Department of Pathobiology, 3800 Spruce Street, Philadelphia, PA 19104-6049. FAX 215-898-7887. Affirmative Action/Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS, available immediately, to study an adhesive multicomponent system expressed by an enterobacterial pathogen. Requires experience in 1) molecular genetics (bacterial genetics, recombinant DNA, mutagenesis, PCR) or 2) glyco-protein/lipid biochemistry and use of antibody probes. Send curriculum vitae, description of previous experience and references to: Dr. Dieter M. Schifferli, University of Pennsylvania, Department of Pathobiology, 3800 Spruce Street, Philadelphia, PA 19104-6049; FAX 215-898-7887. Affirmative Action/Equal Opportunity Employer.

The University of Tennessee, Knoxville

+-DEAN-+

College of Arts & Sciences
The University of Tennessee, Knoxville invites applications and nominations for Dean of the College of Arts and Sciences. The Dean is the chief administrative officer of the College, reporting directly to the Vice Chancellor for Academic Affairs. The Dean is responsible for leading the largest of the university's academic divisions. The College includes 27 academic departments and 13 interdisciplinary programs and offers undergraduate majors and graduate programs of study spanning the arts, humanities, natural sciences, and social sciences.

We seek candidates whose personal and professional qualities and experience assure energetic and creative leadership in all areas of academic endeavor. Candidates must have: (1) significant academic and administrative experience and merit appointment as a full professor with tenure in one of the disciplines represented in the College; (2) experience in planning, budgeting, and fund raising; (3) a belief in faculty governance; (4) an awareness of national issues surrounding university education and a vision for addressing them; (5) a record of commitment to diversity in the faculty and student body; and (6) a commitment to excellence in teaching, research, and service at a major research and/or land-grant university.

We seek to fill this position by July 1, 1996. The University especially welcomes as candidates persons from traditionally underrepresented groups. We will begin screening applications immediately and will consider all applications and nominations until the position is filled. Salary is competitive. Send nominations or a letter of application (including a current curriculum vitae and names, addresses, and phone numbers of four references) to: Dr. Linda Maxson, Chair



Arts & Sciences Dean Search The University of Tennessee 1819 Andy Holt Ave. Knoxville, TN 37996-4350

UTK is an EEO/AA/Title IX/Section 504/ADA Employer.



The Department of Biology at Swarthmore College invites applications for three different one-year positions at the assistant professor level, beginning September 1996. Applicants should have a Ph.D., teaching experience and a strong commitment to undergraduate education. Swarthmore College is an equal opportunity employer.

Plant Physiology. Teaching duties will include a one semester course in plant physiology with laboratory, an advanced course/seminar with laboratory in the area of the applicant's special interest, and participation in a team-taught introductory biology course and a team-taught senior seminar. Interested persons should submit a curriculum vitae, three letters of recommendation and a statement of teaching and research interests to: Plant Physiology Search, Department of Biology, Swarthmore College, Swarthmore, PA 19081. All materials must be received by January 5, 1996.

Neurobiology. Experience with neurophysiological recording techniques is required. Teaching duties will include a course in cellular neurobiology with laboratory, an advanced course/seminar in some area of neuroscience with lab projects, and participation in a team-taught introductory biology course and a team-taught senior seminar. Interested persons should submit a curriculum vitae, three letters of recommendation and a statment of teaching and reserach interests to: Neurobiology Search, Department of Biology, Swarthmore College, Swarthmore, PA 19081. All materials must be received by January 10, 1996.

Animal Behavior. Recent research experience is required and should include field work, preferably with insect or primate social systems. Teaching duties will include participation in a team-taught introductory biology course, a one semester course in general animal behavior with laboratory, an advanced course/seminar with laboratory projects in the area of the applicant's interest, and participation in a team-taught senior seminar. Interested persons should submit a curriculum vitae, three letters of recommendation and a statement of teaching and research interests to: Animal Behavior Search, Department of Biology, Swarthmore College, Swarthmore, PA 19081. All materials must be received by January 19, 1996.

ASSISTANT PROFESSOR Microbiology

The Department of Microbiology at the University of Illinois at Urbana-Champaign seeks candidates for a full-time tenure-track faculty position at the Assistant Professor level. Applicants should have a Ph.D. degree, postdoctoral experience, and show exceptional promise in developing an active research program in Microbiology. Preference will be given to applicants with research interests in the physiology, biochemistry, or molecular genetics of microorganisms that further expand the Department's breadth of microbial diversity. Responsibilities include teaching undergraduate and graduate students. Starting date August 1996. Salary will be commensurate with experience.

The Department of Microbiology offers a supportive and collegial atmosphere and a strong graduate program. There are extensive interdepartmental interactions in microbial and eukaryotic cell and molecular biology, immunology, developmental biology, evolution, biochemistry, and biophysics. The University of Illinois at Urbana-Champaign offers an outstanding and exciting academic research environment including a Biotechnology Center and stateof-the-art facilities for hybridoma production, flow cytometry, electron mi-croscopy, X-ray crystallography and computer analyses.

Applicants should submit a curriculum vitae, a description of research interests and future plans and have at least three letters of reference sent to:

Abigail Salyers, Chair **Faculty Search Committee** Department of Microbiology University of Illinois 131 Burrill Hall 407 S. Goodwin Avenue Urbana, IL 61801 Telephone (217) 333-1736 FAX (217) 244-6697

To ensure full consideration, applications should be received by December 15, 1995. Interviews may be conducted before the closing date, but no final decision will be made before that time.

> The University of Illinois is an Affirmative Action-Equal Opportunity Employer.

TENURE-TRACK FACULTY POSITIONS AT CARB

PROTEIN STRUCTURE AND FUNCTION

The Center for Advanced Research in Biotechnology (CARB) is seeking to fill two tenure-track faculty positions in (1) the elucidation of molecular mechanisms in enzyme catalysis and (2) receptormediated signal transduction. Applicants using multidisciplinary approaches in biochemistry, structural and molecular biology are invited to apply. The successful candidates will be expected to develop strong, independent, externally funded research programs, and also to interact with other CARB scientists involved in physical biochemistry, structural immunology, protein folding, stability, modeling and engineering, macromolecular crystallography, computational chemistry and high-field NMR spectroscopy. One position will be a joint appointment with Bowie State University of the University of Maryland System.

CARB is a research center of the National Institute of Standards and Technology (NIST) and the University of the Maryland Biotechnology Institute devoted to fundamental problems of macromolecular structure, function and engineering. Interested candidates should send a curriculum vitae, three letters of reference, and a summary of research interests and plans to:

Faculty Search Committee Center for Advanced Research in Biotechnology University of Maryland Shady Grove 9600 Gudelsky Drive Rockville, MD 20850 USA

Review of applications will begin on January 15, 1996. CARB is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply. For one of the positions, preference will be given to applicants who are U.S. citizens.

POSITIONS OPEN

POSTDOCTORAL POSITION REPRODUCTIVE BIOLOGIST/EMBRYOLOGIST

A POSTDOCTORAL POSITION is available for a period of at least two years to study cell cycle regulation, cytoplasmic and nuclear transfer in ascidian, mammalian and human oocytes. The applicant will preferably have experience in biochemical and molecular assays of cell cycle regulation and/or micromanipulation. The position will be supported by The Center of Reproductive Medi-cine in Englewood, Colorado and The Institute for Re-productive Medicine and Science at Saint Barnabas Medical Center, Livingston, New Jersey, under the joint su-pervision of Drs. Jacques Cohen, Steen Willadsen (St Barnabas), and Brian Dale (Stazione Zoologica, Napoli) It is expected that most of the experimental work will be carried out at Saint Barnabas Medical Center. To apply send résumé and two reference letters to: Jacques Cohen, Scientific Director of Assisted Reproduction, The Institute for Reproductive Medicine and Science at Saint Barnabas, 101 Old Short Hills Road, Suite 501, West Orange (Livingston), NJ 07052.

