

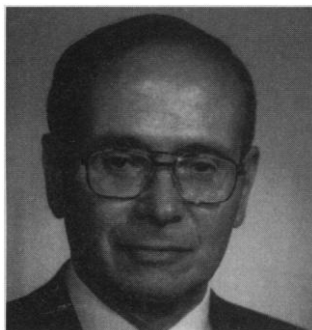
# See you in Baltimore at AMSIE'96

February 8-13 • Baltimore Convention Center

PLENARY

## Lectures

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



Frank Press

THURSDAY 6:00PM-8:00PM

### **Allocating Federal Funds for Research**

Frank Press, Carnegie Inst of  
Washington

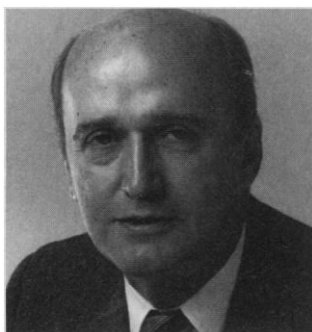
John H. Gibbons, Assistant to the  
President of the U.S. for Sci and  
Tech



John H. Gibbons

Discussant Panel  
Joe Palca, Natl Pub Radio  
**Moderator**

Donald N. Langenberg, Univ of  
Maryland System



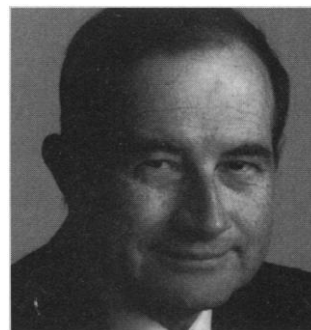
Donald N. Langenberg

Robert Lee Hotz, Los Angeles  
Times

FRIDAY 6:30PM-7:30PM

### **Keynote Lecture**

Neal Lane, Natl Sci Foundation  
**Science and the American  
Dream**



Neal Lane

SATURDAY 6:30PM-7:30PM

### **President's Lecture**

Rita R. Colwell, Univ of Maryland

SUNDAY 6:30PM-7:30PM

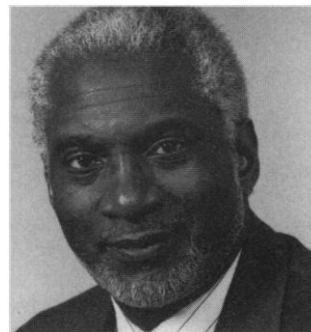
Jacqueline Barton, Cal Inst of  
Tech



Rita R. Colwell

MONDAY 6:30PM-7:30PM

David Satcher, Ctrs for Disease  
Control and Prevention  
**Towards A Global Strategy for  
Emerging Infections**



David Satcher

AMSIE '96

# Daily Time Table

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

TRACK	FRIDAY, 9TH	SATURDAY, 10TH	SUNDAY, 11TH	MONDAY, 12TH	TUESDAY, 13TH
<b>Assessing and Managing Risk Hyatt</b>	<b>AM</b> *Prudent Practices in Laboratory Handling and Disposal of Chemicals <b>PM</b> *Laboratory Research and Regulations: What Works? What Doesn't?	<b>AM</b> Innovative Chemical Separations and the Clean-up of National Nuclear Sites <b>PM</b> Siting Hazardous Facilities: Views on Fair Process and Outcome	<b>AM</b> Risk Assessment: The New Panacea; Regulatory Morass or Just a Tool? <b>PM</b> Science of Decision Making in a Complex World	<b>AM</b> Social Learning in the Management of Global Environmental Risks <b>PM</b> Assessing Health and Environmental Risks from Long-term Radiation Contamination in Chelyabinsk, Russia	<b>AM</b> *Biosafety: Issues of Risk and Responsibility in Biotechnology
<b>Biological Diversity Conv Ctr Hyatt Stouffer</b>	<b>AM</b> The Science of Biodiversity	<b>PM</b> The Ethics of Human Genetic Enhancement	<b>AM</b> Cultural Diversity in Psychological Structure and Functioning <b>AM</b> Building Evolutionary Trees: Evidence and Analysis <b>AM/PM</b> Coral Reefs: Global Change and Biodiversity Loss <b>PM</b> Diversity of Human Physiological Adaptability	<b>AM/PM</b> Heterochrony: Merging Evolutionary Perspectives in Paleanthropology, Paleontology, and Biology <b>AM/PM</b> Utilizing Africa's Genetic Affluence through Natural Products Research and Development	<b>AM</b> *The Microbial World: Foundation of the Biosphere <b>AM</b> Ethnogeriatrics: Biodiversity of Disease and Death Among Elderly People of Color <b>PM</b> 2:15PM-5:30 PM <b>PM</b> *Microbial Diversity: The Unseen Treasure
<b>Educating for the Future Stouffer</b>	<b>AM</b> Assessing Progress: Lessons Learned from Some Informal Science Education Programs <b>AM</b> Quantitative Literacy and Science Education <b>PM</b> Comprehensive School Health Programs: Promoting Public Health Through K-12 Education <b>PM</b> The National Science Foundation and Urban Science Education	<b>AM</b> From Curiosity to Science Through Linguistic Inquiry <b>AM</b> Science Literacy and Undergraduate Education <b>PM</b> Reforming Elementary Science Education in Urban Districts <b>PM</b> The Textbook of the Future	<b>AM</b> Assessing Systemic Reform from National Perspectives to Student Outcomes <b>AM</b> Bio-Resource Education: Giving Meaning to the Sciences of Life <b>PM</b> K-12 Math and Science Education: Is Change Really Taking Place? <b>PM</b> What Works: Successful University-based Outreach Programs	<b>AM</b> The Federal Role in Education: Effects of Changing Attitudes <b>AM/PM</b> Pseudoscience, Biology, and the Education of African American Students <b>PM</b> 2:30 PM - 4:00 PM <b>PM</b> Using Problem-based Learning to Bolster Achievement in Science for High School Students <b>PM</b> 4:00 PM - 5:30 PM <b>PM</b> Problem-based Learning in Undergraduate Science	<b>AM</b> "School Crossings" on the Information Superhighway <b>PM</b> Building Environmental Science Curricula for Youth and Undergraduates
<b>Environment and Science on the Chesapeake Hyatt</b>	<b>AM</b> The Middle Atlantic Environmental and Ecological Systems: Strategies for Sustainable Development		<b>PM</b> Preservation of Farmland and Open Space in the Northeast	<b>AM</b> Our Lancaster County (PA) Neighbors: The Old Order Amish <b>PM</b> *Biotechnology in Maryland <b>PM</b> The Restoration of the Chesapeake: A National Paradigm	
<b>Environment and Sustainability Conv Ctr Hyatt</b>	<b>AM</b> How Many People Can the Earth Support? <b>PM</b> Consumption and Population Growth: Twin Challenges to Sustainable Development	<b>AM</b> International Perspectives on Population, Consumption, and the Environment: Science and Policy Issues <b>PM</b> Limits to Agricultural Productivity <b>PM</b> Recovering Tropical Forests: Conservation, Development, and Local Communities	<b>AM/PM</b> The U.S. Environmental and Natural Resource Research Strategy	<b>AM</b> Dredged Material Disposal and Waste Management in the Nearshore Environment <b>PM</b> *Biotechnology and Aquaculture: Finfish Reproduction, Growth, and Development	<b>AM</b> *Engineering Functionality into Foods: Benefits for the Consumer
<b>Examining Global Change Conv Ctr</b>	<b>PM</b> The Open Exchange of Environmental Information	<b>AM/PM</b> Climate Change: The Second Assessment Report of the Intergovernmental Panel on Climate Change	<b>AM</b> Reconfigurations of Floodplain Management Since the Mid-continent Floods <b>AM</b> Remote Sensing of Climate Sensitive Parameters from Space <b>PM</b> Social Scientists Contributions to Remote Sensing	<b>AM</b> Assessing Ecological Implications of Changes in Climate <b>PM</b> Stratospheric Ozone Depletion by Halogens: Recent Achievements and Continuing Challenges	<b>AM</b> Surface Age Dating in Environmental Studies and Reconstruction of Global Change <b>PM</b> Interactions of Karst Geology and Ecology
<b>Industry, Technology, and Engineering Conv Ctr Hyatt</b>	<b>PM</b> Ocean Science and Engineering: Two Cultures Meet in the Ocean	<b>AM</b> Science and Technology in the NAFTA Framework <b>PM</b> High-Performance Work Transformations in Advanced Manufacturing	<b>PM</b> Technology Partnerships Between Industry and DOE Laboratories: How Do Taxpayers Benefit?	<b>AM</b> The Role of the DOE Energy Research Labs in Maintaining a Healthy Basic Science Capability <b>AM/PM</b> *Stimulating the Local Economy With High Tech Jobs: A Status Report	<b>AM/PM</b> New Directions in Industrial Research and Development
<b>Information Age Hyatt Stouffer</b>	<b>AM</b> *Frontier Applications in Computer Methods for Dynamic Systems	<b>AM/PM</b> *Artificial Life in Cyberspace <b>PM</b> National Information Infrastructure: Access and Use at the People and Policy Level	<b>AM</b> Building the Health Information Highway: Prognosis for a Cure <b>PM</b> Health Research and Education: Information for the Next Century	<b>PM</b> *Intelligent Agents: Software Assistants in Finding, Retrieving, and Analyzing Information	<b>AM</b> Cyberscience: Scientific Endeavors on the Internet
<b>Mathematics and the Physical Sciences Conv Ctr Hyatt Stouffer</b>	<b>AM/PM</b> Human Exploration of Space <b>PM</b> Recent Trends in Japanese Science and Technology	<b>AM/PM</b> *Frontiers of the Physical Sciences, 1996 <b>AM</b> The Universe: Views from Space <b>PM</b> *All Eyes on the Universe: Multi-wavelength Astrophysics	<b>AM</b> New Studies of Meteorites <b>AM</b> 9:30 AM - 11:30 AM <b>PM</b> *Mathematics for the Next Century: Knots <b>PM</b> 2:15 PM - 4:15 PM <b>PM</b> *Mathematics for the Next Century: Pattern Formation <b>PM</b> 4:15 PM - 6:15 PM <b>PM</b> *Mathematics for the Next Century: Geometric Arrangements <b>PM</b> The Discovery of Radioactivity: The Birth of Nuclear Physics <b>PM</b> The Search for Extraterrestrial Intelligence	<b>AM</b> *New Directions in Atomic, Molecular, and Optical Physics: Controlling Matter with Light <b>AM</b> Impact of the Global Positioning System (GPS) <b>PM</b> *New Physics in the Baltimore/Washington Area	

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

## 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)

TRACK	FRIDAY, 9TH	SATURDAY, 10TH	SUNDAY, 11TH	MONDAY, 12TH	TUESDAY, 13TH
<b>Neuroscience, Behavior, and Language Conv Ctr Hyatt</b>	<b>AM</b> The Architecture of the Sign in Signed Languages <b>AM</b> *The Developing Brain: Genes, Environment, and Behavior <b>PM</b> *The Brains Behind Human Communication: New Approaches to Research	<b>AM</b> *New Approaches to the Neurobiology of Language <b>PM</b> Sexual Differences in Brain and Behavior <b>PM</b> Language Deterioration or Language Evolution?: The View from Linguistics	<b>AM/PM</b> Neural Network and Symbolic Approaches to Language	<b>AM</b> The Mind's Clocks: Circadian and Interval Timing	<b>AM</b> Limbic System's Mammalian Heritage: Normal/Deviating Emotion, Memory, and Homicidal Action
<b>Policy, Science, and Engineering Conv Ctr Hyatt</b>	<b>AM</b> Young Scientists in Transition: Career Challenges and Science Policy Implications <b>PM</b> *Science on the Editorial Page <b>PM</b> Attacking Science: Science Critics Meet Their Critics	<b>AM</b> Assessing Competitiveness in Research <b>AM</b> Implementation Strategies for "Platform for Action": The U.N. Conference on Women, Beijing	<b>AM</b> Science, Technology, and the States <b>PM</b> *Impacts of the 104th Congress on Science and Technology	<b>AM</b> Societal Returns to Investment in Research: New Directions, New Concerns <b>PM</b> *Communicating with Policy-makers: Strategies for Scientists and Engineers <b>PM</b> Immigration of Scientists and Engineers: Social and Economic Impacts	<b>AM</b> *Science Careers in a Changing Economy <b>AM</b> The Critical Appraisal of Science and Technology Policy Analysis <b>PM</b> Innovative Collaboration: Student-Faculty Partnerships Explore Curriculum Development
<b>Practice of Science Stouffer</b>	<b>AM</b> Analytic Approaches to Fairness <b>PM</b> Advances in Peer Review Research	<b>AM/PM</b> Not Just Mentors: Educating for the Responsible Conduct of Research	<b>AM</b> Research Ethics: We're All Accountable, So Who's Accounting? <b>PM</b> Ethical Standards for Science and Engineering		
<b>Public Health and Medicine Conv Ctr Hyatt</b>	<b>AM</b> Entertaining, Educational, or Alarming Messages? Public Health Issues and Popular Perceptions <b>AM</b> *Medicines Discovery in the 21st Century <b>PM</b> Our Changing Health Care System and the Future of the Academic Medical Center <b>PM</b> *Mathematical Problems in the Diagnosis and Treatment of Disease	<b>AM</b> *Scope of the AIDS Epidemic in the United States <b>PM</b> *AIDS: Epidemiology, Biology, and Prevention of HIV Infection <b>PM</b> *Molecular Medicine Enters the Mouth	<b>AM</b> 1995: A Year of Dramatic Shifts in Health Data Policy <b>AM/PM</b> *Replacement Parts and Implantations for People <b>AM</b> Religious, Social, and Environment Factors that Influence Disease States <b>PM</b> Life Long Health: Beyond the Medical Model	<b>AM/PM</b> *Global Change and Emerging Infectious Diseases	<b>AM/PM</b> *Challenges in the Development of Medications for Opiate and Cocaine Addictions <b>PM</b> Alzheimer's Disease: Prospects for the Future
<b>Science and International Security Conv Ctr Hyatt</b>		<b>PM</b> Ballistic Missile Defense	<b>AM/PM</b> International Arms Control: Lessons from the UNSCOM Experience	<b>AM</b> A Comprehensive Test Ban Treaty: Implications for National Security and Non-Proliferation <b>PM</b> An Assessment of the Nunn-Lugar Cooperative Threat Reduction Program	<b>PM</b> Environmental Refugees: Anticipation, Intervention, Restoration
<b>Science and Society Conv Ctr Hyatt Stouffer</b>	<b>AM</b> Intersection of Environment, Health, Professional Ethics, and Law <b>AM</b> The Sense of Justice: Evolutionary Origins of Moral and Legal Behavior <b>PM</b> Science, Technology, and Disability: 20th Anniversary Reflections <b>PM</b> 2:30PM - 5:00PM Women Nobelists: Their Work, Their Lives, and Their Impact on Science	<b>AM</b> Growing Up American: Dilemmas of the New Second Generation <b>AM/PM</b> Uncertainty, Science, and the Media <b>PM</b> Women and Violence: Victims, Offenders, and Prevention Policies	<b>AM</b> Major Mental Disorder and Crime: New Data, New Policies? <b>PM</b> Histories of Psychiatry and Neuroscience <b>PM</b> Are Women Succeeding in Science?	<b>AM</b> The General Public's View about Science and Reasoning <b>PM</b> Life After 65: How Science Can Promote Successful Aging	<b>AM/PM</b> Whither Research-Intensive Universities?
<b>Science for All Hyatt Stouffer</b>	<b>AM/PM</b> Science for the Naked Eye, XXIII <b>PM</b> Making the Past Alive through Ceramics: Physical Sciences Meet Anthropology	<b>AM</b> 9:30 AM - 11:30 AM Youth Meets the Masters <b>PM</b> Science Is Fun!	<b>AM</b> Contributions of Science to Human Rights Truth Commissions	<b>PM</b> Mysteries of the American Landscape	<b>AM/PM</b> Science Museums: Past, Present, and Future