POSTDOCTORAL POSITION funded by NCI through April 1998, available January 1, 1995, to perform structure/function studies on cpli, a novel oncogene isolated from neoplastic Syrian hamster embryo cells (Oncogene 9:2065-2069, 1994, and 10:963-971, 1995). Primary research includes: a) isolation and characterization of the promoter region and upstream sequences of the hamster cpli oncogene and proto-oncogene; b) modulation of cph expression as part of the cellular response to stress; c) structural characterization of the human cpli proto-oncogene and cDNA; d) identification of its protein product, and e) detection for cph alterations in human primary tumors and tumor-derived cell lines. Experience with molecular biology techniques (cloning, sequencing, PCR, protein electrophoresis, immunodetection, and purification) is required. Interested individuals should send curriculum vitae and names of three references to: Dr. V. Notario, Experimental Carcinogenesis Program, Department of Radiation Medicine, Georgetown University Medical Center, TRB E220A, 3970 Reservoir Road, NW, Washington, DC 20007. Georgetown University is an Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available to study association/folding processes between protein fragments using multidimensional NMR spectroscopy (*Tasayea* and Chao, *Proteins*, **22**:41–44 1995). Experience solving the structure of proteins in solution is essential. Send curriculum vitae including list of publications, names and addresses of three references to: Dr. Maria Luisa Tasayco, Chemistry Department, City College of the CUNY, Convent Avenue and 138th Street, New York, NY 10031. Email: mltj@carmen.sci.ccny.cuny.edu.

POSTDOCTORAL POSITIONS available immediately to study mechanisms of growth factor and oncogene intracellular signaling and to develop new cancer drugs based on the modulation of these signaling pathways. Applicants must have a Ph.D., M.D., or equivalent degree and a background in biochemistry, molecular biology, cell biology, or pharmacology. The position offers the opportunity for independent research in a well-equipped multidisciplinary lab in an attractive work environment. Applications with curriculum vitae and three letters of recommendation should be sent to: Dr. Garth Powis, Arizona Cancer Center, University of Arizona Health Sciences Center, 1515 North Campbell Avenue, Tucson, AZ 85724-5024. Application review begins November 10, 1995 and continues until December 15, 1995. The University of Arizona is an Equal Employment Opportunity/Affirmative Action/Americans with Disabilities Act

A SENIOR RESEARCH ASSOCIATE POSI-TION and a POSTDOCTORAL POSITION available immediately to study molecular mechanism of tumorigenesis, involving tumor suppressor genes and onco-genes. Very competitive salary depending on experience. Please send curriculum vitae with names and telephone numbers of three references to: Yuen Kai Fung, Ph.D., Associate Professor, University of Southern California, Childrens Hospital Los Angeles, 4650 Sunset Boulevard, Mailstop 94, Los Angeles, CA 90027. Equal Opportunity Employer.

POSITIONS OPEN

Agriculture



POSTDOCTORAL RESEARCH ASSOCIATE POSITION: The U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Sugarbeet and Bean Research Unit, East Lansing, Michigan, is seeking an individual to isolate and characterize dry bean seed coat pigments (flavonoid compounds) and to conduct research that relates Mendelian genes conditioning seeds coat pigments to multistep biosynthetic pathways by which the pigments are formed and interact. Research involves making qualitative and quantitative determina-tions of flavonoids using HPLC and chromatographic analyses, and purifying flavonoids and phenolics by chromatographic methods and characterizing them chemically using advanced level spectroscopic techniques. Particular attention will be placed on phlobaphenes and their role in postharvest after darkening of seeds. Position requires the incumbent to have a well-developed knowledge of the chemistry of secondary plant metabolites and natural products and their isolation, purification, and identification. Some knowledge in genetics is needed because of the use of genetic markers in the research. A knowledge of plants is also needed as the incumbent will be required to produce seed needed for experiments. The incumbent must have the ability to plan and conduct integrated research and to form productive collaborations with other scientists.

The postdoctoral position, a GS11/12, is funded for two years. A Ph.D. in natural products chemistry or related field with a demonstrated ability to publish is required. To apply, please send curriculum vitae, selected papers, and the names of three references to: **Dr. George L.** Hosfield, USDA, ARS, Department of Crop and Soil Sciences, Michigan State University, East Lansing, MI 48824. Telephone: 517-355-0110; FAX: 517-337-6782. Applications should indicate "Position Num-

USDA/ARS is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS Plant Molecular Biology

Two POSTDOCTORAL POSITIONS are currently available to work on two aspects of the soybean-Phytophithora sojae interaction: 1) cloning the soybean disease resistance gene Rps 1; 2) investigating the role of the phosphoinositide signal pathway in the expression of disease resistance. Candidates with experience in soybean transformation, molecular biology, or protein biochemistry are encouraged to apply with three letters of recommendation to: Dr. Madan K. Bhattacharyya, Staff Scientist, Plant Biology Division, Noble Foundation, P. O. Box 2180, Ardmore, OK 73402. FAX: 405-221-7380; Telephone: 405-223-5810. The Noble Foundation is an Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available for an individual with experience in protein/nucleic chemistry and an interest in novel regulatory mechanisms to study the unique epigenetic regulatory system of the Spm transposon (Cell, 77:427, 1994), which is inactivated by methylation and encodes an autoregulatory protein that reactivates its methylated promoter. Send curriculum vitae and references to: **Dr. Nina Fedoroff, Biotechnology** Institute, The Pennsylvania State University, University Park, PA 16802. FAX: 814-863-1357; Email: nvfl@psu.edu

POSTDOCTORAL POSITIONS Molecular Regulation of Hepatic Gene Expression

Two POSTDOCTORAL POSITIONS are available to study molecular mechanisms mediating effects of insulin on hepatic gene expression. One postdoctoral investigator will characterize novel DNA/protein complexes and DNA/protein interactions by methylation interference, affinity labeling, and Southwestern blotting/cloning. Another investigator will examine the role of signaling pathways in mediating insulin effects via defined response sequences, using kinase assays and transfection models. Send curriculum vitae and names and telephone numbers of three references to: Dr. Terry Unterman, Endocrine Section (M/C 640), Department of Medicine, University of Illinois College of Medicine at Chicago, 840 South Wood Street, Chicago, IL 60612. FAX: 312-455-5877.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

The Department Medicine/Medical Oncology of The University of Texas Health Science Center at San Antonio (UTHSCSA) has positions available for POSTDOC-TORAL trainees in our NIH-funded breast cancer SPORE program. Areas of research include: molecular characterization of ER variants, mechanisms of drug and Tamoxifen resistance, genetic markers of premalignant disease, oncogenes and tumor suppressors in breast cancer, transgenic mouse models, signal transduction, and growth factors. Minimum requirements are: Ph.D. degree in molecular or cellular biology or M.D. with research experience, U.S. citizen or pennanent resident. Stipend to be determined by NIH fellowship guidelines. Send curriculum vitae, letter of research interests, and names of three references to: C. Kent Osborne, M.D., Department of Medicine/Medical Oncology, UTHSCSA, 7703 Floyd Curl Drive, San Antonio, TX 78284-7884. The UTHSCSA is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION AVAILABLE

NIH-funded (3½ years) studies on the characterization and molecular etiology of membrane glucocorticoid receptors. Will entail a broad range of techniques including cell culture, receptor modifications, binding, purification, immunocytochemistry, PCR amplification-based sequencing, and cDNA cloning. Available starting February , 1996; salary depends on qualifications. Send curriculum vitae and three letters of reference to: Dr. Bahiru Gametchu, Department of Pediatrics, Medical College of Wisconsin, Milwaukee, WI 53226. Email: gametchu@post.its.mcw.edu. Medical College of Wisconsin an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS to apply advanced Optical Mapping approaches to human genome analysis (see Science, 262:110-114, 1993; Nature Genetics, 9:432-438, 1995; PNAS, 92:165-169, 1995; C&E News, May 15, 1995; PNAS, 92:5164-5168, 1995). Develop new approaches to sequencing, applications of new genotyping methodologies, whole genome approaches to restriction mapping and gene hunting. Send curriculum vitae, summary of past research, and three letters of reference to: Dr. David C. Schwartz, New York University, W. M. Keck Laboratory for Biomolecular Imaging, Department of Chemistry, 31 Washington Place, New York, NY 10003.