All AM sessions: 9:30 AM - 12:30 PM; All PM sessions: 2:30 PM - 5:30 PM

<b>SCIENCE INNOVATION Conv Ctr</b>	<b>AM/PM</b> Neuroscience and Technology: Non-Invasive Functional Brain Mapping <b>AM/PM</b> Signal Transduction <b>AM/PM</b> DNA Computing <b>PM</b> Quantum Computation	<b>AM</b> Neuroscience and Technology: New Views of Brain Function--Visual Memory <b>AM</b> Structural and Molecular Basis of Cancer Vaccines <b>PM</b> Chromosomal Instability as a Causal Factor in Cancer <b>PM</b> Structural Biology	<b>AM/PM</b> Genome Studies and Applications <b>PM</b> Cardiovascular Science and Technology: Vascular Biology: Viruses as a Cause of Cardiovascular Disease <b>AM/PM</b> Advances in AIDS Research	<b>AM</b> Cardiovascular Science and Technology: Cardiac MRI <b>AM/PM</b> Reproductive and Developmental Biology <b>AM/PM</b> Advances in AIDS Research <b>PM</b> Cardiovascular Science and Technology: Diseases of the Cytoskeleton and Contractile Apparatus
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All AM sessions: 9:30 AM - 12:30 PM

All PM sessions: 2:30 PM - 5:30 PM

## SEMINARS

**Origins: Thursday, 8th and Friday, 9th, AM/PM Stouffer**  
**Living with the Internet: Thursday, 8th, AM/PM and Friday, 9th, AM Stouffer**

Note: All information as of 12/1/95. Any changes, additions or deletions received after that date will be included in the next printing of this program.

TOPICAL

# Lectures

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

FRIDAY 1:00 PM-2:00 PM

## George Sarton Award Lecture in the History and Philosophy of Science



Jane Maienschein,  
Arizona State Univ  
**Life on the Cutting  
Edge:  
Experimental  
Biology's Century  
of Progress?**

Jocelyn Elders, Arkansas  
Children's Hosp



Daniel S. Goldin,  
NASA  
**Human Future in  
Space**



Alvin M. Liberman,  
Haskins Labs  
**Contrasting  
Theories About the  
Biology of Speech**

SATURDAY 1:00PM-2:00PM

Teresa B. Fryberger, U.S. Dept of  
Energy  
**Efficient Chemical Separations:  
A Key Role in DOE Waste Clean-up**



France A. Cordova,  
NASA  
**A Multidisciplinary  
Approach to Space  
Science**



Robert T. Watson,  
U.S. Offc of Sci and  
Tech Pol  
**Balancing Risks  
and Uncertainties**

Alexie Arbatov, Subcommittee on  
Intl Security and Arms Control,  
Russian DUMA  
**The Arms Control Regime in a  
Changing Political, Economic,  
and Strategic Environment:  
Perils and Opportunities**

SUNDAY 11:45AM-12:30PM

## Special Public Lecture



Carl Sagan, Cornell  
Univ  
**The Deamon-  
Haunted World:  
Science as a  
Candle in the Dark**

SUNDAY 1:00PM-2:00PM



D. James Baker, U.S.  
Dept of Commerce  
**Preparing for the  
Future Through  
Science and  
Technology: An  
Agenda for  
Environmental and  
Natural Resources  
Research**

## John P. McGovern Award Lecture in the Behavioral Sciences



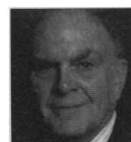
James L. McGaugh,  
Univ of California-  
Irvine  
**Emotion,  
Neuromodulatory  
Systems, and  
Memory Storage**

John H. Conway, Princeton Univ  
**Mathematics**



Shiela Jasanoff,  
Cornell Univ  
**Is Science Socially  
Constructed and  
Can It Still Inform  
Public Policy?**

MONDAY 1:00PM-2:00PM



F. Sherwood  
Rowland, Univ of  
California-Irvine  
**Halocarbons and  
Stratospheric  
Ozone Depletion**

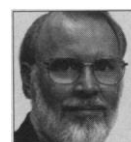


Alison S. Brooks,  
George Washington  
Univ  
**Behavior and  
Morphology in  
Modern Human  
Origins: New  
Perspectives from  
the South**



Yelena Yesha, Univ  
of Maryland-  
Baltimore  
**Challenges in  
Global Electronic  
Commerce**

TUESDAY 1:00PM-2:00PM



C. Wylie Poag, U.S.  
Geological Survey  
**Chesapeake Bay  
Bolide Impact:  
Modern  
Consequences of an  
Ancient Cataclysm**



Alan Leshner, Natl  
Inst on Drug Abuse



Kristin Shrader-  
Frechette, Univ of  
South Florida  
**Risk, Uncertainty  
and Democratizing  
Science Policy**

## SCIENCE INNOVATION TOPICAL LECTURES

FRIDAY 1:30PM-2:15PM



Watt Webb, Cornell  
University  
**Non Linear Laser  
Microscopy**

SATURDAY 8:30AM-9:15AM

Flossie Wong-Staal, Univ of  
California-San Diego

SATURDAY 1:30PM-2:15PM



Suzanne T. Ildstad,  
Univ of Pittsburgh  
**Mixed Chimerism  
to Treat Non-  
Malignant Disease  
States: Enzyme  
Deficiency,  
Hemoglobinopathies,  
Acquired  
Immunodeficiency,  
and Tolerance**

SUNDAY 8:30AM-9:15AM



Robert F. Bonner,  
Natl Inst of Health  
**Optical  
Tomographies:  
Prospects for  
3-Dimensional In  
Vivo Imaging**

SUNDAY 1:30PM-2:15PM



William A.  
Haseltine, Human  
Genome Sciences  
**The Application of  
Genomics to the  
Creation of New  
Pharmaceutical  
Products**

MONDAY 8:30AM-9:15AM



William Bialek, NEC  
Resch Inst  
**From Photons to  
Perception**

MONDAY 1:30PM-2:15PM



Steven M. Block,  
Princeton Univ  
**Studying Biological  
Motors Using  
Optical Tweezers**

# ON-SITE REGISTRATION FORM

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The AAAS Annual Meeting & Science Innovation Exposition\*

February 8-13, 1996

Baltimore, MD

## I. REGISTRANT INFORMATION (Please type or print clearly; allow 40 characters per line for name and institution)

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Institution/Company \_\_\_\_\_

Mailing Address \_\_\_\_\_ City/State/Zip \_\_\_\_\_

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## II. PATRON/SPECIAL NEEDS/SPECIAL RATES VERIFICATION

☐ Check here if AAAS Patron ☐ Check here if special needs due to disability

To qualify for Student or \*Special registration fees, please complete the appropriate line below:

☐ Student: Institution Name: \_\_\_\_\_ Level: \_\_\_\_\_

☐ 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 Teacher, Postdoctorals.)

A. CONFERENCE	AAAS Member	Non-Member
<b>AMSIE '96 Passport:</b> Unlimited access – Full entry to all sessions - General Meeting, Science Innovation, all Seminars; plenary and topical lectures, exhibition hall and workshops.		
Registrant	<input type="checkbox"/> <del>\$245</del> \$220	<input type="checkbox"/> <del>\$295</del> \$270
Special* Registrant	<input type="checkbox"/> \$180	<input type="checkbox"/> \$210
Student* Registrant	<input type="checkbox"/> \$130	<input type="checkbox"/> \$150
<b>General Meeting Symposia:</b> Entry to the General Meeting symposia, plenary and topical lectures, exhibition hall and workshops only.		
Registrant	<input type="checkbox"/> <del>\$205</del> \$180	<input type="checkbox"/> <del>\$255</del> \$230
Special* Registrant	<input type="checkbox"/> \$115	<input type="checkbox"/> \$145
Student* Registrant	<input type="checkbox"/> \$50	<input type="checkbox"/> \$70
<b>Science Innovation Symposia:</b> Entry to the Science Innovation symposia, plenary and topical lectures, exhibition hall and workshops only.		
All Registrants	<input type="checkbox"/> \$155	<input type="checkbox"/> \$210
* Special = Postdoc, retired, and K-12 Teacher		

B. EACH SEMINAR	AAAS Member	Non-Member
Please specify seminar below.		
All Registrants	<input type="checkbox"/> \$155	<input type="checkbox"/> \$210
<input type="checkbox"/> Origins Seminar		
<input type="checkbox"/> Living with the Internet Seminar		

C. ONE DAY ONLY	AAAS Member	Non-Member
Please specify day below.		
All Registrants	<input type="checkbox"/> \$155	<input type="checkbox"/> \$210
<input type="checkbox"/> Thurs <input type="checkbox"/> Fri <input type="checkbox"/> Sat <input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tues		

**D. MEMBERSHIP<sup>2</sup>**  
If you are not a AAAS member, you can join now by checking the appropriate box below – and take advantage of the discounted member registration fees. You'll also get a year's subscription (51 issues) to the journal SCIENCE at the lower 1995 rate.

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Student Member	<input type="checkbox"/> \$50	<input type="checkbox"/> \$110.21	<input type="checkbox"/> \$143
Postdoc Member	<input type="checkbox"/> \$72	<input type="checkbox"/> \$133.75	<input type="checkbox"/> \$165
Retired Member	<input type="checkbox"/> \$53	<input type="checkbox"/> \$113.42	<input type="checkbox"/> \$146

E. OPTIONAL	AAAS Member	Non-Member
Exhibit Only Pass	<input type="checkbox"/> \$25	<input type="checkbox"/> \$30

## IV. PAYMENT

Check appropriate boxes under section III A, B, C or D and write in Advance Fees below.

### A. CONFERENCE FEES:

AMSIE '96 Passport (Unlimited Access).....\$

**Note:** Seminars and Science Innovation are free to AMSIE '96 Passport registrants, but you must indicate below the program(s) you plan to attend:

☐ Origins Seminar ☐ Living with the Internet Seminar ☐ Science Innovation

General Meeting Symposia.....\$

Science Innovation Symposia.....\$

### B. SEMINARS

☐ Origins Seminar.....\$

☐ Living with the Internet Seminar.....\$

**C. ONE DAY ONLY**.....\$

**D. MEMBERSHIP DUES** (if joining now).....\$

### E. OPTION FEES

Exhibit Only Pass.....\$

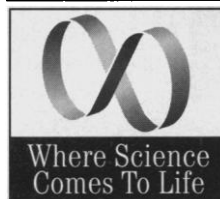
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### Important Notes:

[1] Students, postdocs, K-12 teachers, and retired members must complete the verification information to be accepted at the special registration rates.

[2] Membership dues indicated herein are the 1995 rates. Although dues will increase on January 1, 1996, the 1995 rates are guaranteed through February 8, 1996 for registration of the annual meeting. \$50 of dues plus international postage are allocated to SCIENCE. Please allow up to 4 weeks for receipt of your first issue of SCIENCE. Canadian rates include GST #125488122.

[3] Checks must be in United States currency and must be payable on a United States bank.

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# PRODUCTS & MATERIALS

## Antibodies

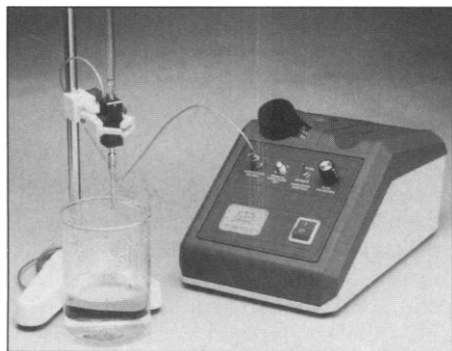
Monoclonal antibody (mAb) HA.11, specific for hemagglutinin tag, is effective in protein immunoblotting, immunoprecipitations, and immunofluorescence applications of tagged proteins. **Berkeley Antibody Co. BAbCO. Circle 136.**

A rabbit polyclonal antibody reacts with neurogranin, one of the most prominent substrates for protein kinase C in the mammalian brain. It is suitable for use in protein immunoblotting, immunoprecipitation, and immunohistochemistry. **Affiniti. Circle 137.**

DAKO-LEA.135 recognizes a cell surface glycoprotein, luminal epithelial antigen, present on the apical plasma membrane of luminal epithelial cells in normal breast. The mAb MOC-31 reacts with an epithelial antigen present on most normal and malignant epithelia. It can be used on formalin-fixed, paraffin-embedded tissue sections. **DAKO. Circle 138.**

## Ultrasonic Spraying System

The Micromist Ultrasonic Spraying System nebulizes liquids into a fine mist that can be evenly deposited onto any surface to form a uniform thin coating. It can be used for spray-coating antibodies, chromophores, and



other diagnostic reagents onto plastic or glass tubes, plates, wells, and test strips. Droplet size ranges from 5 to 120 nm with flow rates of 0.1 to 30 cm<sup>3</sup>/min. Viscosity range is from 0.5

to 200 centipoise. Micromist can be customized for a range of flow rates, patterns, and viscosities for a variety of applications in the biotechnology, chemical, pharmaceutical, medical, food and beverage, and environmental industries. **Misonix. Circle 139.**

## Sequencing Plate Pad

Softpad is a support for expensive glass sequencing plates. Glass plates overhang the 4-cm thick Softpad so they are easy to siliconize, tape, or clamp. Softpad is nonskid and prevents plates from moving. **American Bioanalytical. Circle 140.**

## Statistical Software

SIMSTAT/MVSP is a new bundle of statistical software programs. MVSP is a powerful multivariate analysis program for analyzing data with principal components, principal coordinates, and correspondence analysis as well as cluster analysis. SIMSTAT is a menu-driven statistical program that provides a wide variety of descriptive and comparative statistics as well as flexible data manipulation routines. It contains all the usual types of analyses as well as some that are more difficult to find, such as bootstrap analysis, reliability and sensitivity analysis, and a large number of nonparametric tests. **Kovach Computing Services. Circle 141.**

## More Thin-Wall PCR Plates

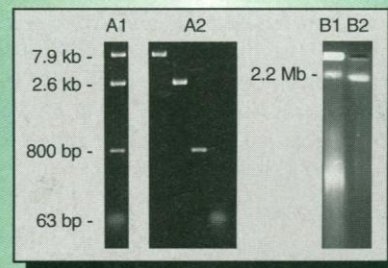
CyclePlate-24 and CyclePlate-48 are new thin-wall plates for polymerase chain reaction (PCR). Designed for processing up to 24 and 48 samples, they are for laboratories that prepare fewer samples per run but still want the handling convenience of the original 96 sample CyclePlate. They are made from rigid polypropylene and have thin-wall construction for fast cycle times. The design of the 0.2-ml reaction chamber allows completely oil-free thermal cycling when used with Strip-Ease caps. All CyclePlate versions fit

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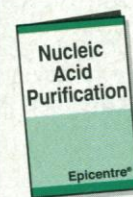
Epicentre's unique GELase™ Agarose Gel-Digesting Preparation offers these advantages in purifying nucleic acids from LMP-agarose gels:

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DNA from 63 bp to 7.9 kb (A1) and 2.2 megabases (B1) was separated by electrophoresis on LMP-agarose, recovered using GELase Preparation, and analyzed by electrophoresis on new LMP-agarose gels (A2 & B2). The DNA was recovered undegraded and in high yield.