DUKE UNIVERSITY CELL/MOLECULAR BIOLOGY

POSTDOCTORAL POSITION: Investigate the gene regulation of antioxidants and proinflammatory cytokines in models of lung injury and repair. Approaches include quantitative RT-PCR, differential display, and gene transfection. Please submit a curriculum vitae with references to: Rodney Folz, M.D., Ph.D., Duke University Medical Center, Box 3177, Durham, NC 27710. Telephone: 919-684-2513; FAX: 919-684-3067. Equal Opportunity Employer

POSTDOCTORAL POSITION available immediately to study physiological roles for protein carboxyl methylation in animal cells. A microinjection model involving Xenopus oocytes is used to analyze the biochemical processing of methylated proteins and peptides. Transfected mammalian cell lines and Drosophila are used to study the consequences of methyltransferase manipulation on the stress response and aging. Research experience in molecular biology, mammalian cell culture, and/ or protein biochemistry is preferred. Send curriculum vitae and three references to: Dr. Clare O'Connor, Biology Department, Boston College, Chestnut Hill, MA 02167.

POSTDOCTORAL POSITION is available beginning January 1, 1996 to study the electrophysiologic and pharmacologic consequences of gender-based differences in expression of cardiac ion channels. Applicants should have extensive experience in cardiac cellular electrophysiology, patch clamp, and cardiac myocyte cell culture techniques. Send curriculum vitae and three letters of reference to: Raymond L. Woosley, M.D., Ph.D., Department of Pharmacology, Georgetown University Medical Center, 3900 Reservoir Road, NW, Washing-ton, DC 20007



KALAMAZOO COLLEGE Department of Biology

Kalamazoo College seeks to fill positions in molecular biology and genetics (tenure-track) and in botany and ecology (anticipated one-year sabbatical replacement). Ph.D. (or evidence of imminent completion) required. Salary competitive and consistent with level of experience. Candidates are expected to have high aptitude and interest in undergraduate teaching, a commitment to the liberal arts, and a desire to involve undergraduates in scholarship both inside and outside the classroom. Kalamazoo College is a highly selective nationally known liberal arts college with a unique and distinguished undergraduate program. The Biology Department recently moved into a new "state-of-the-art" science teaching and research facility that includes modern teaching and student/faculty research labs.

Molecular Biologist/Geneticist: tenure-track position at the Assistant Professor level preferred or commensurate with level of experience beginning September 1996. Teaching responsibilities include genetics, molecular biology, and other electives, such as microbiology or developmental biology, depending upon experience and background. Interest and ability to involve undergraduates in research are essential. Start-up funds will be made available.

Botanist/ecologist: one-year sabbatical replacement at the Assistant Professor level beginning September 1996. Teaching responsibilities include General Botany with possible participation in evolution or ecology sections of introductory courses. Other options include Ecology or Environmental Science for majors or non-majors. An excellent opportunity for an individual to develop a set of strong credentials in a program that puts a premium on excellence in undergraduate science education.

Completed applications received by November 24, 1995 will receive full consideration, with later applications reviewed as needed until the positions are filled. Send curriculum vitae (including a description of research interests), undergraduate and graduate transcripts (unofficial acceptable), a detailed statement of teaching philosophy and goals, and three letters of recommendation to: Dr. Paul D. Olexia, Chair, Biology Department, Kalamazoo College, 1200 Academy Street, Kalamazoo, MI 49006-3295. Please specify clearly for which position you are applying. Kalamazoo College encourages candidates who will contribute to the cultural diversity of the College to apply and to identify themselves if they wish. Equal Opportunity Employer.

Scripps Institution of Oceanography Center for Clouds, Chemistry, and Climate

Scripps Institution of Oceanography (SIO) at the University of California, San Diego (UCSD) invites applications for appointment to a research position in the area of atmospheric chemistry.

The research appointments parallel University of California faculty appointments, but are without teaching requirements. For this atmospheric chemistry position applications for the appointment at assistant, associate, or full research scientist will be considered. Salary is commensurate with experience and based on the University of California salary scale. Partial salary support will be provided from various sources subject to availability of funds.

Candidates must hold a Ph.D and have demonstrated their ability to conduct high quality research. Research area may include chemistry of tropospheric games and aerosols, with an emphasis on atmospheric observations. The successful candidate will be expected to establish an extramurally funded research program and to involve SIO graduate students. There will be opportunities to interact with an international and interdisciplinary group of researchers in clouds and climate, and to participate in on-going field experiments involving aircraft, ships, and surface observations.

Closing date is January 31, 1996. Applicants should send a curriculum vitae, selected reprints, a list of at least three references and a brief statement of research interests to:

V. Ramanathan, Director Center for Clouds, Chemistry, and Climate Scripps Institution of Oceanography University of California, San Diego 9500 Gilman Drive Mail Code 0239 La Jolla, CA 92093-0239

The University of California is an equal opportunity employer.

■ Neurobiologist ■

Assistant Professor, tenure-track position available in the Department of Biology, September, 1996. Successful applicant will be expected to teach undergraduate and graduate courses in neurobiology; to participate in the development of, and teach in, a general education curriculum; to establish an externally funded research program; and to direct the research of students at the undergraduate, master's and doctoral levels. Research focus could be in areas of neurophysiology, neurochemistry, receptor biology, or molecular or developmental neurobiology. However, applications will be particularly welcome from candidates with research interests in areas such as neuroethology, neuroendocrinology, neuroplasticity and biorhythm that would enable direct participation in our doctoral track in Environmental Biology. Ph.D., postdoctoral (or equivalent professional) experience. Send letter stating interests and goals in research and teaching, CV and three reference letters to: Dr. Richard H. White, Chair, Biology Search Committee, Biology Department, University of Massachusetts Boston, 100 Morrissey Blvd., Boston, MA 02125-3393. Application deadline is November 20, 1995. An Affirmative Action, Equal Opportunity, Title IX employer.

University of Massachusetts Boston

ASSISTANT PROFESSOR

FRESHWATER/LANDSCAPE ECOLOGY

Beginning Academic Year 1996-1997

The Harvard University Graduate School of Design has an Assistant Professor position available beginning in the academic year 1996-1997 for a dynamic individual qualified to offer graduate-level instruction in freshwater/landscape ecology. This full-time position may be filled for a fixed initial term, normally of three years, with responsibilities for teaching and scholarship. Candidates should have a record of scholarly research productivity on land/water interactions, an ability to relate research to the design professions, and some teaching experience. A Ph.D and published research in ecology with a focus on streams, rivers, wetlands, or lakes are required. Experience in landscape ecology, aquatic restoration, hydrology, or working with landscape architects and planners is desirable.

Applications are invited before 15 December, 1995 on the application forms available from: Office of Faculty Planning, Harvard University Graduate School of Design, 48 Quincy Street, S203, Cambridge MA 02138, Attn: Richard T. Forman. Fax: (617) 496-5310. Applicants should also include copies of their most relevant publications with their applications.

Harvard is an Equal Opportunity/Affirmative Action Employer.



HARVARD UNIVERSITY

Graduate School of Design

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for an NIH-funded study of genes and proteins involved in alginate biosynthesis/degradation in Pseudomonas aeruginosa. Applicants must possess expertise in gene cloning, sequencing and expression, and purification of recombinant proteins. Candidates should send curriculum vitae, reprints, and names of three references to: Neal L. Schiller, Ph.D., Chair, Graduate Program in Microbiology, University of California, Riverside, CA 92521-0121. FAX: 909-787-5504; Email: neals@ucracl.ucr.edu. Affimative Action/Equal Opportunity Employer.

MOLECULAR TOXICOLOGY UNIVERSITY OF WISCONSIN-MADISON

POSTDOCTORAL POSITIONS in Molecular, Cellular and Biochemical Toxicology funded by an NIEHS training grant.

Topic areas include: regulation of gene expression (toxicant metabolizing enzymes, oncogenes, DNA repair enzymes); cellular effects mediated by the Ah-receptor; toxicant activation; toxicity in developing organisms; mechanisms of carcinogenesis; action of toxicants on liver, kidney, gonadal, nerve, and immune cells.

Time will be allocated for training in Toxicology, and Molecular and Cellular Biology as appropriate. Collaborative projects involving more than one laboratory are encouraged.

Applicants must be U.S. citizens or permanent residents and should send a curriculum vitae, three references (addresses and telephone numbers), and a letter stating research interests to: Dr. Colin R. Jefcoate, Director, Environmental Toxicology Center, B157 Steenbock Library, 550 Babcock Drive, Madison, WI 53706. Telephone: 608-263-4580. An Equal Opportunity Employer.

BIOLOGY ONE-YEAR SABBATICAL REPLACEMENT

Earlham College seeks a one-year replacement to teach Human Anatomy and Physiology, Genetics, and related introductory courses. Ph.D. or A.B.D. Should send transcripts, curriculum vitae, three letters of reference that speak to teaching effectiveness, and a letter of application describing biology teaching experience and philosophy of teaching to: Jerry Woolpy, Earlham College, Richmond, IN 47374. Apply before January 15, 1996. Earlham College is an Affirmative Action/Equal Opportunity Employer. We particularly encourage applications from women, minorities, and Quakers.

SCIENTIFIC LIBRARIAN

Progressive Marina del Rey nutrition firm seeks CLINICAL RESEARCH ASSOCIATE or LIBRARY RESEARCHER for cutting edge work on health and nutrition. If you're fascinated by the new trend in nutritional support, alternative health care, and life extension, this firm is the answer. Excellent opportunity for alternative-care minded individuals with an eye on the future. Send résumé to: Ning Li, 520 Washington Boulevard, Suite 420, Marina del Rey, CA 90292.

RESEARCH ASSOCIATE needed by southwest Ohio University to conduct multidisciplinary ergonomics-biomechanics research studying the risks of slips and falls on elevated and/or inclined surfaces, the ergonomics of task performances on slippery surfaces, and the gait and balance in lead exposed children. Coordinates data collec-tion with human subjects developing protocols and questionnaires. Writes computer programs in Asyst and C++ to collect, analyze, graph, and plot data using software and hardware from AMTI Force Platforms, Peak Performance System and FScan Pressure Sensors. Uses SAS programming and multivariate regression analysis to analyze results and writes reports for scholarly journals. Must have Ph.D., or completed all degree requirements, in environmental health or industrial hygiene. Must have two years of experience in job described or two years of experience or dissertation involving writing programs in C++ and Asyst to collect and analyze data using AMTI Force Plat-forms, Peak Performance System and FScan Pressure Sensors and working with human subjects. Experience may be gained before, during or after degree and may be gained concurrently. Work schedule: forty hours per week, 8am to 5pm, Monday through Friday. Salary: \$39,140.04 per year. Must have proof of legal authority to work permanently in the U.S. Send two résumés and cover letters (no calls) to: T. Do, Reference No. 1357, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

POSITIONS OPEN



FOOTHILL DE ANZA
COLLEGE COMMUNITY
DISTRICT
Los Altos Hills, California
BIOTECHNOLOGY
INSTRUCTOR

This position will be responsible for teaching biotechnology, microbiology, and cell biology along with the appropriate equipment and techniques used in microbiology and biotech labs. Master's degree required. Application and job description may be obtained from:

Employment Services Telephone: 415-949-6217 or Email: cms6438@mercury.fhda.edu

A résumé or curriculum vitae may not be substituted for a completed application. Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT I

Coronary vascular physiology and pharmacology research. Primarily responsible for conducting both functional and imaging studies of coronary arteries obtained from various species of animal as well as human hearts. Responsible also for implementation of highly integrated and computerized data acquisition system to correlate magnetic resonance imaging (MRI) of coronary arteries to their functional reactivity. Will assist in the experimental designs, data analyses, and preparation of reports and publishable manuscripts. Requires B.S. in biology and/or computer engineering plus one year of experience in duties described or one year of experience in computer engineering or medical engineering. Computer engineering or medical engineering experience must include control-ling of computer based data acquisition/processing techniques, analog/digital equipment experience, and ability to program for data processing, and knowledge of MRI technique. Salary: \$22,000 per calendar year. Work 8am to 5pm, 40 hours per week. Applicants must be authorized to work in the United States. Résumés to: M. Fowler, Alabama State Employment Service, P. O. Box 12046, Birmingham, AL 35202-2046. Refer to Job Order Number AL 5020747. Equal Employment Opportunity.

PLANT TRANSFORMATION

DNA Plant Technology Corporation has an immediate opening in its Vegetable Tissue Culture Group for an experienced SCIENTIST to work on dicot transformation. Current research is in the development of transformation systems in a variety of vegetable crops and the production of new transgenic lines for commercial release. Candidates must have transformation experience using Agrobacterium, preferably in the development or trouble shooting of transformation protocols. Experience with the tissue culture and transformation of tomato and/or strawberry would be valuable.

DNAP offers an excellent compensation and benefits package that includes stock incentives. Candidates should send a résumé with three references to: Dr. Alison Morgan, DNA Plant Technology Corporation, 6701 San Pablo Avenue, Oakland, CA 94608. FAX: 510-547-2817; Email: morgan@dnap.com. An Equal Opportunity Employer.

SENIOR RESEARCH ASSOCIATE

The Department of Neurology, Columbia University College of Physicians and Surgeons, seeks a SENIOR RESEARCH ASSOCIATE to assist in laboratory work in neurogenetics. Responsibilities will include DNA sequencing and sequence analysis, mutation analysis, RNA and protein extraction and assay. M.D. or Ph.D. required, with at least three years of postdoctoral experience in the necessary techniques. Send curriculum vitae to: Torbjoern G. Nygaard, M.D., Department of Neurology, Columbia University, 710 West 168th Street, New York, NY 10032.

Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN



THE CLEVELAND CLINIC FOUNDATION

STAFF SCIENTISTS PROGRAM IN MACULAR DEGENERATION AND

INHERITED RETINAL DISEASES

Division of Ophthalmology The Cleveland Clinic Foundation (CCF)

Recruitment of STAFF SCIENTISTS is underway for the newly expanding Eye Institute. Two positions are available immediately at the Assistant, Associate or Full Scientist level, and three additional positions will be filled in the fall of 1997. Basic investigators with training in molecular biology, cell biology, biochemistry, human genetics, or epidemiology, with research interests that impact the clinical areas of macular degeneration and inherited retinal diseases, will be seriously considered. Applicants should send curriculum vitae; names of three references; and a statement of past research activities, current interests, and career goals to: Joe G. Hollyfield, Ph.D., Director of Ophthalmic Research, Research Institute FFb, The Cleveland Clinic Foundation, Cleveland, OH 44195-5245. FAX: 216-445-3670. Email: https://doi.org/10.1001/j.com/portunity/Affirmative Action Employer.

OPEN EXAMINATION FOR SENIOR TOXICOLOGIST

The California Environmental Protection Agency, Department of Pesticide Regulation, seeks a SENIOR TOXICOLOGIST in the pesticide regulatory program. Requirements: four years of postdoctoral experience in toxicology or closely related field. This experience must include the interpretation of toxicological findings relative to probable human health and one year of experience in the development and design of toxicological research and investigative studies. The senior toxicologist position is responsible for both supervisory tasks and may perform the most difficult or sensitive work. The position is located in Sacramento. Salary range: \$5,242 to \$6,336 per month. Comprehensive benefits package. Submit application and résumé to the address below by the Final File Date: November 30, 1995.

Department of Pesticide Regulation Personnel/Examination Unit 1020 N Street, Room 126 Sacramento, CA 95814 Attn: SDJ

For State application and announcement **Telephone**: **916-322-4553**.

RELOCATION OF RESEARCH PROGRAMS TAMPA BAY RESEARCH INSTITUTE

The Tampa Bay Research Institute (TBRI) invites applications from established SCIENTISTS to relocate funded research programs in Molecular Biology, Cancer Research, Virology, and Gene Therapy. TBRI is an independent, nonprofit research organization located in the beautiful Tampa Bay Area. The institute is based in a modern facility with excellent individual laboratories suitable for molecular biology/biotechnology research in a variety of areas of modern biology. Individuals with funded research programs in the fields of interest are encouraged to apply. Please send application, including a statement of research interest and names and addresses of three referees, to: The Chair, Search Committee, Tampa Bay Research Institute, 10900 Roosevelt Boulevard, St. Petersburg, FL 33716.

COURSES AND TRAINING

ATTENTION PH.D.'S AND M.S.'S

Earn M.D. degree from top ranked international medical school. Alternate studies program in English, two years basic science, three weeks on six weeks off. World Health Organization listed and Educational Committee on Foreign Medical Graduates approved. Eligible for third and fourth years clinical studies in USA. Contact: Dr. Alan Butkowsky. Telephone: 203-563-4554. Total cost per year is approximately \$18,000.

Animal Health Research

Pfizer, a leader in animal health products has established a reputation for success in finding/developing breakthrough products for the global market. Our new Molecular Biology laboratory is a dynamic part of Pfizer's Animal Health discovery operation in Lincoln, Nebraska.