(Pulsed-field CHEF gels B1 & B2 courtesy of L. Chen & A. Atherly, Zoology & Genetics, Iowa State Univ., Ames, IA.)



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## Apoptosis Research Reagents

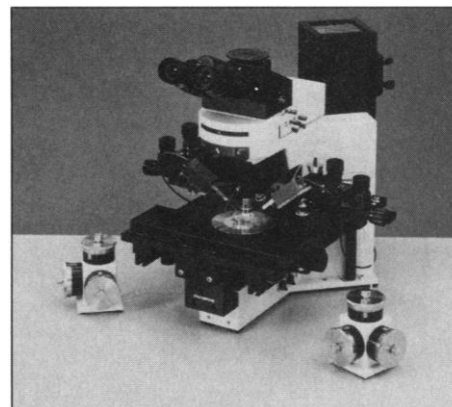
Several peptide inhibitors and fluorogenic substrates are available for measuring the activity of enzymes involved in apoptosis. Interleukin-1 $\beta$ -Converting Enzyme (ICE) inhibitor, Granzyme B inhibitor, and CPP-32/Apopain inhibitor are irreversible, highly specific, and able to penetrate cell membranes. ICE substrate, Granzyme B substrate, and CPP-32/Apopain substrate are both chromogenic and fluorogenic. A Granzyme B Fluorogenic Enzyme Overlay Membrane is also available for visualizing Granzyme B isoenzyme activity patterns following acrylamide or agarose gel electrophoresis. Cowpox viral serpin response modifier A is a potent natural inhibitor of ICE and Granzyme B. **Kamiya Biomedical. Circle 143.**

## Bioseparation Media

Spherilose low-pressure bioseparation media are based on a rigid, crosslinked cellulose matrix that offers exceptional stability and flow characteristics. Compared with traditional agarose gels, Spherilose media provide faster separations and reduced cycle volumes, with corresponding cost and performance advantages in purifying, separating, and preparing proteins, peptides, polynucleotides, and enzymes. There are 27 different combinations of chemistries and particle sizes available for gel filtration, ion exchange, affinity, hydrophobic interaction, and adsorption chromatography. **Iscu. Circle 144.**

## Neuro- and Electrophysiology Microscope

The BX50WI microscope incorporates three major design innovations for superior stability: a bridge-design stage with front and back support, unibody casting comprising the microscope's base and horizontal arm, and a focusing nosepiece that allows the stage to remain fixed and rigid. The nosepiece provides precise focusing with 1- $\mu$ m sensitivity over a 25-mm range. The dual-position nosepiece moves forward and back to switch between two objectives, leaving the entire lateral field available for micromanipulators and other electrophysiology instrumentation. High numerical aperture, water immersion objectives with a 3.3-mm working distance permit an access angle of up to 43°. The user may select from objectives with high ultraviolet transmission to 340 nm for ratio imaging applications, or optimized infrared obser-



vation deep within brain slices using Nomarski differential interference contrast. **Olympus. Circle 145.**

## Literature

*Corning PES Filter Systems* is a brochure on a line designed for rapid vacuum filtration of serum-containing tissue culture media and other aqueous solutions, available in 200 ml, 500 ml, and 1000 ml volumes. **Corning Costar. Circle 146.**

*The Road to Discovery* is a restriction endonuclease wall poster filled with the latest information on sequence recognition, cut sites, isoschizomers, heat inactivation, and the activity of endonucleases in a variety of REact Buffers. **Life Technologies. Circle 147.**

*OptiPrep Applications in Cell and Molecular Biology* is a working manual on an optimum density gradient medium that does not affect the density of particles, nor their resolution in gradients, as do other separation media. **Accurate Chemical and Scientific. Circle 148.**

*PCR Primer: A Laboratory Manual* explores the basic requirements for performing polymerase chain reaction (PCR) and other amplification techniques. It covers issues such as sample preparation, primer design, efficiency, detection of products, and quantification. Protocols for a wide range of PCR and amplification techniques are presented for cloning, sequencing, mutagenesis, library construction and screening, exon trapping, differential display, and expression. **Sigma-Aldrich Techware. Circle 149.**

*Understanding Chemifluorescence* is a full-color guide to a nonisotopic labeling and detection method for proteins and nucleic acids. The guide presents information on the principles of chemifluorescence chemistry, the advantages over other detection methods, and the range of applications. **Molecular Dynamics. Circle 150.**

# SCIENCE

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**MEETINGS, CONFERENCES & SYMPOSIA**  
For meeting, conference and symposium display advertisements, to page 257.

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## POSITIONS OPEN

### COORDINATOR OF DEVELOPMENTAL RESEARCH

The Children's Hospital of Philadelphia

The Division of Pediatric Cardiology in the Department of Pediatrics, University of Pennsylvania School of Medicine is seeking an outstanding senior investigator (M.D. or Ph.D.) at the **ASSOCIATE PROFESSOR/PROFESSOR** level to lead a multidisciplinary research group of physicians and basic scientists at the Joseph Stokes Jr. Research Institute of The Children's Hospital of Philadelphia. The focus of this research should be in the area of development of the mammalian cardiovascular system. The successful candidate will direct the program in Cardiac Development within the Division and Institute as well as be responsible for leading his or her own research. This individual will be responsible for recruitment of additional faculty and coordination and development of existing and new program projects and centers of research. The successful candidate must have extensive research experience and extramural funding, and experience in training young investigators. The expectation will be to develop an extramurally funded research program, train postdoctoral fellows, and participate in the education program of the pediatric cardiology division. Research space will be provided within the newly constructed Abramson Pediatric Research Center. Significant opportunity for collaborations exist with investigators in the Division of Surgery and Cardiovascular Surgery at The Children's Hospital of Philadelphia as well as with investigators at the University of Pennsylvania and the Wistar Institute. Applicants should send a curriculum vitae, research and teaching goals and experience to: **Dr. Victoria L. Vetter, Chief, Division of Pediatric Cardiology, The Children's Hospital of Philadelphia, 34th and Civic Center Boulevard, Philadelphia, PA 19104.** Applications should be received by April 1, 1996. *The Children's Hospital of Philadelphia is an Affirmative Action/Equal Opportunity Employer. Women, minorities, and persons with disabilities are encouraged to apply.*

### MAMMALIAN OR AVIAN PHYSIOLOGIST

Tenure-track, **ASSISTANT PROFESSOR** position anticipated for fall 1996, in Biological Sciences at the University of New Orleans (UNO); Ph.D. required and postdoctoral research experience in physiological adaptations of mammals or birds preferred. The Department is affiliated with the Audubon Institute's Center for Research of Endangered Species providing research opportunities involving threatened and endangered mammals and birds. Initially, duties include developing an upper-level animal physiology laboratory, and later, participating in upper-level physiology courses and Introductory Biology. Our twenty-four Graduate Faculty are expected to seek outside funding and engage in research, direct graduate student research, and teach courses. UNO (approximately 16,000 students) is in the LSU System on a campus overlooking Lake Pontchartrain. A statement of research interests, recent reprints, curriculum vitae, and three letters of recommendation should be sent by February 23, 1996 to: **Dr. Britt Bromberg, Search Committee, Biological Sciences, University of New Orleans, New Orleans, LA 70148. Email: BBBBS@UNO.EDU.** UNO is an Equal Opportunity/Affirmative Action Employer.

### FACULTY POSITION IN RADIATION BIOLOGY AT STANFORD UNIVERSITY

The Division of Radiation Biology of the Department of Radiation Oncology is seeking applicants for a non-tenure line **RESEARCH ASSISTANT PROFESSOR**. We seek applicants with an interest in and a proven research record in the application of molecular biology to the area of DNA repair. The successful applicant will be expected to participate in an existing program in DNA damage and repair following ionizing radiation and eventually to develop his or her own research funding. Other research within the Division with which the successful candidate could collaborate include molecular aspects of cellular stress to hypoxic conditions and exploitation of the low oxygen conditions in solid tumors for therapeutic benefit. Applicants should submit curriculum vitae and names of three references to: **Dr. J. Martin Brown, Director, Division of Radiation Biology, Department of Radiation Oncology, Stanford University School of Medicine, Stanford, CA 94305-5468.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

## POSITIONS OPEN

### BIOLOGY/ENVIRONMENTAL BIOLOGY FACULTY

Governors State University invites applications and nominations for a **TENURE-TRACK FACULTY POSITION** in Biology/Environmental Biology for fall of 1996. Located 35 miles south of downtown Chicago, Governors State University serves over 6,000 students in the Colleges of Arts and Sciences, Business and Public Administration, Education, and Health Professions.

**Description of Position:** Undergraduate teaching includes Animal Diversity (Zoology), Basic Ecology, a natural history course (e.g., Entomology, Plant Systematics, Mammalogy, etc. appropriate to background) and either Comparative Anatomy or Microbiology. Masters-level responsibilities include courses in Natural Areas Ecology, Methods in Ecology, and Special Topics as well as supervision of graduate research/thesis projects.

**Qualifications:** Applicants should be broadly trained in biology, with background in natural areas ecology, including knowledge of historical and current issues of preservation, management, and restoration. Programs are offered at upper-division undergraduate and masters levels. Strong commitment to undergraduate education and scholarly research a must. Completion of Ph.D. preferred, but ABD considered.

**Application and Nomination Procedure:** Review of applications will begin March 15, 1996 and continue until the position is filled. Salary is competitive. Send curriculum vitae, the names, addresses, and telephone numbers of at least three references, transcripts, and other supporting materials to: **Dr. Ed Miller, Biology Coordinator, Division of Science, Governors State University, University Park, IL 60466.** *Governors State University is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITIONS DEVELOPMENTAL BIOLOGY/MAMMALIAN EMBRYOGENESIS University of Missouri-Columbia

The Departments of Veterinary Pathobiology and Animal Sciences are jointly seeking applicants for two **TENURE-TRACK FACULTY** (Assistant or Associate Professor) with research interests in one or more of the following areas: stem cell biology, embryology, immunology, disease resistance, growth factors and cytokines, pregnancy/early development. They should have training in homologous recombination/transgenic animal technology with an emphasis on murine models but with the potential to develop program(s) in large animal species. Teaching responsibilities include participation in graduate and professional student training. Applicants should possess a Ph.D., M.D., or D.V.M. degree(s), and a minimum of two years of postdoctoral experience. Submit application, curriculum vitae, a summary of research interests, and names of four referees to: **Dr. R. Michael Roberts, Chair, Department of Veterinary Pathobiology, 104 Conaway Hall, University of Missouri-Columbia, Columbia, MO 65211.** Applications will be accepted until March 15, 1996; or until position is filled. *The University of Missouri is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minorities.*

### VASCULAR BIOLOGISTS/PHYSIOLOGISTS ASSISTANT PROFESSORS

The Department of Physiology at Jefferson Medical College, Thomas Jefferson University, Philadelphia, Pennsylvania, has two full-time 12-month faculty positions for vascular biologists/physiologists at the **ASSISTANT PROFESSOR** level starting 1 September 1996. Excellent space and working conditions are available. Candidates should have a Ph.D. or M.D. degree and two to three years of relevant postdoctoral experience. Investigators in the area of cell signaling, endothelial cells, atherosclerosis, nitric oxide biology, cell adhesion molecules, neutrophil mediators, or growth factors and cytokine research are preferred. A strong program in endothelial, leukocyte and vascular smooth muscle physiology and pathophysiology already exists. Evidence of independent research and an ability to develop grant applications is important. Funded investigators will be given preference. Applicants should send their curriculum vitae, including a statement of their research interests and experience, and arrange to have three letters of recommendation sent to: **Dr. Allan M. Lefer, Chairman, Department of Physiology, Jefferson Medical College, 1020 Locust Street, Philadelphia, PA 19107-6799.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR IN DEVELOPMENTAL BIOLOGY University of Minnesota Medical School

The Department of Cell Biology and Neuroanatomy invites applications for a **TENURE-TRACK** position from candidates with strong research programs in the field of vertebrate developmental biology/genetics. Excellent modern research space will be available as part of the new Program of Developmental Genetics, headed by **Chris Wylie**, in the Institute of Human Genetics. Candidates must have a Ph.D. degree (or foreign equivalent) and a minimum of two years of postdoctoral experience. They must also have demonstrated the ability to carry out independent, high-quality research, with publications in mainstream journals, and will be expected to develop a strong, extramurally-funded research program. The Program of Developmental Genetics offers excellent opportunities and facilities for collaborative research. This inter-departmental program will contain an eventual faculty of up to eight, with primary appointments in different Medical School departments. A strong emphasis will be placed on the candidate's abilities to interact with other faculty members in this program and in the Department of Cell Biology and Neuroanatomy. Teaching will be expected in one of the professional courses offered by the department to medical and dental students, Human Gross Anatomy, Histology, or Neuroscience, as well as participation in appropriate graduate programs. Salary and start-up funds will be highly competitive. The deadline for receipt of applications will be: March 15, 1996.