At Pfizer we draw from real life.

Currently, Pfizer's cutting-edge Molecular Biology department, has an outstanding opportunity for a team-oriented, technically talented:

VIRAL MOLECULAR BIOLOGIST

Design and conduct contemporary experiments on RNA viruses for the discovery of biological animal vaccines. To qualify, you must have a Ph.D. or equivalent in microbiology or biochemisty with at least 2 years of relevant postdoctoral experience with RNA viruses, including retroviruses or coronaviruses, with the ability to manipulate RNA using contemporary techniques.

In addition to the opportunities to interact with one of the world's finest corporate scientific communities, you will enjoy the many recreational and educational amenities of our community and its friendly, family-oriented Midwestern lifestyle. Relocation assistance is available. Please send detailed resume to: Employee Resources, Biological R&D, 601 West Cornhusker Highway, Lincoln, NE 68521.

We are an equal opportunity employer M/F/D/V.



Central Research

We're part of the cure.

CARDIOVASCULAR PHARMACOLOGY

Investigator

SmithKline Beecham, a worldwide leader in pharmaceutical research, has an excellent research opportunity in our Cardiovascular Pharmacology department for an Investigator with good understanding of molecular biology techniques and strategies and special emphasis on transcription regulation/factors.

While working in a very interactive and collaborative environment, the successful candidate will establish independent basic research in areas such as atherosclerosis, tissue remodeling and matrix formation, smooth muscle/endothelial cell biology and vascular functions. Responsibilities will also include supervising an associate scientist and taking care of administrative aspects of lab work.

Qualified individuals will have a PhD in Biological Sciences, at least one full term of post-doctorate fellowship, and 5-7 years' experience in independent scientific research in an academic or pharmaceutical research organization. Strong experience in gene cloning, yeast dihybrid systems and cell biology are important. A strong track record of publication in high-quality, peer-reviewed professional journals is mandatory.

Our state-of-the-art research facility is located in suburban Philadelphia. We offer a competitive compensation/benefits/ relocation package and a stimulating team environment. For confidential consideration, send your resume to: SmithKline Beecham Pharmaceuticals, Job Code H5-0107, P.O. Box 2645, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.

SmithKline Beecham

Pharmaceuticals 4 6 1

Challenging the natural limits.

TWO FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY AND BIOPHYSICS

IOWA STATE UNIVERSITY

The department seeks to fill two tenure-track appointments at the level of assistant professor. The successful applicants will be expected to develop independent research programs that emphasize biochemical and/or biophysical aspects of important biological problems. Applicants should also have an interest in graduate and undergraduate teaching. Generous start-up funds and space in the new Molecular Biology Building will be available.

Applicants should send a curriculum vitae and description of research accomplishments and interests, and have three letters of recommendation sent to:

Faculty Search Committee
Dr. Robert Thornburg, Chairman
Department of Biochemistry
and Biophysics
1210 Molecular Biology Building
Iowa State University
Ames, IA 50011

To ensure full consideration, all materials should be received by January 15, 1996. Iowa State University is an affirmative Action/ Equal Opportunity Employer. Applications from women and minority candidates are especially encouraged. For additional information about the Department and Iowa State University see: http://molebio.iastate.edu/bbhtml/homepage.htm

DIRECTOR

Research Animal Resource Center

Memorial Sloan-Kettering Cancer Center and the Cornell University Medical College

The Memorial Sloan-Kettering Cancer Center (MSK) and the Cornell University Medical College (CUMC) are seeking a Director for their jointly-operated Research Animal Resource Center (RARC) which encompasses approximately 35,000 NSF with an average daily census of more than 32,000 animals. The Director of RARC has direct responsibility for managing an AAALAC-accredited program of laboratory animal care and use that complies with all federal, state and local animal welfare regulations. The Director serves as the chief veterinarian for both institutions and has MSK/CUMC-wide responsibility for the development, recommendation and implementation of policies regarding the care and management of research animals.

Responsibilities include supervising two veterinarians and approximately 29 managerial and associated support staff members in the General Animal Facilities and Animal Health Divisions who provide clinical care, post-operative care, anatomic and clinical pathology services, and related professional services. The annual budget of RARC exceeds \$2.5M.

Candidates must have either the DVM or VMD from a recognized school of veterinary medicine; must be Board certified by the American College of Laboratory Animal Medicine and must have approximately 10 years of significant administrative experience (including personnel and budget management) in the care and managing of research animals; should have research experience.

Individuals should submit a letter of interest, a curriculum vitae, and the names of three references to: Senior Vice President, Memorial Sloan-Kettering Cancer Center, Room 1308H, 1275 York Avenue, New York, NY 10021.

Memorial Sloan-Kettering Cancer Center and the Cornell University Medical College are committed to the policy that all persons shall have equal access to its programs, facilities and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

GLOBAL CAREER OPPORTUNITIES



Public Announcement Regarding the Recruitment of Researchers for the NEDO Industrial Technology Fellowship Program in FY1996.

The New Energy and Industrial Technology Development Organization (NEDO) has been conducting research and development on new energy, energy conservation and industrial technologies. In order to ensure efficient promotion of its research and development projects, NEDO would like to recruit researchers to participate in such projects.

Those who wish to participate in NEDO's projects should apply in accordance with the following information.

1. Purposes and Activities

In order to more efficiently conduct NEDO's ongoing research and development projects, NEDO will employ researchers (hereinafter "Industrial Technology Researchers") to be seconded to organizations which NEDO has entrusted with its projects to be engaged in project research and development work.

2. Projects

Please refer to the attachment entitled "Projects for Which Industrial Technology Researchers Will Be Enlisted."

3. Employment Period

The employment period will be from April 1, 1996 to March 31, 1997. (The total employment period may extend up to a maximum of three consecutive years, that is, up to March 31, 1999, based on an evaluation at the end of each fiscal year.)

4. Number of Researchers to be Recruited.

Several researchers will be recruited.

- 5. Requirements
- (1) A person who holds a doctorate degree or who has a comparable level of research ability;
- (2) A person without any health problems which may constitute an obstacle to research activities;
- (3) A person whose Japanese or English language ability does not create any obstacle to his/her life in Japan.
- 6. Work Conditions, Etc.
- (1) The status of individual Industrial Technology Researchers shall be as a full-time employee on a contract basis.
- (2) Work conditions shall be in accordance with NEDO's work regulations.
- (3) NEDO will pay a total annual remuneration of approximately ¥7.0 million based on regulations provided for by NEDO. (This amount includes basic salary, benefits, taxes and the researcher's share of premiums for social insurance. Payments equal to 1/12 of the total amount of annual remuneration will be made on a monthly basis.)
- (4) NEDO will pay the actual amount of transportation expenses necessary for individual Industrial Technology Researchers to travel from their home or place of residence to their place of work in Japan. (The amount shall not include expenses for anyone other than individual Industrial Technology Researchers.)
- 7. Screening of Successful Applicants

Successful applicants will be selected by NEDO's internal committee comprised of such people as those with knowledge and experience in the field of industrial technology.

8. How to Apply

Those who wish to apply are requested to send NEDO an Application for an Industrial Technology Researcher Position in FY1996 with necessary information filled in conforming to Format 1 attached hereto together with the documents listed below.

- (1) Curriculum vitae (There is no particular requirement for the format. The document should be typed and signed by the applicant.)
- (2) Copy of diploma (only of the last educational institution)
- (3) Copy of certificate of doctorate degree
- (4) List of research publications (papers and oral presentations) (See Attachment 2)
- (5) Copies of two or three representative research papers (Excluding doctorate thesis)
- 9. Deadline for Submitting Applications

All applications should be forwarded to the person indicated below and arrive at NEDO no later than December 1, 1995.

Shunji Kubota

Research and Development Division

Industrial Technology Department

New Energy and Industrial Technology Development Organization

3-1-1, Higashi-ikebukuro, Toshima-ku, Tokyo, 107 Japan

Telefax: 03-3981-1536

10. Inquiries

For inquiries regarding this program, please contact either of the following persons at NEDO by telefax:

Shunji Kubota

Research and Development Division Industrial Technology Department

Telefax: 03-3981-1536 Masamichi Yamamoto

Policy Planning and Coordination Division

Planning Division Telefax: 03-3981-1059

^{*}The information given above is based on the assumption that approval will be obtained from the national budget. Please note, therefore, that the information is subject to change depending on the situation related to the budget approval.