Applications should include a current curriculum vitae, statement of research interests and intentions, and names and addresses of three references. Please send to: **Camille Lund, Developmental Biology Search Committee, Department of Cell Biology and Neuroanatomy, University of Minnesota, 4-135 Jackson Hall, 321 Church Street SE, Minneapolis, MN 55455.** *The University of Minnesota is an Equal Opportunity Educator and Employer.*

### FACULTY POSITION/MEDICINAL CHEMISTRY College of Pharmacy University of New Mexico

The College of Pharmacy at The University of New Mexico has a 12-month tenure-track Medicinal Chemistry Faculty position at the **ASSISTANT PROFESSOR** rank available May 1, 1996. Minimum requirements are a Ph.D. in Medicinal Chemistry or related field, a record of research related to toxicology and the ability to provide instruction related to medicinal chemistry/toxicology. Desirable characteristics are: a record of quality instruction in a professional curriculum; a record of quality graduate instruction; postdoctoral experience and evidence of the ability to develop/maintain an extramurally funded toxicology-centered research program. The position offers excellent opportunities for collaborative research within the College of Pharmacy, the School of Medicine, Cancer Center and National Laboratories. Applications will be accepted until March 1, 1996, or until the position is filled. Applicants should forward a letter of intent describing career goals, curriculum vitae, and three letters of reference to: **Jerry L. Born, Ph.D., Chair, Medicinal Chemistry Faculty Search Committee, College of Pharmacy, University of New Mexico, Albuquerque, NM 87131. Telephone: 505-277-3657; FAX: 505-277-6749; Email: jborn@unm.edu.** *The University of New Mexico is an Equal Opportunity/Affirmative Action Employer.*

### MICROBIOLOGY Assistant Professor (Tenure-Track)

The Department of Microbiology at the Medical College of Ohio invites applications for a tenure-track, full-time position at the **ASSISTANT PROFESSOR** level. Applicants should have a doctoral degree, postdoctoral experience, and a record of research productivity. The successful candidate will be expected to teach and develop an independent research program in immunology related to host response to infection, which could include vaccine development. Competitive salary, space, and start-up funds will be provided. Applicants should send a statement of research goals, a curriculum vitae, and have three letters of recommendation forwarded to: **Garry T. Cole, Ph.D., Chairman, Department of Microbiology, Medical College of Ohio, 3000 Arlington Avenue, Toledo, OH 43699-0008.** Deadline is February 29, 1996. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### PHYSIOLOGY AND BIOPHYSICS ASSISTANT OR ASSOCIATE PROFESSOR

Applications are invited for a tenure-leading faculty position in the Department of Physiology and Biophysics at the University of Nebraska College of Medicine. We are seeking a **CARDIOVASCULAR PHYSIOLOGIST** who is currently working as an independent investigator on funded research in an area of heart failure, hypertension or cardiovascular function in the disease state, especially if the work involves cellular and/or molecular techniques.

The successful candidate will complement a group of cardiovascular investigators whose research is at the integrative, organ, and cellular levels. The position will include a modest teaching responsibility at the medical and graduate levels. Generous salary and startup funds are available. Applicants should forward by March 1, 1996, a curriculum vitae, a brief description of research activities and accomplishments, plans for future research, and the names of three individuals who can serve as references to:

**Francis J. Clark, Ph.D.**  
Chairman, Search Committee  
Department of Physiology and Biophysics  
University of Nebraska College of Medicine  
600 South 42nd Street  
Omaha, NE 68198-4575

*An Equal Opportunity/Affirmative Action Employer. Minorities and Women are encouraged to apply.*

### PLANT BIOLOGY

The Botany Department at the University of Georgia has an opening at the **ASSISTANT PROFESSOR** level for a scientist with expertise in plant anatomy/morphology. The successful candidate will be expected to establish a vigorous research program in an area of fundamental importance in plant biology at the cellular, developmental, or evolutionary levels. In addition, he or she should possess the training and desire to teach courses in plant anatomy and morphology. The Botany Department has strengths in several areas of plant biology and has extensive links to other plant-related programs on campus. Candidates should submit a curriculum vitae, a statement of research and teaching interests, reprints of up to five research papers, and arrange to have four letters of recommendation sent to: **Chairperson, Plant Biology Search Committee, Botany Department, Miller Plant Science Building, University of Georgia, Athens, GA 30602.** Application deadline is March 1, 1996. *The University of Georgia is an Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR OF QUANTITATIVE ECOLOGY

Tenure-track **ASSISTANT PROFESSOR** position for fall 1996 for quantitative ecologist. Expectations: 1) in addition to ecology, teaching responsibilities may include biometrics, modeling and simulation, and other undergraduate courses. 2) develop an active research program involving undergraduate students. 3) advise students and participate in general departmental administration. All applicants must have a Ph.D. in biology or related field and experience after the doctorate. Send curriculum vitae, descriptions of teaching and research interests, reprints, copies of transcripts, and three letters of recommendation by 12 February 1996 to: **Dr. Edwin J. Spicka, Biology Department, 1 College Circle, State University of New York, Geneseo, NY 14454. FAX: 716-245-5007.** *SUNY is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### ASSISTANT PROFESSOR Drosophila Molecular Biologist

The Department of Biochemistry and Molecular Genetics at the University of Alabama at Birmingham is seeking applications from individuals that work with *Drosophila*. The specific area of research is open. This is a **TENURE TRACK FACULTY POSITION**. The successful candidate may begin their appointment as early as October 1, 1996. He/she will be expected to develop a funded research program and participate in teaching in the graduate and medical/dental programs. Interested individuals should forward a curriculum vitae, statement of research plans and letters of recommendation by March 30, 1996 to: **Dr. Jamila I. Horabin, Department of Biochemistry and Molecular Genetics, University of Alabama at Birmingham, Birmingham, AL 35294.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### FACULTY POSITION IN SYSTEMS NEUROPHYSIOLOGY OR NEUROETHOLOGY

The Department of Biology at the City College of the City University of New York seeks a **NEUROPHYSIOLOGIST** working at the systems level who has a strong independent research program. Preference will be given to one whose research would predispose her/him to interact with other neurobiologists in the department, who work on the visual and oculomotor systems and on development. Successful applicants will be expected to teach both undergraduate and Ph.D. level courses. However, teaching loads are compatible with a strong departmental commitment to investigator-initiated research.

City College offers an active research environment in an urban setting with students of multi-ethnic backgrounds. This is a tenure-track position, and rank and salary will be \$43,495 to \$55,854 commensurate with experience. Applicants are required to have a Ph.D. and postdoctoral experience at the time of application. They should send a curriculum vitae, a statement of research interests and the names of three references by February 22, 1996 to: **Dr. Josh Wallman, Chair, Neurobiology Search Committee, Biology Department, City College of New York, Convent Avenue at 138th Street, New York, NY 10031.** *An Affirmative Action/Equal Opportunity Employer. Reasonable accommodations provided for individuals with disabilities upon request.*

### CANCER GENETICIST

The Department of Genetics at the Southwest Foundation for Biomedical Research invites applications for a **FACULTY-LEVEL POSITION** for an individual with experience in cancer research. The successful candidate will be expected to develop a strong independent research program on UV-induced cancer and to collaborate with members of our laboratories of molecular genetics, biochemical genetics, immunogenetics, population genetics, quantitative genetics, and cell biology. This position is a critical component of a major research initiative involving our pedigreed colony of 2400 *Monodelphis domestica*, which is a unique model for UV-induced melanoma and corneal cancer. Research with human subjects, rodents, and our pedigreed colony of 3000 baboons also is possible. Academic affiliation also may be possible. A Ph.D. with postdoctoral research experience is required. Salary and rank will be commensurate with experience. This is an excellent opportunity for a creative scientist to have a leadership role in a dynamic genetics department. Send résumé, statement of research interests, and names, addresses, and telephone numbers of three references to: **Dr. James E. Hixson, Search Committee Chair, c/o Mike Moore, Director of Human Resources (540), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78228-0147.** *Equal Opportunity Employer, Male/Female.*

### BEHAVIORAL ECOLOGIST

**VISITING POSITION** for 1996-97 at John Carroll University, a Catholic and Jesuit University, offering B.S., M.S. and M.A. degrees. Successful applicant will be a viable candidate if position is converted to tenure-track. Responsibilities will be to teach behavior at the graduate level and evolution and ecology to undergraduates. Capability to teach genetics is desirable. Load is 12 credit hours/semester. Submit a letter of application, curriculum vitae, statement of teaching philosophy, and three letters of recommendation by 1 March 1996 to: **Dr. Miles Coburn, Department of Biology, John Carroll University, University Heights, OH 44118.** *An Equal Opportunity/Affirmative Action Employer; women and minorities encouraged to apply.*

### ENVIRONMENTAL SCIENCE AND POLICY

Two tenure-track **ASSISTANT PROFESSOR** positions, environmental science/statistics and environmental economics/policy, to support undergraduate and graduate programs, engage in independent research, and participate in university activities. Applications review begins 1 February 1996. Submit a letter of application, statement of teaching and research interests, curriculum vitae, and list of at least three references to: **Dr. J. R. Pratt, ESR, Portland State University, P.O. Box 751, Portland, OR 97207-0751. Telephone: 503-725-8038; Email: pratt@science1.sb2.pdx.edu; Web Site: http://clas.www.pdx.edu/environ/index.html.** *Portland State University is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

## DIRECTOR NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

The National Institutes of Health (NIH) invites applications for the position of Director, National Institute of General Medical Sciences (NIGMS). NIGMS is one of the 25 Institutes, Centers, and Divisions that comprise the NIH, and is the Institute that provides funding support for the most basic of the biomedical research programs. The mission is to promote the development of new scientific knowledge regarding the fundamental structures and life processes that underlie human health. The Director provides leadership, direction and coordination of the Institute's programs; formulates overall policies relating to the Institute's programs and goals; provides management and administrative services to the Institute; collects, develops and disseminates information on basic biomedical research undertakings; and insures that results of Institute research are appropriately evaluated and transferred to the medical community and the public. The NIGMS employs 171 Full Time Equivalent (FTE) staff members who administer an annual budget of \$904 million.

This is a Civil Service position in the Senior Executive Service (SES), with a salary ranging from ES-1 to ES-6 level (currently \$97,991 to \$122,040 including a locality allowance). Physicians may be eligible for a comparability allowance of up to \$20,000 per annum. A recruitment bonus of up to 25% of base pay may be available to a non-Federal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. A one-year probationary period must be served by the individual selected if not currently in the career SES.

The vacancy announcement with mandatory and desirable qualifications requirements can be obtained by calling (301) 496-1443. Applicants are required to submit a Bibliography, and either a Curriculum Vitae, Application for Federal Employment (SF-171), Optional Application for Federal Employment (OF-612), Resume, or any other written format which addresses the requirements indicated in this announcement, to the following address:

**NATIONAL INSTITUTES OF HEALTH  
DIVISION OF SENIOR SYSTEMS  
6120 EXECUTIVE BLVD.  
SUITE 100  
ROCKVILLE, MARYLAND 20852  
ATTENTION: FRED WALKER**

**Applications must be postmarked no  
later than March 29, 1996**

Applicants with access to E-Mail may transmit their materials to the following E-Mail address: [fwalker@helix.nih.gov](mailto:fwalker@helix.nih.gov)

Applicants with access to the Internet's World Wide Web may wish to browse the NIH Home Page, and may apply through the Web at the following URL: <http://www.nih.gov/news/>

Application materials may be FAXed to (301) 402-6139 (Please limit FAXed materials to no more than 10 pages)

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, political affiliation, marital status, sexual orientation, handicapping condition, age or membership or non-membership in an employee organization.

NIH is an Equal Opportunity Employer



## MOLECULAR NEUROSCIENCE

### Department of Developmental Neurobiology

**St. Jude Children's Research Hospital, Danny Thomas, Founder**, a renowned center for biomedical research, has launched an initiative in the neurosciences housed in the recently completed Danny Thomas Research Tower. To this end, a new Department of Developmental Neurobiology, dedicated to the investigation of fundamental questions in contemporary neurobiology, has been created. The department is now recruiting postdoctoral fellows, graduate students and technical staff with research interests and training in molecular and cellular neurobiology. Currently, the department comprises Dr. Tom Curran (analysis of gene regulation; gene function during neurodevelopment), Dr. James Morgan (molecular basis of neuronal degeneration and regeneration; stimulus-transcription coupling in the nervous system), Dr. Suzanne Baker (molecular basis of carcinogenesis in Ewings sarcoma and pediatric brain tumors) and Dr. Michisuke Yuzaki (role of excitatory amino acid receptors in development and function of the nervous system; mechanisms of synaptic plasticity).

The campus provides a state-of-the-art research environment including new, custom designed laboratories and core facilities for molecular biology, peptide and protein chemistry, genomics and transgenic/knockout technology. The research towers presently house approximately 300 doctoral level scientists who provide a rich and interactive scientific environment. In addition, the Department is fostering strong intellectual and collaborative ties with neuroscientists and neurologists at the University of Tennessee Medical School. The faculty are affiliated with the Neuroscience Graduate Program in the Department of Anatomy and Neurobiology.

Postdoctoral candidates should send a CV and 3 letters of recommendation to the research lab of interest. Candidates for technical positions should write or call Kathleen Speck, human resources department, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105, (901-495-2770), for information and application forms. Potential graduate students should write or call Jean Laughter (901-495-2253) for information about the Neuroscience graduate program. We expect to move into the new space in February, 1996; therefore, applicants should inquire before the end of January.

**St. Jude Children's Research Hospital is an  
equal opportunity employment/affirmative action employer**



## Vice Provost for Research

The University of Pennsylvania invites applications and nominations for the position of Vice Provost for Research. The Vice Provost is responsible to the Provost for the development and implementation of policies and procedures that promote excellence in research across the University. In this capacity the Vice Provost explores potential new areas for research and oversees long-range planning efforts with respect to research and to facilities and support at the University, advises the Provost on all such efforts, provides leadership and coordination of multi-disciplinary research programs, and represents Penn to federal and other funding agencies. The Vice Provost is responsible for administering and coordinating a wide variety of activities supporting research at Penn, including the Provost's Council on Research, the Research Foundation, and the Research Facilities Development Fund. In addition, the Vice Provost has direct supervisory responsibility for five administrative entities: the Office of Research Administration, the Center for Technology Transfer, the University Laboratory Animal Resources, the Office of Radiation Safety and the Office of Environmental Health and Safety.

Candidates for the position must have a strong record of research and scholarship sufficient to merit appointment as a full professor in an academic department of the University, knowledge of the operations and practices of a comprehensive research-oriented university, and proven administrative competence.

The position is available in July, 1996. Applications should include a curriculum vitae and other information which will help the search committee in evaluating the application. The review of applications will begin February 1, 1996. All nominations, applications, and supporting materials should be mailed to:



**Vice Provost for Research Search Committee  
Office of the Provost  
University of Pennsylvania  
110 College Hall  
Philadelphia, PA 19104-6303.**

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

## POSITIONS OPEN

### SABBATICAL LEAVE APPOINTMENT EMINENT AQUATIC ECOLOGIST

The Florida Center for Environmental Studies (CES) has funding (\$50,000) to support a 12 month Sabbatical Leave Position for an **EMINENT AQUATIC ECOLOGIST**. Credentials: a Ph.D. and extensive experience in aquatic research, supported by a significant grant award and strong publication record. Expertise in restoration ecology, especially constructed wetlands, is desirable. Support includes a postdoctoral position, graduate student, funds for travel, minor equipment and supplies, technical support, use of existing laboratory and field equipment of the South Florida Water Management District (SFWMD), and a moving allowance. A key role for the appointee will be to collaborate with scientists of the SFWMD and the State University System of Florida engaged in research on major South Florida aquatic restoration projects. Candidates should provide a letter of application, curriculum vitae, and the names and contact information for five references to: Ms. Jo Ann Jolley, Florida Center for Environmental Studies, Florida Atlantic University—Northern Campus, 3970 RCA Boulevard, Suite 7400, Palm Beach Gardens, FL 33410. Application review will begin February 1, 1996. *An Equal Employment Opportunity/Affirmative Action Employer.*

Biology. Two **ASSISTANT PROFESSOR OF BIOLOGY** positions, beginning fall semester 1996, for an **ECOLOGIST** and a **CELL BIOLOGIST**. Three year renewable contract with possibility of renewal or conversion to tenure track at end of second year of appointment. Responsibilities include 1) teaching at least one course in the area of specialization, 2) full participation in at least one semester of the introductory biology course for majors, including lectures and labs, 3) development of an active research program emphasizing undergraduate student involvement. Successful candidates must clearly demonstrate a commitment to excellence in undergraduate biology instruction at all levels and an appreciation for the special mission of a small liberal arts institution. Review of applications will begin February 2, 1996. Send curriculum vitae, relevant transcripts, names of only three references, and a brief cover letter to: Gerald L. Kreider, Ph.D., Biology Department, Albright College, 13th and Bern Streets, P.O. Box 15234, Reading, PA 19612-5234. Albright College is committed to a policy of Equal Opportunity and does not discriminate on the basis of race, religion, sex, age, national origin, sexual orientation, veteran status, marital status, or disability. This policy extends to all educational, service, and employment programs of the College.

### MICROBIAL ECOLOGIST

The University of Maryland Center for Environmental and Estuarine Studies, Horn Point Environmental Laboratory, invites applications for a **TENURE-TRACK FACULTY POSITION** in microbial ecology. We seek a colleague who has experience in marine bacterial processes who would complement our present programs in planktonic food-web interactions, nutrient cycling, biogeochemical fluxes and wetlands ecology. The successful candidate is expected to participate in an externally funded research program and to participate in our graduate education program. A Ph.D. in biological oceanography or microbiology is required with postdoctoral experience. Applicants should send a cover letter, a statement of research interests, curriculum vitae and the names of four references by 1 March 1996 to: Michael Roman, Chairman, Microbial Ecologist Search, Horn Point Environmental Laboratory, P.O. Box 775, Cambridge, MD 21613. Telephone: 410-228-8200. *Affirmative Action/Equal Opportunity Employer.*

### ASSOCIATE PROFESSOR

The Department of Veterinary Anatomy and Cell Biology is seeking a cell/molecular biologist for a tenure-track faculty position at the **ASSOCIATE PROFESSOR** level starting June 1, 1996. Applicant should have Ph.D. or equivalent in a biological or biomedical science, postdoctoral experience, research background in cell/molecular biology, ability to teach neuroanatomy/neuroscience, and extramural funding. Application deadline is February 15, 1996, or until suitable applicant is found. Submit curriculum vitae; names, addresses, and telephone numbers of at least three references; and a summary of current research to: Dr. Gary E. Wise, Professor and Head, Department of Veterinary Anatomy and Cell Biology, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803. Louisiana State University is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### ASSISTANT PROFESSORS IN LIFE AND EARTH SCIENCES OTTERBEIN COLLEGE

**BOTANIST:** Ph.D. in plant physiology with experience in plant molecular biology and systematics. Teaching responsibilities include botany, genetics, and advanced plant biology courses in the life science major and courses in the college's general education program.

**GEOLOGIST:** Ph.D. in geology with experience in ecology and paleontology to teach earth science and environmental courses. Position supports the life science major and the college's general education program.

Successful candidates will have a strong commitment to the liberal arts. They will show effective teaching and scholarly research. It is expected that they will involve undergraduates in research. Finalists for the position will be asked to submit official transcripts for all previous academic work. Deadline: February 15, 1996. Send application letter, curriculum vitae, and three current letters of reference to: Dr. Patricia A. Frick, Vice President for Academic Affairs, Otterbein College, Westerville, OH 43081. *Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### RESEARCH ASSISTANT SCIENTIST

The Division of Infectious Diseases, Department of Medicine, Indiana University School of Medicine is seeking a faculty member at the **ASSISTANT SCIENTIST** level. The position is 100 percent research with a strong focus on molecular epidemiology of *Chlamydia trachomatis*. Applicants should have a Ph.D. in Microbiology/Immunology, Molecular Biology, or a related field. Postdoctoral experience is preferred and experience with nucleic acid amplification techniques required. The successful candidate will be expected to work closely with an established group of investigators on the molecular epidemiology and immunology of *Chlamydia trachomatis* infections. Applicants should submit a curriculum vitae, a statement of research interest, and the names and addresses of three individuals who may be contacted for letters of reference to: Robert B. Jones, M.D., Ph.D., Chief, Division of Infectious Diseases, Department of Medicine, Indiana University School of Medicine, Emerson Hall, Room 435, 545 Barnhill Drive, Indianapolis, IN 46202. Indiana University School of Medicine is an Equal Opportunity Employer and welcomes applications from women and minority group members.

### PROFESSOR OF BIOCHEMISTRY OR BIOPHYSICS

The Department of Biology invites applications for a tenured **PROFESSORSHIP** (head of the laboratory) in biochemistry or biophysics. The laboratory consists of a professor (this position), an associate and two assistant professors. Wishes to recruit an individual with an outstanding record in the research of his or her interest. Teaching graduate and undergraduate courses required. No discrimination by nationality or religion. Salary determined by governmental rule, depending on research or teaching experience. Japanese or English proficiency required. Expected to hold the position at least for six years (renewable). Submit a publication list, curriculum vitae, major reprints (up to seven), statement of research interests, and two recommendation letters by March 31, 1996 to: Yukio Fujiki, Department of Biology, Faculty of Science, Kyushu University 33, Fukuoka 812-81, Japan. FAX: 81-92-632-2741; Email: yfujiscb@mbox.nc.kyushu-u.ac.jp.

### FACULTY POSITIONS

Applications are invited for full-time Ph.D. **FACULTY POSITIONS** in Medical Anatomy, Biochemistry, Microbiology, Pharmacology and Physiology. Principal duties involve the teaching of first- and second-year osteopathic medical students in a curriculum utilizing a systems approach. Individuals with evidence of excellence in teaching and/or independent research funding will be given priority. Rank is open based upon qualifications and experience. Review of applications will begin immediately and will continue until the positions are filled. Submit a letter of application, curriculum vitae, and the names and addresses of at least three references to: Silvia Ferretti, D.O., Dean and Vice President of Academic Affairs, Lake Erie College of Osteopathic Medicine (LECOM), 1858 West Grandview Boulevard, Erie, PA 16509. LECOM is an Affirmative Action/Equal Opportunity Employer and encourages female and minority candidates.

## POSITIONS OPEN

### STATE UNIVERSITY OF NEW YORK COLLEGE AT OLD WESTBURY

**ASSISTANT PROFESSOR** of Biology: Tenure-track teaching position beginning fall 1996 in an ethnically diverse undergraduate college. Candidate must have a Ph.D. and demonstrated research capabilities in a biomedical field with an interest in serving as a mentor to undergraduates in research. Fields of special interest could include molecular biology, animal virology, microbial physiology and cell physiology. Candidate must have both the ability and the interest to work with students of diverse backgrounds. Send curriculum vitae, a statement of teaching philosophy, and three letters of reference by February 23, 1996 to: Director of Personnel and Affirmative Action, Screening Committee: AP/B-SCI, SUNY College at Old Westbury, Box 210, Old Westbury, NY 11568. Salary Negotiable. *Women and minorities are encouraged to apply. Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR COLUMBIA UNIVERSITY

The Department of Microbiology seeks an outstanding candidate for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. The applicant's research program should focus on genetic and biochemical analysis of signal transduction, cell cycle regulation, chromosome behavior, gene expression, or related topics in yeast. Columbia University has a strong graduate program and an interactive faculty working in related areas. Send a curriculum vitae, a statement of future research plans, and three letters of reference to: Dr. Marian Carlson, Search Committee Chair, Yeast Molecular Genetics Search Committee, Department of Microbiology, HHSC 1208 Columbia University, 701 West 168th Street, New York, NY 10032. *Columbia University is an Affirmative Action/Equal Opportunity Employer.*

### ENVIRONMENTAL STUDIES

Westminster College seeks a **SENIOR ASSISTANT** or **JUNIOR ASSOCIATE PROFESSOR** to develop an environmental studies program. Applicants should have a doctorate in an appropriate field, strong commitment to undergraduate teaching and advising, and evidence of professional growth. The appointee will teach core courses in the program and introductory courses in one or more of the following areas: earth sciences, geology, geography, and meteorology. The position begins July 1996. Contact: Prof. Hank Ottinger, c/o Office of the Dean of Faculty and Vice President, Westminster College, 501 Westminster Avenue, Fulton, MO 65251. Closing date: February 15, 1996. *Westminster College is an Equal Employment Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

### ASSISTANT PROFESSOR BIOLOGY

Ph.D. is required. Expertise in immunology/microbiology. In addition to excellence in teaching, the ability to develop a strong research laboratory using state of the art techniques is required. Successful candidate for this position will have primary teaching responsibilities in the College of Arts and Sciences, with possible secondary responsibilities in the Honors College. Appointment commences September 1, 1996. The deadline for applications is February 1, 1996. This position is subject to availability of funding and Board of Trustees approval. Apply to: Dean, College of Arts and Sciences, Adelphi University, Garden City, NY 11530-4299. *Equal Opportunity/Affirmative Action Employer.*

Fixed-term position (Research Assistant Professor) as **ASSOCIATE DIRECTOR** of the Pacific Northwest Tree Improvement Research Cooperative, which conducts genetics research in support of applied breeding programs. Position is available April 1, 1996. Ph.D. in forest genetics with strong background in quantitative genetics and whole plant physiology, and experience in writing scientific articles. Salary range of \$33,996 to \$39,000 per annum. Reappointment at the discretion of the Dean. Application closing date March 1, 1996. Send résumé, three letters of recommendation, up to three examples of scientific publications, and transcripts to: Dr. Logan A. Norris, Head, Department of Forest Science, College of Forestry, Oregon State University, Corvallis, OR 97331-7501. *Oregon State University is an Equal Employment Opportunity/Affirmative Action Employer and is responsive to dual-career needs.*

# ANNOUNCING THE UNCF•MERCK POSTDOCTORAL SCIENCE RESEARCH FELLOWSHIPS

Ten \$55,000 awards will be made in 1996. Each award consists of

- **FELLOWSHIP STIPEND UP TO \$40,000**
- **INSTITUTIONAL GRANT UP TO \$15,000**

*Applicants must be:*

- African American
- Appointed as a postdoctoral fellow during the 1996 calendar year at an academic institution or a non-academic institution, such as the National Institutes of Health or the Centers for Disease Control
- Committed to conduct research at a Merck research facility for a minimum of three months
- A U.S. citizen or permanent resident.

*For application packets, contact:*

Rebecca Bennett, The College Fund/UNCF, 1-800-331-2244

**Deadline for receipt is February 26, 1996**

*"A mind is a terrible thing to waste."*

## FACULTY POSITION IN MICROBIOLOGY MICHIGAN STATE UNIVERSITY and EDITOR-IN-CHIEF BERGEY'S MANUAL

The Department of Microbiology at Michigan State University working jointly with the Board of Trustees of the Bergey's Manual Trust intends to make an academic year appointment at the level of **ASSOCIATE OR FULL PROFESSOR** (with tenure), which would also carry the title and responsibilities of **EDITOR-IN-CHIEF** for the Bergey's Manual Trust. In addition, the successful applicant will also be associated with the MSU-National Science Foundation Center for Microbial Ecology. Applicants are sought with expertise in microbial systematics and/or biodiversity. Responsibilities include supervising the publications activities of the Bergey's Manual Trust, attracting external support for research in the general area of microbial systematics and diversity, and teaching duties at the undergraduate and/or graduate level. A Ph.D. degree and demonstrated success and visibility in microbiology are required, along with the ability to work with the contributors to and publishers of Bergey's Manuals and associated publications. The Department of Microbiology at MSU is one of the largest and most diverse such departments in the nation. To apply, send a C.V. along with a plan describing future goals in research and in the role of Editor-in-Chief to: Dr. John Holt, Search Committee, Department of Microbiology, Giltner Hall, Michigan State University, East Lansing, MI 48824. Review of applications will begin March 1, 1996. *Michigan State University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are particularly encouraged to apply.*

## NATIONAL INSTITUTES OF HEALTH / DEPARTMENT OF HEALTH AND HUMAN SERVICES CHIEF, NEUROBIOLOGY AND ANESTHESIOLOGY BRANCH (NAB)

The National Institute of Dental Research (NIDR) invites nominations and applications for the position of Chief, Neurobiology and Anesthesiology Branch (NAB). The Chief, NAB, is responsible for the scientific and administrative management of a multidisciplinary research program spanning the basic and clinical sciences in oral-facial sensation, with emphasis on pain mechanisms and the development of new methods of pain control.

This is a Federal Civil Service position at the GS-15 level, salary range \$71,664 to \$93,166 per annum, (including Washington, D.C. locality pay). The individual selected may be considered for (1) Physicians Comparability Allowance up to \$20,000 per year; (2) physician special pay under Title 38; (3) a recruitment bonus of up to 25% of base pay, subject to individual approval; or (4) a relocation bonus of up to 25% of base pay, subject to individual approval. A one-year probationary period must be served by the individual selected if not currently in the Federal service. Alternatively, appointment in the PHS Commissioned Corps may be considered.

The individual selected also may be considered for appointment in the Senior Biomedical Research Service (SBRS). Salary range for SBRS is \$71,664 to \$148,400 per annum, and may include ability to transfer current retirement system (if portable) into NIH employment.

U.S. citizenship is required for appointment to the Federal Civil Service or the PHS Commissioned Corps. U.S. citizens and citizens of countries allied to the U.S. are eligible for appointment to the SBRS. Other employment options may also apply to foreign nationals.

Applicants should have a D.D.S., M.D., or a Ph.D. in a science related to health, dentistry or medicine, (or possess equivalent combination of experience and training); research accomplishments in an area of relevance to the position, and demonstrated leadership qualities.

Applicants may apply by submitting a curriculum vitae and bibliography, a resume, Optional Application for Federal Employment, OF-612 (available in any Federal Personnel Office), or an application in any other written format. Applicants are encouraged to address the knowledge, skills and abilities required for this position.