GLOBAL CAREER OPPORTUNITIES



(Format 1)

Application for an Industrial Technology Researcher Position in FY1996

Date:

To: Mr. Hachio Iwasaki New Energy and Industrial Technology

Development Organization

Name and address of applicant:

Regarding the subj	ject shown above, I hereby wish to	apply for a position as followed	Signature ows:		
Name of applica	nt:				
Date of birth:		(Age:)	······································	Male/female	
Nationality:					
Home address:					
Tel. or f	ax no.				
Office address:					
Tel. or f	ax no.				
Name of project	the applicant wishes to participate	in:			
Academic backg Month, year Month, year Month, year	round:				
From (Month,	eer: year) to (Month, year) year) to (Month, year) year) to (Month, year)				
Qualifications:					
From (Month,	: year) to (Month, year) research on year) to (Month, year) research on year) to (Month, year) research on				
Awards: Month, year Month, year	Received XXX Prize (for resear	ch on)			
Format 2)		list of Resea	ch Presentations/Publications		
				(Name of applicant	
Date	Classification	Title	Medium	Name(s) of co-authors	Remarks
 In the or The na 		her ''Written'' or ''Oral'' sh d be written in the same o	rder as given in the papers concerr	ned. c society, a business magazine or ot	her media, respectively

Affiliation: Tel. or fax no.:

- This document shall be prepared using Japan Industrial Standard (JIS) A4 paper (length: $29.7 \text{ cm} \times \text{width}$: 21 cm) or letter size paper. The application may be prepared on more than one page to cover all necessary items. (Note) 1.

 - The application may be prepared on more than one page to cover all necessary items.
 The reference person shall be a person with knowledge about such issues as the contents of the applicant's research or achievements.

"Projects for Which Industrial Technology Researchers Will Be Enlisted."

1. Marine Biotechnology (Fine Chemicals from Marine Organisms and Tropical Bioresources)

The goal of this R&D project is to establish technology for the production of various fine chemicals by promoting the use of unexplored marine and tropical organisms and by developing new basic relating biotechnologies.

2. Ultimate Manipulation of Atoms and Molecules

In combination with the mechanical probe technique and beam technique, the new technology allows the identification, observation, measurement and manipulation of atoms and molecules on surface of various matter, organic molecules such as DNA, and atom assembles in free space. R&D of simulation technology will also be pursued to exactly predict atomic and molecular processes and their properties on purely theoretical basis.

Material properties and functions are closely related to the type and structure of the constituent elements. The microstructure of ceramic materials is composed of many kinds of structural elements such as chemical bonding, crystalline grains, fibers, and layers. These elements have different sizes and morphologies (shape, configuration, distribution, etc.), and their size can range from the atomic-molecular scale through the nano-scale (1/1,000,000 mm), micro-scale (1/1,000 mm) to the macro-scale.

4. International Clean Energy Network Using Hydrogen Conversion

International Clean Energy Network Using Hydrogen Conversion System (World Energy Network, WE-NET) is a large scale project which will provide a comprehensive solution to the global dilemma of producing and utilizing energy while simultaneously preserving the environment. The WE-NET project will construct a clean energy network on a worldwide scale, where hydrogen will be produced by employing various kinds of renewable energies such as hydropower, solar, geothermal and wind power in areas blessed with those energies. The produced hydrogen will then be transported to and used in high energy consumption regions.

5. Broad Area Energy Utilization Network System (Eco-Energy City)

The Eco-Energy City Project is a multi-technology initiative which aims at promoting the development of innovative technologies necessary for constructing broad-area energy networks. Echo-Energy Cities will have low energy demand (energy conservation) and little negative effect on the environment. In order to promote the Eco-Energy City Project a wide range of innovative elemental technologies such as waste heat recovery and energy conversion technologies, energy transportation technologies, energy storage technologies, heat utilization technologies, environmental protection technologies, system technologies and etc, have being developed from FY1993.



RCLEME

Cooperative Research Centre for Landscape Evolution & Mineral Exploration

The Cooperative Research Centre for Landscape Evolution and Mineral Exploration (CRC LEME) is an unincorporated joint venture b Australian National University, University of Canberra. Australian Geological Survey Organisation and CSIRO Exploration and Mining.

Established on 1 July 1995, CRC LEME's vision is the discovery of concealed world-class ore deposits through knowledge of Australian landscape evolution.

The broad mission of CRC LEME is to develop an enhanced understanding of the three-dimensional Australian landscape in terms of its geomorphology, regolith geology, weathering diagenesis and geochemistry, and translate this understanding into vastly improved methods for finding world-class mineral deposits, and into the training of geoscientists.

WITHIN THIS BROAD MISSION THERE ARE A NUMBER OF OBJECTIVES:

- To establish the spatial relationships between regolith, landforms, and bedrock
- To establish uniform terminology
- To understand the relationships between weathering processes and evolutionary stages of regolith development
- To develop appropriate exploration procedures for different landscape
- To ensure the effective transfer of knowledge to the exploration industry, academia and the wider community of interested professionals.

CRC LEME HAS THE FOLLOWING PROGRAMS

- Regolith and landscapes of the Australian Shield
- Regolith and landscapes of the Tasman Fold Belt Regolith and landscapes of the Australian sedimentary basins
- 4 Synthesis of Australian regolith-landscape evolution

Education and Applications are important activities of CRC LEME.

To undertake the work of CRC LEME the following position is now available at the Australian Geological Survey Organisation.

Program Leader

(Principal Research Scientist) A\$66,472 - A\$74,884

CRC LEME is seeking to appoint a highly motivated Geoscientist to work in Program 3, Regolith and Landscapes of Australian Sedimentary Basins. The person we appoint will have a PhD or expertise in the broad area of regolith studies and familiarity with at least some of the following:

- geomorphology
- supergene ore deposits
- regolith geochemistry
 terrestrial sedimentology
- surficial geology

Experience in mapping regolith, landforms or soils would also be an advantage. The appointee will have a commitment to mineral exploration. We will also be looking for experience in project management.

The position will be based at AGSO in Canberra with regular travel to Sydney and occasional travel throughout Australia. The job will involve leadership of Program 3, the development and leadership of research projects within the Program, and liaison with industry representatives. The appointee will lead a team of scientists and professionals from government, universities and industry. He/she will be expected to make a contribution to the development of research directions in the CRC LEME.

The appointment will be permanent, subject to normal probationary conditions. Australian Government superannuation is available.

Further information regarding this position is available from Dr Colin Pain, AGSO, telephone 61 6 249 9469, or Dr Raymond Smith, Director, CRC LEME, telephone 61 9 387 0272.

Copies of the Duty Statement and Selection Criteria are available from the receptionist on telephone 61 6 249 9808.

Please send your application to the Personnel Manager, AGSO, Box 378 Canberra ACT 2601 AUSTRALIA. Applications should be marked "Position: PRS/1999" and be received by close of business on Friday 1 December

AGSO is an equal opportunity employer.



ORGANISATION



BURNIE

Chair in Dairy Science Department of Agricultural Science

Applications are invited for appointment to the position of Professor of Dairy Science within the Department of Agricultural Science at the University of Tasmania. This position will be based at the University's North-West Campus in Burnie and the initial appointment will be for a period of 5 years.

The successful applicant will have a distinguished international research reputation in animal nutrition aspects of dairy research. Applicants with research interests in the area of pasture-based ruminant nutrition are particularly encouraged to apply for

As a staff member of the Department of Agricultural Science, the appointee will function as the Director of the University's Cuthbertson Research Laboratories and will be responsible for developing and leading the University's research, education and postgraduate programs in dairy science. The appointee will join dairy researchers and technical support staff of the Tasmanian Institute of Agricultural Research (TIAR), a multi disciplinary team of researchers located within the North-West Centre. This research group will be responsible for delivering industry prioritised research to support the rapidly expanding dairy industry in Tasmania, in accordance with research strategies endorsed by the Board of the TIAR. Resources to support this research will be provided by the University, the Department of Primary Industry and Fisheries (DPIF), the Dairy Research and Development Corporation and industry,

Facilities at Burnie include the recently completed Cuthbertson Research Laboratories, the DPIF Elliott Research Station and the TAFE/University Farm.