Further information about the position and qualification requirements, including the knowledge, skills and abilities required, may be obtained from:

**MS. FAYE M. HARBRANT, PERSONNEL MANAGEMENT SPECIALIST**  
**NATIONAL INSTITUTE OF DENTAL RESEARCH**  
**NATIONAL INSTITUTES OF HEALTH**  
**31 CENTER DRIVE, MSC 2290, BUILDING 31, ROOM 2C-23**  
**BETHESDA, MARYLAND 20892-2290; (301) 496-6971**

*Application materials must be postmarked and sent to Ms. Harbrant by the closing date of February 26, 1996.*

NIH is an Equal Opportunity Employer



## POSITIONS OPEN

### CENTRE COLLEGE Developmental Cell Biologist

**ASSISTANT PROFESSOR**, tenure-track, Ph.D. required. Strong background in light and electron microscopy and experience in animal histology is desirable. Teaching responsibilities include introductory biology, introductory cell and molecular biology, cell ultrastructure and physiology, developmental biology, microscopy and microanatomy, and associated laboratories and seminars. Collaborative research with undergraduates is expected. Strong commitment to liberal arts and undergraduate teaching required. Send letter of application, curriculum vitae, transcripts, and at least three letters of recommendation to: **Dean John C. Ward, Centre College, 600 West Walnut Street, Danville, KY 40422-1394**. Review of applications will begin February 5, 1996 (express intent to apply via **Email: Richey@Centre.edu** or **FAX: Professor Peggy Richey, 606-236-7925**). *Centre College is an Equal Opportunity Employer. Applications from women and minority groups are encouraged.*

**ENVIRONMENTAL SCIENTIST**: Pending final budget approval, Drake University seeks a teacher/scholar to develop and direct an undergraduate Environmental Science and Policy program that will provide an integrative ecological perspective within a liberal arts setting. This is a **TENURE-TRACK POSITION** with rank and salary dependent on experience and qualifications. Candidates should have the Ph.D. degree, postdoctoral experience, a record of teaching excellence, an active research agenda, and a strong commitment to undergraduate research. A physical or life science background is needed with an interdisciplinary orientation that permits developing courses, projects, and internships appropriate to environmental concerns. Familiarity with spatial information technology is desirable. Applicants should send a letter of application, curriculum vitae, evidence of teaching effectiveness, research goals, relevant reprints, and the names, addresses, and telephone numbers of three references. Mail to: **Ron Troyer, Dean, College of Arts and Sciences, Drake University, Des Moines, IA 50311**. Review will begin February 1, 1996. *Drake University is an Equal Opportunity Employer.*

North Carolina State University invites applications for a **TENURE-TRACK** position at the **ASSISTANT PROFESSOR** level. Candidates should have a Ph.D. in plant breeding, genetics, molecular biology or related area, with postdoctoral experience in gene cloning, plant transformation and related technologies. The successful candidate will initiate a program for germplasm improvement of warm and cool season turfgrass species. Emphasis will be on development of molecular techniques, including transformation, for the introduction of novel traits. The individual must be capable of developing broad collaborative research, incorporating molecular technologies with conventional breeding programs, both public and private, directed toward release of improved commercial turfgrass varieties. Application deadline has been extended to February 2, 1996. A curriculum vitae, description of research interests, original transcripts, and three letters of reference should be sent to: **Dr. David A. Knauff, Head, Crop Science Department, North Carolina State University, Box 7620, Raleigh, NC 27695-7620**. *North Carolina State University is an Equal Opportunity Employer and operates under Affirmative Action policy. The university urges all qualified applicants to apply.*

The Swiss Federal Institute of Technology in Zurich (ETHZ) invites applications for a **CHAIR IN CELL BIOLOGY**. The Department of Biology at ETHZ has defined structural biology, generation and processing of bioinformation and molecular biology of organisms as the three main research directions for the next decades. We seek, therefore, an outstanding candidate with an established record in research and teaching of cell and molecular biology of higher organisms. The main emphasis should be on cell differentiation and cell-cell interactions with respect to tissue and organ development and with a major focus in molecular physiology. Support is provided through excellent research facilities including high-tech microscopy and through the ongoing research on structural and functional aspects of the cellular organization. The successful candidate is expected to participate in the teaching program in cell biology at all levels. Please apply with curriculum vitae and a list of publications to the **President of ETHZ, Prof. Dr. J. Nüesch, ETH Zentrum, CH-8092 Zurich**, no later than March 31, 1996. *Applications from female scientists and recent graduates are especially invited.*

## POSITIONS OPEN

The Institute of Systematic Botany of The New York Botanical Garden is pleased to announce an opening for a position of **ASSISTANT CURATOR**. Qualifications are: 1) a Ph.D. in systematic botany, 2) demonstrated research interests (monographic and/or floristic) in the flowering plants of the New World as evidenced by publication in peer reviewed journals and/or the completion of an outstanding Ph.D. dissertation, 3) the interest and ability to utilize large herbarium and library collections, 4) the ability to develop or continue an active field program, 5) a willingness to participate in garden activities such as scientific publication and teaching, and 6) a willingness to seek external sources of funding. Interested applicants should send their curriculum vitae, statement of research interests, reprints, and the names of five colleagues willing to provide letters of recommendation to: **Personnel Coordinator-AC, The New York Botanical Garden, 200th Street and Southern Boulevard, Bronx, NY 10458-5126**. Application deadline: 28 February 1996. *Affirmative Action/Equal Opportunity Employer/Minority/Female/Disabled/Veteran.*

### PROTEIN CRYSTALLOGRAPHER University of Georgia

A tenure-track **ASSISTANT PROFESSORSHIP** is available in Protein Crystallography in the Department of Biochemistry and Molecular Biology. Applicants should have a Ph.D. or equivalent degree and at least two years of postdoctoral research experience. The successful candidate is expected to establish an independent research program and to participate in teaching. Excellent facilities and a competitive start-up package are available. The deadline for applications is March 1, 1996. Applicants should submit a letter, including a description of current and long-term research interests, a curriculum vitae and the names of three references to: **Prof. Bi-Cheng Wang, Search Committee Chair, Department of Biochemistry and Molecular Biology, University of Georgia, Athens, GA 30602**. *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*

North Carolina State University (NCSU) has a position available for **DIRECTOR** of the NCSU NMR Facility, operated by the Departments of Chemistry and Biochemistry. Responsibilities include supervision of research-level NMR spectroscopists and an electronics technician, oversight of five high field/high resolution spectrometers and two solids spectrometers, UNIX data system administration, general administrative oversight of the Facility, and interaction with users to encourage and facilitate research improve instrumentation. Participation in collaborative research is expected. Minimum qualifications are a Ph.D. degree with NMR specialization and four years of experience with modern multidimensional NMR techniques. A background in methods development, analysis of macromolecular structure/dynamics, or biological NMR is preferred. Send résumé and three letters of recommendation to: **Dr. E. O. Stejskal, Chair, NMR Search Committee, Department of Chemistry, Box 8204, North Carolina State University, Raleigh, NC 27695-8204**. *Women and minorities are encouraged to apply. NCSU is an Equal Opportunity/Affirmative Action Employer. See: <http://www2.ncsu.edu/ncsu/chemistry/chem.html> on the WEB.*

**ASSISTANT PROFESSOR**: Twelve month tenure-track, 55 percent research and 45 percent extension, dealing with insects and mites that affect woody ornamentals, at The Ohio State University/Ohio Agricultural Research and Development Center (OARDC), Wooster, Ohio. Available July 1, 1996. A Ph.D. in Entomology or related field is required. Postdoctoral or equivalent experience in pest management is desirable. The research program can be in any area related to biology and/or management of pests that attack woody ornamentals, including Christmas trees. The Extension program will assist the commercial nursery, Christmas tree and urban arboriculture industries. To apply, send curriculum vitae, undergraduate and graduate transcripts, publications or accepted manuscripts, cover letter with professional interests and goals, names, addresses and telephone numbers of five references to: **Richard Lindquist, Department of Entomology, OARDC, 1680 Madison Avenue, Wooster, OH 44691**. Applications will be processed beginning 15 March 1996. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSORS UNIVERSITY OF NEVADA, RENO

The Department of Biology at UNR is seeking **THREE FULL-TIME, TENURE TRACK FACULTY** (at the assistant professor level). Starting date: fall 1996. All positions require a Ph.D., postdoctoral experience, a strong publication record, and the potential to attract significant outside funding. All Biology faculty participate in teaching appropriate undergraduate and graduate courses. 1) **DEVELOPMENTAL BIOLOGIST**. Research specialization must emphasize contemporary problems in developmental biology; preference given to applicants with a specialization that complements those of existing faculty. Teaching experience in developmental biology desirable. 2) **EVOLUTIONARY BIOLOGIST**. Research specialty open, but successful candidate must demonstrate an advanced understanding of quantitative methods of data analysis. Teaching experience in evolution, biometry, or systematics desirable. 3) **ECOLOGIST**. Research specialty in plant/vertebrate interactions, particularly in the role of animals in seed dispersal. This position will be filled at the senior assistant professor level; college-level teaching experience in human anatomy and physiology and research experience in the Sierra Nevada/Great Basin region desirable.

Send curriculum vitae, statements of research/teaching interest and philosophy, significant reprints, and the names, addresses, and telephone numbers of four references to appropriate **Search Committee, Department of Biology/314, University of Nevada, Reno, NV 89557**. Review of applications will begin 20 February 1996. *Equal Employment Opportunity/Affirmative Action Employer.*

The Swiss Federal Institute of Technology in Zurich (ETHZ) invites applications for the position of a **PROFESSOR FOR THEORETICAL PHYSICS**. Applicants for this position are expected to have a Ph.D., experience in basic research in theoretical physics, and to have made important contributions to theoretical physics. The new professor should have broad interests and be willing to interact scientifically with some of the existing research groups at the physics department of ETH Zurich. She or he will participate in undergraduate- and graduate-level teaching in theoretical physics and in supervising the research of diploma- and Ph.D. students. Please submit your application together with a curriculum vitae and a list of publications to the **President of ETH Zurich, Prof. Dr. J. Nüesch, ETH Zentrum, CH-8092 Zurich**, no later than February 29, 1996. *The ETHZ specifically encourages female candidates to apply with a view toward increasing the proportion of female professors.*

**CENTER DIRECTOR AND PROFESSOR**. University of Florida, Institute of Food and Agricultural Sciences, Southwest Florida Research and Education Center (SWFREC), Immokalee. Provide leadership and direction for 12 faculty and 56 support personnel. Center programs include multidisciplinary extension, research, and teaching programs in citrus, vegetable, sugarcane, and beef cattle production, and in environmental and urban issues. Requires a Ph.D. in an agricultural or related field, and demonstrated professional leadership. Previous experience in research/extension and administration preferred. The SWFREC is located about 40 miles east of Ft. Myers and Naples, Florida. For more detailed information, contact: **Dr. Thomas Obreza, SWFREC, P.O. Drawer 5127, Immokalee, FL 33934**. Telephone: 941-657-5221; FAX: 941-657-5224; Email: [taob@icon.ifas.ufl.edu](mailto:taob@icon.ifas.ufl.edu). Closing date March 15, 1996. *Women and minorities are encouraged to apply. The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

**TEMPORARY ASSISTANT PROFESSOR** in the Department of Wildlife at Humboldt State University for the 1996-97 Academic Year. Ph.D. or near completion at time of appointment; university teaching experience desirable. The position is full-time teaching. Candidates must have demonstrated research experience in ornithology and wildlife management or applied ecology. The successful applicant will teach Ornithology both semesters, a seminar, and any two of the following courses (1 per semester): Principles of Wildlife Management, Upland Game Management, Nongame Management, The Ecology and Management of Upland Habitats, or Wildlife Ethology. Appointment will begin about mid-August 1996. Submit curriculum vitae, transcripts of academic work, and three letters of reference to: **Dr. David W. Kitchen, Chair, The Department of Wildlife, Humboldt State University, Arcata, CA 95521**. Review of applicants will begin by 29 February 1996 and continue until an appropriate person is hired. *Humboldt State University is an Equal Opportunity/Affirmative Action/Title IX Employer.*

# Research Funding Now Available for the Study of the Neuropathology of Ataxia-Telangiectasia

Grants are now available to support research efforts that will focus on the cerebellar neurodegeneration seen in all patients with Ataxia-Telangiectasia (A-T). Projects awarded funds will concentrate on the neuropathology of A-T concurrently with other scientists who are cataloging genetic mutations in patients, studying ATM gene homologs in yeast and *Drosophila* model systems, making knock-out mice, raising antibodies against the ATM protein, trying to capture the ATM complex using immunoaffinity and two-hybrid screens and looking at the protein's involvement in cell cycle regulation and radiation response.

In spite of its pleiotropic nature, A-T is primarily a neurodegenerative disease. While the other manifestations of the disease can be understood in terms of the putative ATM function, the cerebellar problem is still a great enigma. Why the cerebellum? Why the Purkinje cells? A major objective of new grant awards therefore will be to investigate the role of the ATM protein in the development and maintenance of the cerebellum. Competitive awards will be given to academic, government and corporate researchers for one- and two-year projects to be funded up to a maximum total direct cost of \$100,000 per year. No administrative overhead or fixed costs are supported. Quarterly grant awards are made using a thorough peer-review selection process. Scientific excellence and direct relevance to A-T are the paramount criteria in award decisions. The next deadline for submission of proposals is March 1, 1996, with decisions by May 1, 1996 and grant periods starting by May 15, 1996. For grant proposal guidelines, interested researchers should contact the A-T Children's Project or visit our internet world-wide-web home page.

Suite 104  
398 W. Camino Gardens Blvd.  
Boca Raton, Florida 33432 USA



Phone: 407-395-2621 Fax: 407-395-2640  
e-mail: bradmargus@delphi.com  
Web Home Page: <http://www.med.jhu.edu/ataxia/>



## Senior Faculty Position in Developmental Biology

The Department of Cell and Developmental Biology at the University of Pennsylvania School of Medicine has embarked on a major expansion in the analysis of vertebrate and invertebrate development. At this time, we are particularly interested in recruiting a senior investigator who uses experimental approaches to study problems such as morphogenesis, pattern formation, differentiation and determination in the early embryo. Highly qualified individuals in related areas are also encouraged to apply. The position will be filled at the rank of associate or full professor.

We expect to begin interviewing candidates by March 1, 1996. Send curriculum vitae and research description to:



Search Committee,  
c/o Charles P. Emerson, Jr.  
Chair, Department of Cell  
and Developmental Biology  
University of Pennsylvania  
Philadelphia, PA 19104-6058

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

## DRUG METABOLISM & PHARMACOKINETICS

### Research Investigator

SmithKline Beecham, a world leader in pharmaceutical research, is currently seeking a Research Investigator to fill a position in the Pharmacokinetics department of Drug Metabolism and Pharmacokinetics (DMPK).

The successful candidate will provide scientific leadership while designing, conducting and evaluating pharmacokinetic and toxicokinetic studies for compounds in Phase 0 to Phase IV of development. This will include writing development plans and technical reports, developing protocols and presenting results. A primary consideration will be representing Drug Metabolism and Pharmacokinetics on development project teams and the coordination of internal compound teams within DMPK.

Qualifying candidates will have a Ph.D. or PharmD in Pharmacokinetics, Pharmaceutical Sciences or related discipline, together with comprehensive knowledge of pharmacokinetic principles. Excellent interpersonal and written/oral presentation skills as well as the ability to work in a team environment are essential. Previous industrial experience and/or specialization in PK/PD relationships or population analysis would be advantageous.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. Qualified candidates should forward resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code L535, P.O. Box 2646, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



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## POSITIONS OPEN

### FACULTY POSITION School of Medicine University of Washington

The Department of Comparative Medicine invites applications for a faculty position as a **RESEARCH ASSISTANT PROFESSOR** from scientists with capabilities and interests in molecular biology, embryonic stem cell technology, and laboratory animal genetics. The opportunity exists for adjunct or joint appointments in other departments. Primary responsibilities are service and research in association with the National Institute of Aging-funded Nathan Shock Center of Excellence and the Department of Comparative Medicine. Service activities should complement the existing transgenic program. Instructional and training activities are modest, and limited to the graduate and postdoctoral level. The core facilities are new and well-equipped, and there are numerous opportunities for collaboration. Individuals with a doctorate degree, relevant experience, and original ideas on animal modeling and molecular genetics are encouraged to apply. It is anticipated that the full-time position will begin on or before September 1, 1996. Interested individuals should send a curriculum vitae and names of four references by April 1, 1996 to: **Dr. G. L. Van Hoosier, Search Committee Chair, University of Washington, Box 357190, Seattle, WA 98195.** The University of Washington is an Equal Opportunity/Affirmative Action Employer.

### SIGNAL TRANSDUCTION AND GENE THERAPY POSITIONS

The University of Florida (UF) Brain Institute (<http://www.ufbi.ufl.edu>) has two tenure track **ASSISTANT PROFESSOR** positions available April 1, 1996. The salary is negotiable. These positions are supported in part by a grant funded from the Lucille P. Markey Charitable Trust. a) Molecular or cellular neurobiology of signal transduction processes involved in nervous tissue damage and maintenance. Trauma, epilepsy, and ischemia are among conditions of interest, though the most outstanding overall candidate is desired. Appointment will be associated with the UF Program in Signal Transduction. b) Gene transfer into the nervous system, with emphasis on developing vector systems to study neurobiological processes. Appointment will be associated with UF Gene Therapy Center.

Candidates with a Ph.D. and/or M.D. and a record of excellent research productivity should send their curriculum vitae, brief description of research interests, and three letters of recommendation to: **Chair, Search Committee for the Markey Faculty Scholars Program, Box 100244, University of Florida, Gainesville, FL 32610-0244.** Application deadline: February 14, 1996. University of Florida is an Equal Opportunity Employer, and minorities and women are especially encouraged to apply.

### ORGANIC CHEMIST

Utah Valley State College seeks **TENURE-TRACK POSITION** in Organic Chemistry to begin August 1996. Requires M.S. or Ph.D. in organic or general chemistry with college-level teaching experience (1 year for Ph.D., three years for M.S.). Candidates must have demonstrated ability to teach inorganic and organic chemistry for both majors and non-majors. Screening will begin February 2, 1996. For application procedures, please contact: **Human Resources, 800 West 1200 South, Orem, UT 84058.** Telephone: 801-222-8207.

### MACROMOLECULAR STRUCTURAL BIOLOGIST THE OHIO STATE UNIVERSITY

The Ohio State University is seeking one or possibly **TWO FACULTY** in the area of Macromolecular Structural Biology as part of the multi-year interdisciplinary Molecular Life Sciences Initiative. Scientists with strong research experience in X-ray crystallography, mass spectrometry or NMR spectrometry are a high priority. Department affiliation is negotiable for these tenure-track positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** rank. Applications, including curriculum vitae, three letters of reference, statement of research interests, and graduate transcript should be sent to: **Charles L. Brooks, Ph.D., 1925 Coffey Road, Columbus, OH 43210.** Review of applications will begin on March 15, 1996. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disabilities are encouraged to apply.

## POSITIONS OPEN

**GROSS ANATOMIST:** Highly motivated person to help develop multi-disciplinary offerings in gross anatomy and neuroanatomy for students in professional Physician Assistant BS, Occupational Therapy BS and Physical Therapy MS programs. Design innovative curricula to foster team approach to healthcare delivery via interdisciplinary training. Responsibilities include delivery of lower division and advanced/graduate level curricula in human anatomy and physiology; lead research initiative in anatomy, establish strong collaborative ties with other professionals associated with area tertiary care centers. **TENURE-TRACK FACULTY POSITION.** Teaching gross anatomy in PA and PT programs begins June 3, 1996. Neuro instruction begins fall: OT in 1997-98. Requires Ph.D. in human anatomy or related with anatomy emphasis. Postdoctoral experience desired. Gross anatomy and/or neuroanatomy teaching experience in academic, health care or medical science research facility recommended. Letter, résumé, and three reference letters must be received by March 1, 1996. To: **Dr. Martin Venneman, Chair, Anatomist Search and Screen, University of Wisconsin-La Crosse, La Crosse, WI 54601.** Telephone: 608-785-8218; Email: [venneman@sah.uwlax.edu](mailto:venneman@sah.uwlax.edu). See also: <http://www.uwlax.edu>. All positions contingent on funding. Names of applicants who haven't requested confidentiality in writing and all finalists, must be released on request. Women and minorities are encouraged to apply. Affirmative Action/Equal Opportunity Employer.

Biology: **ASSISTANT PROFESSOR.** Tenure track, Ph.D. required. Broadly-trained Cell Biologist with expertise in areas such as organelle structure and dynamics, inter- or intra-cellular signaling, membrane biology and other eukaryotic structure/function interrelationships. Expectations: strong commitment to undergraduate education; participate in general biology program; teach undergraduate and graduate courses in cell biology and related areas; serve as mentor for undergraduate research and Master's theses; seek extramural funding. Appalachian State University, a member of the University of North Carolina (UNC) System, has an enrollment of 12,000. Among the 16 UNC campuses, Appalachian ranks in the top four in SAT scores, retention, and graduation rates. The Biology Department has 19 faculty, 500 majors, and 35 graduate students. Send letter of application, curriculum vitae, description of research interests, names, addresses, and telephone numbers of three references to: **Dr. Douglas Meikle, Chair, Department of Biology, Appalachian State University, 572 Rivers Street, Boone, NC 28608.** Telephone: 704-262-3025. Completed applications due by February 16, 1996. Appalachian State University is an Equal Opportunity Employer.

### TENURE-TRACK FACULTY POSITION

The Department of Biochemistry and Biophysics, University of California, San Francisco offers an **ASSISTANT PROFESSOR** position. Individuals working in modern biology, including cell biology, development, biological structure, genetics, and biochemistry will be considered. Candidates should hold a Ph.D. or M.D. degree, and will be expected to establish a dynamic research program and be a top quality teacher in graduate/professional school courses. By March 1, 1996, submit a curriculum vitae, summary of research accomplishments, description of future research plans, major publications, and three to five letters of recommendation to: **Search Committee, Biochemistry and Biophysics, University of California, San Francisco, CA 94143-0448.** Women and minorities are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.

### ASSISTANT PROFESSOR OR ASSOCIATE PROFESSOR

The Department of Physiology and Cell Biology is recruiting a tenure-track **FACULTY MEMBER**. Candidates should have research experience in either Physiology, Cell Biology, or Molecular Biology and will be expected to establish an independent, extramurally-funded research program related to either cardiovascular disease, microvascular physiology, pulmonary pathobiology, inflammation, or wound healing. Associate Professor candidates must have an established research program and prior experience as an Assistant Professor. The successful candidate will participate in undergraduate and graduate educational programs. Interested applicants should send curriculum vitae, description of research, and letters of reference to: **Dr. Thomas M. Saba, Professor and Chairman, Department of Physiology and Cell Biology (A-134), Albany Medical College, 47 New Scotland Avenue, Albany, NY 12208.** An Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY UNIVERSITY OF ARIZONA Organismal Biologist

The Department of Ecology and Evolutionary Biology invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Ph.D. required. We seek an individual who studies the functional biology of organisms, with interests in one or more of the following areas: Physiology, Physiological Ecology, Functional or Quantitative Morphology, Biomechanics, Developmental Morphology and/or Physiology. The successful candidate should use integrative and/or comparative approaches that complement existing strengths in Ecology and Evolutionary Biology. This individual is expected to develop excellence in research and teaching at the undergraduate and graduate levels. Review of applications begins February 26, 1996, and continues until filled. Please send curriculum vitae and three letters of recommendation to: **Dr. Daniel Papaj, Chair, Search Committee, Department of Ecology and Evolutionary Biology, Biological Sciences West 310, University of Arizona, Tucson, AZ 85721-0088.** The University of Arizona is an Equal Opportunity/Affirmative Action/ADA Employer, encourages applications from women and members of underrepresented minority groups.

### UCLA FACULTY POSITION UCLA-DOE Laboratory of Structural Biology and Molecular Medicine

The division of Structural Biology and Genetics of the UCLA-DOE Laboratory of Structural Biology and Molecular Medicine will appoint one faculty position at the level of **ASSISTANT PROFESSOR** or Assistant Professor in Residence, jointly with departments in the College of Letters and Science or the School of Medicine. We seek a computational biochemist with an interest in genome analysis. Truly exceptional candidates in related areas will also be considered. Set up and research funds will come from the UCLA-DOE Lab. Candidates must have significant research accomplishments, the ability to establish a vigorous research program, and a commitment to excellence in education. Applicants should provide a curriculum vitae, a summary of proposed research, copies of key publications or preprints, and three letters of recommendation by March 1, 1996. Applications should be sent to:

**Dr. David Eisenberg  
Chair of Search Committee  
UCLA-DOE Laboratory  
UCLA, Box 951570  
Los Angeles, CA 90095-1570  
FAX: 310-206-3914**

UCLA is an Equal Opportunity Employer and encourages applications from women and minority candidates.

### POSTDOCTORAL ASSOCIATE

A **POSTDOCTORAL POSITION** is available to study the posttranscriptional regulation of early development in *Xenopus* and mouse, particularly with respect to cytoplasmic mRNA processing and translational control. Useful references include: Gebauer *et al.*, *EMBO J.* 13, 5712-5720 (1994); Hake and Richter, *Cell* 70, 617-627 (1994); Kuge and Richter, *EMBO J.* 14, 6301-6310 (1995). We anticipate experiments that will include the analysis of RNA-protein interactions, oocyte microinjection, and the generation of transgenic mice. Interested persons should send a complete curriculum vitae, with the names and addresses of three persons who may act as references to: **Dr. Joel D. Richter, c/o Human Resources, Worcester Foundation for Biomedical Research, 222 Maple Avenue, Shrewsbury, MA 01545, USA.**

**PENN**  
UNIVERSITY OF PENNSYLVANIA

### POSTDOCTORAL FELLOWSHIPS MOLECULAR VIROLOGY

Applications are invited for postdoctoral fellowships to study molecular aspects of herpes simplex virus gene regulation, DNA replication and latency. Candidates with experience in virology and molecular biology are encouraged to apply. Please send curriculum vitae, statement of research experience and interests, and three letters of reference to: **Priscilla Schaffer, Ph.D., Department of Microbiology, University of Pennsylvania School of Medicine, 1033 Blockley Hall, 423 Guardian Drive, Philadelphia, PA 19104.** Application deadline, March 15, 1996. An Equal Opportunity/Affirmative Action Employer.

## SENIOR STAFF SCIENTIST

A position(s) is available immediately for a senior staff scientist for the design and development of recombinant vaccines for cancer immunotherapy, in the Laboratory of Tumor Immunology and Biology (Dr. Jeffrey Schlom, Chief), National Cancer Institute, National Institutes of Health, PHS, Bethesda, MD. Non-replicating and replicating pox viruses as well as other vectors are being employed to induce specific T-cell responses to oncogene and tumor associated gene products, both in experimental systems and in clinical trials. Studies also involve the construction of recombinant vaccines expressing multiple gene products. **A background in molecular biology/virology is required.** This is an appointment for two years with an option for renewal for two additional years. Salary range is \$60,925 to \$93,166. If interested, please call Nancy Bagley (301) 496-1771 to request the mandatory application/CV requirements for position #CA-95-0233.

NIH is an Equal Opportunity Employer

## ASSISTANT PROFESSOR OF GENETICS

Applications are invited for a tenure-track position in the Department of Genetics with primary research and teaching interests in the molecular genetics of eukaryotes. Those with research interests in fungal genetics or molecular genetic approaches to cellular and developmental biology are especially encouraged to apply. The candidate will be expected to develop a strong creative research program and have a commitment to teaching at the undergraduate and graduate levels. The appointment could begin as early as September 1, 1996. Apply before March 1, 1996 by sending a curriculum vitae, list of publications, brief statement of research interests and three letters of reference solicited by the applicant to:

Search Committee  
Department of Genetics  
Life Sciences Building  
University of Georgia  
Athens, GA 30602-7223

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Action Employer*

## RESEARCH MYCOLOGIST Natural Products Section

At Wyeth-Ayerst Research, a major division of Fortune 150 American Home Products Corporation, we're meeting the challenges of a new decade and the next century by building upon our strengths and creating an environment that fosters a more dynamic Research and Development organization. As a leader in the research and development of therapeutic compounds, our drugs have been instrumental in the areas of infectious, cardiovascular, central nervous system, and metabolic diseases, cancer and women's health. Currently, we're seeking a Mycologist to join us in Pearl River, NY.

The successful candidate will conduct research to isolate unusual fungi from diverse environmental niches and to characterize conditions for their growth and production of secondary metabolites. The goal of this program is the discovery of novel, bioactive natural products for medical and agricultural applications. Candidates should have a Ph.D. degree in Microbiology or a related discipline with at least 5-7 years of postdoctoral experience. Specific background in the application of fungi for the production of useful metabolites, enzymes, etc. and in fungal genetics is desirable.

This position emphasizes strong interactions with a staff of highly experienced research scientists and presents a valuable opportunity to acquire a broad background in a multidisciplinary pharmaceutical discovery environment.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please send your resume with salary requirements to: **Wyeth-Ayerst Research, Human Resources Dept., Position #PRS-1678, P.O. Box 7886, Philadelphia, PA 19101-7886**, or fax your resume (in fine mode if possible) directly into our centralized Research resume database at (610) 989-4854. Principals Only. Equal Opportunity Employer, M/F/D/V.



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## TOXICOLOGIST

Hoffmann-La Roche, a leader in the pharmaceutical and health care industries, is looking for an experienced toxicologist to join the Department of Toxicology and Pathology in Nutley, New Jersey.

The successful candidate will represent the Department on International Project Teams using toxicological knowledge and skills to strategically design and coordinate the preclinical safety programs for drugs in development. Additional responsibilities will include the design and interpretation of toxicity studies and preparation of contributions to internal and regulatory documents.

To qualify, you must have a Ph.D. or a veterinary degree and a minimum of five years pharmaceutical and drug development experience. Strong oral/written communication, interpersonal and team skills are required, supported by the ability to effectively plan and manage multiple scientific projects and to make sound scientific decisions. PC/computer knowledge is desirable.