The appointee will be expected to contribute to all academic activities of the University and the further development of collaborations between the University, DPIF, TAFE and industry in all areas of dairy science education, research and training,

Further details concerning the post, the appointment criteria and general information about the University are available from the Secretary, Personnel Services, telephone 61-03-24 3537, facsimile 61-03-24 3437. Details on the academic programs within the Department of Agricultural Science and the current and planned collaboration with the TIAR, TAFE and industry, are available from Professor RJ Clark, Head of Department, Agricultural Science, University of Tasmania, Hobart, Tasmania 7001, Australia, telephone 61-02-20 2620, fax 61-02-20 2642, email Rob.Clark@agsci.utas.edu.au.

The present professorial salary is \$AU80,176 pa plus superannuation. With the consent of the University, academic staff may also undertake consultative work.

Applications, quoting reference number BA 125/95 and including the names of three referees, should give particular attention to the selection criteria and reach the Director of Personnel Services, University of Tasmania, PO Box 1214, Launceston, Tasmania 7250, Australia by 15 November 1995.

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SINGLE QUANTUM
DOT Project

Kato CYTOPROTEIN NETWORK Project

Doi BIOASYMMETRY Project

Mikoshiba CALCIOSIGNAL NET Project

Information Qualifications Applications

Deadline: 1 February 1996

The Research Development Corporation of Japan, a statutory agency of the Japanese Government, invites applications for its new ERATO projects listed below from young scientists interested in recognized, well-funded, multidisciplinary research. ERATO projects operate for five-year terms and are independent from the Project Directors' home institutions.

Fields: SEMICONDUCTOR OPTICAL PHYSICS, LASER SPECTROSCOPY, OPTOELECTRONICS, SURFACE SCIENCE, MATERIALS SCIENCE, CHEMISTRY Research: Optical properties of semiconductor quantum dots, laser spectroscopy of a single quantum dot, ultrafast carrier dynamics, fabrication, theoretical studies Director: Dr. Yasuaki Masumoto, University of Tsukuba

Fields: MOLECULAR GENETICS, BIOCHEMISTRY, PROTEIN CHEMISTRY AND PHYSICS. CELL BIOLOGY

Research: Systems approach to the proteins of the intracellular network using full-length cDNA libraries and related tools

Director: Dr. Seishi Kato, Sagami Chemical Research Center

Fields: THEORETICAL BIOLOGY AND GENETICS, MOLECULAR GENETICS, EXPERIMENTAL EVOLUTION. DEVELOPMENTAL BIOLOGY

Research: Asymmetric replication of DNA and its role in cell differentiation and tissue

development

Director: Dr. Hirofumi Doi, Fujitsu Laboratories

Fields: BIOCHEMISTRY, CELL BIOLOGY, ELECTROPHYSIOLOGY Research: The calcium-inositol trisphosphate signal pathways and their relation to

functional molecules and membrane dynamics, calcium ion dynamics and information control, membrane-cytoskeletal associtations, protein targeting

Director: Professor Katsuhiko Mikoshiba, The University of Tokyo and the Institute

for Physical and Chemical Research (RIKEN)

The 1995 ERATO GUIDE FOR PROSPECTIVE RESEARCHERS is available on the Internet (http://www.jrdc.go.jp/ERATO/NewPositions/) or from the ERATO Overseas Representative. Applicants must hold a Ph.D. or equivalent degree with less than 5 years of postdoctoral experience, be willing to stay at least one year, and be fluent in English or Japanese. Applications must include 1) a letter describing background and interests (important!), 2) curriculum vitae, 3) list of publications, 4) copies of representative publications, and 5) names and addresses of references. Send applications by post only, not by electronic mail.

Send Applications To

ERATO Overseas Representative, 950 Conestoga Road, Rosemont, Pennsylvania 19010-1347 USA Voice: +1-610-527-4538, Fax: +1-610-527-2041, Internet: engel@jrdc.go.jp

European Science Education

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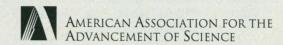
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		Blue and White Mug†	\$12.50	\$10.00		
31)		Navy & Natural Cap	\$13.50	\$10.80		THE STATE OF
		Gold-toned Lapel pin	\$4.75	\$3.80	The same	
	10	THE PROPERTY OF STREET			Subtotal	
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THE CHINESE UNIVERSITY OF HONG KONG

Department of Biochemistry invites applications for:-Lecturer (Human Genetics/Oncology) (carrying the title of Assistant Professor or Associate Professor, as appropriate) (Ref. 95/115(665)/2)

Candidates should have a PhD degree and post-doctoral experience in (i) human genetics, with substantial research emphasis on the genes responsible for inherited and somatic diseases or (ii) cancer research, particularly as it relates to the interaction among drugs, radiation and growth factors in suppressing tumour growth. The successful applicant is expected to develop externally funded research programmes and participate in graduate training and the instruction of undergraduate science and medical students. The appointee will be provided with laboratory space and startup funds in a well appointed Department which offers tissue/cell culture facilities and analytical equipment including automated DNA sequencer, DNA synthesizer, flow cytometer, confocal microscope, mass spectrometer as well as opportunities for collaborative work. The specific area of research is open but demonstrable expertise in genome mapping and gene knock-out which can complement the Department's existing research interests will be decided advantages. English and/or Chinese are used in teaching and administration at the University.

Annual Salary and Fringe Benefits

HK\$454,200 - 758,700 by 10 increments (approx. exchange rate in September 1995: £1 = HK\$12.2) Starting salary will be commensurate with qualifications and experi-

Benefits include leave with full-pay, medical and dental care, education allowance for children, housing benefit for eligible appointee (with appointee contributing 7.5% of salary towards the provision of housing). Appointment may be made either on regular or fixed term contract. Under regular contract, retirement benefits are provided by the University. Fixed term contract also carries where appropriate a contract-end gratuity (15% of basic salary).

Application Procedure:

Send full resume in duplicate, and names and addresses of three referees, with copies of academic credentials (in duplicate) and recent publications, to the Personnel Office, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong (Fax: (852)2603 6852) before **December 8, 1995.** Please quote the reference no. and mark "Recruitment" on cover.

The United Arab Emirates University Faculty of Science Department of Biology FACULTY POSITIONS

The Department of Biology at the UAE University invites applications for a faculty position in the following areas:

- 1. Plant Physiology (Desert Ecophysiology)
- 2. Developmental Biology
- 3. Recombinant DNA Biotechnology
- 4. Human/Animal Physiology (Special consideration is given to Cardiovascular Physiology
- 5. Comparative Anatomy
- 6. Embryology (Animal Tissue Culture)

Candidates must have a Ph.D. and demonstrate interest and potential for excellence in both teaching and research. Excellent command of Arabic and English languages is required. Applications should be received prior to December 15, 1995. Send resume with three references and letter of application to: Secretary General, The UAE University, P.O. Box: 15551, Al Ain, Arab Emirates, Fax #(971-3)-645277.





The Institut fur Pflanzengenetik und Kulturpflanzenforschung (IPK) Gatersleben and the Martin-Luther-Universität Halle-Wittenberg invites applications for the position of

Head of the IPK Gatersleben Genebank

(Bes.Gr. C4)

Responsibilities include teaching in the field of Biology and Genetics of Plant Genetic resources at the University in Halle.

The IPK in Gatersleben is a research centre with over 400 employees. It is funded as a Blue List institute by the federal state of Sachsen-Anhalt and the Federal Republic of Germany.

The responsibilities of the head of the genebank will include further development of the collections, their characterization and evaluation within the framework of expanding cooperations, the improvement of information systems and the increasing use of the collections in co-operative research with other departments of the IPK deploying up-to-date methods and technologies. The successful candidate will support the Federal Government of Germany in the field of plant genetic resources in national and international committees.

We are looking for an internationally recognized scientist with experience in leading interdisciplinary research groups.

The appointee will become a member of the board of directors of the IPK.

The IPK promotes equal opportunities and women are particularly encouraged to apply. Please send a curriculum vitae, a list of publications with up to 10 reprints and names and addresses of three referees within six weeks to:

Dekan des Fachberelches Biologie der Martin-Luther-Universität Halle-Wittenberg Domplatz 4, D-06108 Halle/Germany



UNIVERSITY COLLEGE LONDON

Department of Human Communication Science

Chair of Communication Disorders

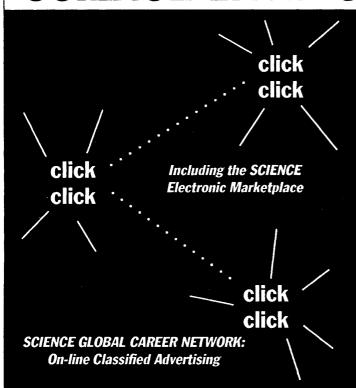
UCL intends to make an appointment to a newly established Chair of Communication Disorders. The Department of Human Communication Science is a new multidisciplinary department within the Faculty of Life Sciences, created by the recent transfer to UCL of the National Hospital's College of Speech Sciences. It is the largest and among the most research-oriented of its kind in the UK. The Department already enjoys close teaching and research links with other departments within UCL, and also with the Institute of Neurology/National Hospital for Neurology and Neurosurgery. There are excellent opportunities for clinical research.

We are seeking an established scholar with an international profile, who will strengthen the research ethos of the new Department, and who has a commitment to research into any aspect of communication disorders in children or adults. The main focus of the post will be on research and postgraduate teaching, with minimal administrative duties.

Further particulars may be obtained from the Head of Department, Dr Bill Wells, Chandler House, Wakefield Street, London WCIN 1PG, UK. Tel 0,17 837 0113. Fax 0171 713 0861. E-mail bill.wells@ucl.ac.uk. Applications (ten copies from UK candidates, one copy from overseas candidates) including a curriculum vitae and the names and addresses of three referees (including at least one overseas referee) should be sent to The Provost, University College London, Gower Street, London WCIE 6BT, to arrive by 1st December 1995.

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Issue date: 1 December

Space Reservation Deadline: 10 November

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Cancer Epidemiologist

UTAH CANCER REGISTRY

he University of Utah and the Huntsman Cancer Institute invite applications for the Director of the Utah Cancer Registry. The Huntsman Cancer Institute is a new and rapidly expanding center of cancer research at the University of Utah. The Utah Cancer Registry plays a major role in facilitating cancer research activities of Huntsman Cancer Institute members and other cancer researchers in the intermountain area. The Utah Cancer Registry is one of the oldest cancer registries in the United States and has been part of the Surveillance Epidemiology and End Result (SEER) Program sponsored by the National Cancer Institute since 1973. The Director of the Utah Cancer Registry will assume programmatic and administrative responsibilities for the cancer registry and will provide leadership in developing and coordinating registry policies and procedures.

Candidates should have an M.D. with training in epidemiology or a doctoral degree in epidemiology or related scientific discipline and must qualify for an appointment at the Associate Professor level. The successful candidate must have a proven record of excelence in cancer research and management of research projects as demonstrated by cancer-related publications and ability to obtain research funding. We invite applications from individuals who understand issues related to gathering complex medical data and are able to communicate effectively with a wide variety of individuals within the scientific, medical, and lay communities. It is expected that the successful candidate will continue to develop a cancer-related research program within the Huntsman Cancer Institute.

To apply for this position, send a cover letter, a current CV, and names of individuals whom we may contact as a reference by February 29, 1996. Send applications to Marty Slattery, Ph.D., M.P.H., Department of Oncological Sciences/Division of Public Health Sciences, Room 5C334 SOM, University of Utah, Salt Lake City, Utah 84132. Additional information can be obtained by contacting Dr. Slattery at marty@possum.med.utah.edu.



HUNTSMAN

The University is an Equal Opportunity/Affirmative Action employer. Women, minority and international candidates are encouraged to apply.

AT THE UNIVERSITY OF UTAH



ASSISTANT/ASSOCIATE PROFESSOR Biochemistry/Molecular Biology of Cancer

The Department of Biochemistry and Molecular Biology and Center of Excellence in Cancer Treatment, Research and Education (the Cancer Center) at the Louisiana State University Medical Center invite applications for a tenure-track faculty position. The Department and Center currently have strengths in prokaryotic and eukaryotic genetics, transcription and chromatin structure, translation and cell growth control, protein and biophysical chemistry, and signal transduction. Applicants with interests in the molecular biology of cancer research are particularly encouraged to apply. Applicants should have a doctoral degree, post-doctoral research experience and a commitment to excellence in teaching and research. The successful applicant should develop a strong, extramurally funded research program and contribute to the teaching of graduate and medical students. The Department and Center will assist with technical support and start-up funds. Send a curriculum vitae, statement of current and future research directions, and names of three references to: Robert E. Rhoads, Ph.D., Professor and Head, Department of Biochemistry and Molecular Biology, LSU Medical Center, 1501 Kings Highway, Shreveport, LA 71130-3932, U.S.A. An equal opportunity employer.

MEETINGS

Optical Imaging of Gene Expression and Signaling in Living Cells (CSH) March 15 - 17, 1996

Conference Chairman: Steve Kay, University of Virginia
Keynote Address:

Roger Tsien, University of California, San Diego
"Imaging Proteins and Gene Expression in Living Cells:
GFP, beta-Lactamase, and Beyond"

Advanced Imaging Technology and Reporter Measurement

Masafumi Oshiro, Hamamatsu Photonics USA Ted Salmon, University of North Carolina Scott Fraser, California Institute of Technology Keith Wood, Promega Corporation

Luciferase Applications

Jeremy Tavare, University of Bristol, U.K.
Stephen Frawley, Medical University of South Carolina
Andrew Millar, University of Warwick, U.K.
Lionel Jaffe, Woods Hole Marine Biological Laboratory

Applications of Green Fluorescent Protein and its Derivatives

Tulle Hazelrigg, Columbia University Jim Haseloff, Medical Research Council, U.K. Pamela Silver, Harvard Medical School

Abstracts may be submitted for poster presentation. The abstract deadline is January 15, 1996. Registration fee, including all meals and accommodation: Students \$295, all others \$385

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POSITION ANNOUNCEMENT

RANK AND TITLE: Professor and Head, Department of Animal Sciences, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign

DEPARTMENTAL DESCRIPTION:

The Department of Animal Sciences is administered by a Head, and includes 44 faculty involved in research, teaching and extension activities. Complete curricula are offered to 400 undergraduate majors and 100 graduate students in M.S. and Ph.D. programs in various specializations.

QUALIFICATIONS:

Candidate must hold a Ph.D. in one discipline of the animal sciences, be internationally recognized for contributions in research, resident and/or extension education, and be tenurable at the level of Professor. Administrative experience and familiarity with the land-grant system are desirable. The candidate should have strong communication skills, the ability to work effectively with faculty, students, staff, administrators, and industry clientele, and demonstrated ability in attracting extramural funding.

SALARY: Competitive and commensurate with experience.

NOMINATIONS AND APPLICATIONS:

Nominations/Applications must be received by December 15, 1995 to ensure full consideration. Qualified women and minority candidates are encouraged to apply. Applications, including a statement of interest in headship, resume, and names, addresses and phone numbers of three references should be sent to:

Search Committee for Head, Department of Animal Sciences c/o D.L. Chicoine Interim Dean

College of Agricultural, Consumer and Environmental Sciences 101 Mumford Hall/1301 West Gregory Drive Urbana, IL 61801

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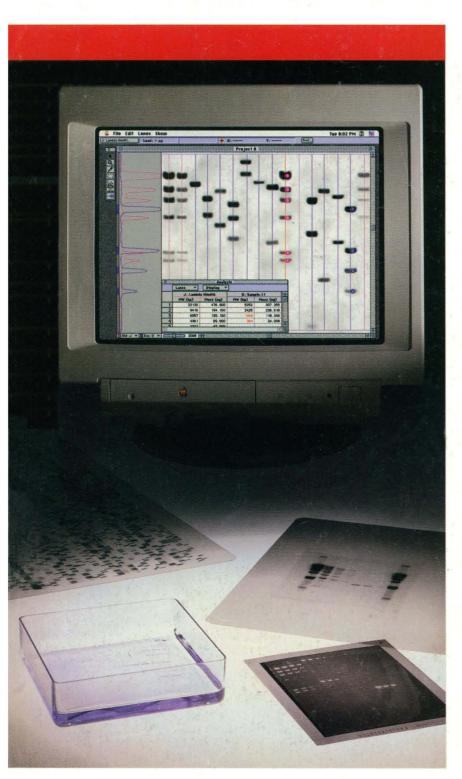
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