We offer a competitive salary and benefits package as well as the opportunity to make an impact in an important industry. For consideration, please send your curriculum vitae and salary history to: **Ms. Stella Strazdas, Hoffmann-La Roche Inc., Department SS026RT, Nutley New Jersey 07110-1199. Principals only. NO PHONE CALLS PLEASE.** We are an equal opportunity employer.

Roche

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## POSITIONS OPEN

### FACULTY OPENING NEURAL BASIS OF MEMORY AND LEARNING

The Department of Neuroscience at the University of Pittsburgh, together with the Center for the Neural Basis of Cognition at the University of Pittsburgh and Carnegie Mellon University, seeks a **FACULTY MEMBER** with research interests in the neural basis of memory and learning. Appointment can be at any level.

Candidates should send an application to: **Dr. German Barrionuevo, Department of Neuroscience, University of Pittsburgh, 446 Crawford Hall, Pittsburgh, PA 15260.** The application should include a curriculum vitae, copies of representative publications, three letters of reference, and a statement of interest describing the candidate's work. *The University of Pittsburgh is an Equal Employment Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION KIDNEY BIOLOGY AND PATHOBIOLOGY Case Western Reserve University

Applications are invited for positions funded by NIH Institutional Training Grant, beginning in July 1996. **TRAINING FACULTY** will use both cell and molecular biological techniques to understand normal kidney function and mechanisms of kidney disease. Faculty research interests include mechanisms of inflammatory tissue injury, analysis of transcriptional regulation, control of protein trafficking, kidney development, mucosal immunity and gene transfer techniques. Experience in molecular biology, cell biology or biochemistry is desirable. *Must be permanent resident.* Send letter of application, curriculum vitae, and letters of recommendation to: **Dr. John R. Sedor, Chief, Division of Nephrology, MetroHealth Medical Center, Rammelcamp Center for Research, 2500 MetroHealth Place, Cleveland, OH 44109-1998.**

**POSTDOCTORAL POSITION** in molecular hematology available immediately to candidates with an M.D. or a Ph.D. degree. Priority will be given to those with prior basic research experience, particularly in the fields of molecular and cellular biology or virology. This position is intended to support a group working in the area of the gene therapy of blood diseases. Please send a letter of application with your curriculum vitae and the names and addresses of three references to: **Dr. George F. Atweh, Division of Hematology, Box 1079, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. FAX: 212-369-8375; Email: gatweh@smtplink.mssm.edu.**

**POSTDOCTORAL POSITION** available immediately for NSF-funded research in the design of cell/polymer composites for mesenchymal tissue engineering in orthopaedic applications. The successful candidate will have a Ph.D. in Cell/Molecular Biology or Polymer Science. Send curriculum vitae with bibliography, a statement of experience, and names and telephone numbers of three references to: **Cato T. Laurencin, M.D., Ph.D., Department of Orthopaedic Surgery, Medical College of Pennsylvania Hospital, 3300 Henry Avenue, Philadelphia, PA 19129. FAX: 215-848-1355. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available immediately for an NIH-funded study of genes suppressing radiation sensitivity in mammalian cells. Investigation will include the effects of suppression and apoptosis and cell cycle checkpoint controls. Position is best suited to a recent graduate with basic experience in molecular biological techniques and/or somatic cell genetics. Please submit a curriculum vitae including the names and addresses of three references to: **Dr. Mark Meuth, Eccles Institute of Human Genetics, Building 533, Room 3110, University of Utah, Salt Lake City, UT 84112.**

A **POSTDOCTORAL RESEARCH ASSOCIATE POSITION** is available to study mechanisms of chemical-induced alterations in glutathione S-transferase and cytochrome P450 gene expression in extrahepatic tissues. Applicants should have experience in molecular biology. A curriculum vitae and three reference letters should be sent to: **Dr. Raymond F. Novak, Director, Institute of Chemical Toxicology, 2727 Second Avenue, Room 4000, Detroit, MI 48201-2654. Wayne State University is an Equal Opportunity/Affirmative Action Employer.** All buildings, structures, and vehicles at WSU are smoke-free. Wayne State University—People working together to provide quality service.

## POSITIONS OPEN

**BOTANY: TENURE-TRACK ASSISTANT PROFESSOR;** Teaching responsibilities include plant general biology, anatomy, physiology, systematics and diverse knowledge of botanical concepts and statistical applications. Ph.D. in appropriate field required. Salary commensurate with qualifications and experience. Available August 16, 1996. Send letter describing teaching and research interest, curriculum vitae, official transcripts, and three recommendation letters to: **Personnel/Botany Search Committee, Station Number 21, Eastern New Mexico University, Portales, NM 88130.** Screening will begin February 16, 1996 and continue until position is filled. *ENMU is an Equal Employment Opportunity/Affirmative Action Employer.* New Mexico is an open record state; therefore, it is the policy of the University to reveal to the public the identities of the applicants for whom outside inquiries have been made or for whom on-campus interviews are scheduled.

### ASSOCIATE PROFESSOR (RESEARCH)

Applications are invited for the position of **ASSOCIATE PROFESSOR (Research Track)** at Emory University in the Department of Gynecology and Obstetrics. The successful candidate will have five or more years of postdoctoral experience to establish a strong externally funded research program, and should have extramural funding. The position also includes directorship of a well-equipped infectious disease laboratory. Research interest in the area of infection and inflammation is desirable. Candidates should send curriculum vitae, description of research interests and the names of three references to: **Dr. Sampath Parthasarathy, Emory University School of Medicine, Department of Gynecology and Obstetrics, 1639 Pierce Drive, Atlanta, GA 30322,** on or before February 15, 1996. *Emory University is an Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to study the molecular biology of cardiac acetyl CoA carboxylase, with the aim of understanding its role in the regulation of fatty acid oxidation. Previous experience in the field of molecular biology required. Salary is negotiable and based on previous experience. Send curriculum vitae, a statement of research interests and capabilities, and the names and telephone numbers of three references to: **Dr. Gary Lopaschuk, Professor, Cardiovascular Disease Research Group, 423 Heritage Medical Research Building, University of Alberta, Edmonton, Alberta T6G 2S2 Canada. Email: glopasch@gpu.srv.ualberta.ca.** *The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities.*

### UNDERGRADUATE RESEARCH

The Center for Reproduction of Endangered Species (CRES) at the San Diego Zoo is seeking outstanding undergraduates for NSF/Bonner **STUDENT RESEARCH POSITIONS** during summer 1996. Students will participate in biological research on topics involving genetics, behavior, endocrinology, pathology, or reproductive physiology. Full summer stipend (\$3,255) and travel are paid. To apply, send letter of application, official transcripts, a statement identifying your interest in one of the above listed disciplines, and two letters of recommendation to: **Dr. John A. Phillips, Summer Research Program, CRES, Box 551, San Diego, CA 92112,** by March 1, 1996. *The Zoological Society of San Diego is an Equal Opportunity Employer. Applications from minority and female students are strongly encouraged.*

### MICROBIOLOGIST

Research position available for a M.S. in microbiology with experience in gas chromatography and the use of basic microbiology and immunochemistry techniques. Must be able to take direction, work independently, and be willing to work in BSL-3 containment facility. *U.S. citizenship required.* Send résumé to: **Human Resources Department 993, Southern Research Institute, P.O. Box 55305, Birmingham, AL 35255-5305. Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL POSITION

Position available to study molecular biology of bovine herpesvirus types 1 and 5. Qualified individuals should possess a Ph.D. or D.V.M. and Ph.D. Experience in virology, immunology and molecular biology is preferable. Send curriculum vitae, research interests, background and the names and telephone numbers of three references to: **Shafiqul I. Chowdhury, Room VMS 342, College of Veterinary Medicine, Kansas State University, Manhattan, KS 66506. Telephone: 913-532-4616; FAX: 913-532-4039; Email: Chowdh@Vet.KSU.EDU.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION Mayo Clinic Scottsdale Department of Biochemistry and Molecular Biology

**POSTDOCTORAL POSITION** focused on functional analysis of a carcinoma-associated transmembrane mucin MUC1. Project includes development and analysis of mammary gland tumors induced by chemicals and other means in Muc-1 null and wild type mice and analysis of phenotype of Muc-1 null mice using differential display or subtractive hybridization. Applicant should be experienced in molecular and tumor biology and immunology. Position available May 1996. Applicants should send curriculum vitae, three recommendation letters, and a one paragraph description of research interests to: **Dr. Sandra Gendler, Department of Biochemistry and Molecular Biology, Mayo Clinic Scottsdale, S.C. Johnson Medical Research Building, 13400 East Shea Boulevard, Scottsdale, AZ 85259.**

### TWO POSTDOCTORAL POSITIONS Slow Virus/Neurodegenerative Disease

Established and new rodent models of human Creutzfeldt-Jakob Disease are being used 1) to understand fundamental mechanisms of pathogenesis, 2) to investigate diagnostic and therapeutic strategies that can be applied to human disease, and 3) to determine the essential molecular structure of the infectious agent. Self-motivated individuals with a strong background in either molecular virology or neuroscience/cell biology will have the opportunity to pursue cross-disciplinary projects. This program includes five experienced faculty with excellent technical facilities, e.g. transgenic, molecular biology and *in-situ*/structural resources.

Send letter, curriculum vitae and names of three references to: **Dr. Laura Manuelidis, Head, Section of Neuropathology, Yale Medical School, New Haven, CT 06510. FAX: 203-785-6381.**

**RESEARCH ASSOCIATE** for firm in northwest Ohio. To conduct research on genetic alterations in oncogenes using molecular cloning, cell culture, polymerase chain reaction, and two dimensional DNA electrophoresis. Involves surgical preparation and dissection of laboratory animals. Must have Ph.D. (or ABD) in Medical Sciences and one year of experience in the job offered or as a Research Assistant. Academic program must have included one course each in the following areas: Mechanisms of Enzyme Action, Cytophysiology, Recombinant DNA Methodology, and Biostatistical Methods. Must be conversant with such molecular biology research techniques as two-dimensional DNA electrophoresis, polymerase chain reaction, cell culture, and molecular cloning. The skills may be evidenced by academic letter(s) of reference and/or employer testimonial(s). 40 hours per week, 8:00 a.m. to 5:00 p.m., \$25,000 per year. Send résumé and course transcript in duplicate (NO CALLS) to: **T. Do Reference Number 1490, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

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# SCIENCE

**Sandia National Laboratories  
Post-Doctoral Positions In Computational Chemistry**

Sandia National Laboratories in Livermore, California has an ongoing program in computational chemistry which has immediate openings for post-doctoral researchers. Areas of research include the modeling of organic polymers, proteins, DNA, and small molecules, using a variety of computational methods such as molecular mechanics, molecular dynamics, and *ab initio* quantum chemistry. We have a mix of methods and software development and applications work. Successful candidates shall have a Ph.D. in chemistry, biophysics, or a related field, and proven experience in software development or application of computational chemistry methodologies. Experience in one of the following modeling areas would be of particular interest: polymers (mechanical and chemical properties), proteins (including antibody modeling), DNA dynamics and reactivity, small molecule/macromolecule interactions, fluorescence properties of dye molecules. The research group has extensive computing resources including a high-end graphics workstation, distributed networks of high-end workstations containing up to 50 nodes, SMMP workstations, and a 72 node Intel Paragon. The group also has access to Sandia's massively parallel Intel Paragon and nCUBE machines, and a teraflop MPP that is scheduled to be delivered in late 1996. We feel that this position will provide especially exciting prospects for candidates with a strong background in computational methods who are interested in problems of interest to experimentalists. Salary and fringe benefits are extremely competitive. Candidates should send a CV (with names of references), reprints and uncertified copies of college transcripts to:

**Dr. Richard Judson**  
Sandia National Laboratories  
Attn: Anna Isham, Personnel, MS 9111  
HR Department 8522 - CA0006  
P.O. Box 969  
Livermore, CA 94550

Deadline is March 1, 1996  
U.S. Citizenship is required  
Equal Opportunity Employer M/F/V/H

**SANDOZ CHAIR IN NEUROSCIENCE  
THE OHIO STATE UNIVERSITY MEDICAL CENTER**

The Department of Neurology announces a search for a senior investigator to assume the Sandoz Chair in the College of Medicine. We seek a highly qualified investigator (M.D. or Ph.D.) working in the area of degenerative or immune-mediated brain disorders and/or movement disorders who will serve as an interface between basic and clinical neuroscience groups. Strong skills in molecular neuroscience are desirable. This position is a fully endowed Chair; the successful candidate can expect to receive substantial space and a generous start-up package.

Neuroscience has been designated as a Center for Excellence in the Medical Center Strategic Plan. Already in place are well funded programs in CNS neoplasia, neurotrauma and spinal cord repair, neuroimmunology, developmental neurobiology, autonomic and enteric neurobiology, and molecular neurobiology. An interdisciplinary Ph.D. Program in Neuroscience, and a Medical Scientist Program (M.D./Ph.D.) provide campus-wide support for graduate education in neurobiology.

The Ohio State University is a comprehensive research university with all of the health science colleges located on the same campus with the College of Biological Sciences, Mathematical and Physical Sciences, and a unique Neurobiotechnology Center. Opportunities for collaboration and interaction are extensive and diverse. The City of Columbus is the state capital and a major economic center which provides diverse cultural and recreational opportunities to a metropolitan region exceeding 1.4 million people.

Nominations are welcomed; applications should include a curriculum vitae, statement of research experience and interests and the names of three references, and should be sent to:

**Jerry R. Mendell, M.D.**  
Department of Neurology  
The Ohio State University  
1654 Upham Drive  
Columbus, Ohio 43210  
Telephone: 614-293-4962; Fax: 614-293-4688

*The Ohio State University is an equal opportunity employer.*

**UNIVERSITY OF MINNESOTA**

**POSTDOCTORAL/RESEARCH ASSOCIATES.**

(A variety of annually renewable, non-tenure-track appointments at the rank of Postdoctoral/Research Associate between 75-100% time.) Ph.D./foreign equivalent in hand by appointment. Candidates with previous postdoctoral experience and background in biochemistry, microbiology, molecular biology, pharmacology, immunology, or virology preferred. Research Associates require 1-2 years of postdoctoral experience; 3-5 years of postdoctoral experience preferred. Duties include conducting experiments on current research in department and participating in design, implementation, and evaluation of research; designing, organizing and implementing project database; analyzing data; collaborating on reports and published findings. Salary based on experience and qualifications. Deadline: 6/30/96 for positions starting continually but not after 8/30/96. Send curriculum vitae, letter of application and names and addresses of three references to: **J. Hildebrand, Veterinary Pathobiology, University of Minnesota, 1988 Fitch Avenue, Room 295J, St. Paul, MN 55108. The University of Minnesota is an Equal Opportunity Educator and Employer.**

**ASSISTANT PROFESSOR IN IMMUNOLOGY:** Faculty positions in Immunology are available at the University of Rochester School of Medicine. The Clinical Immunology/Rheumatology Unit invites applications for tenure-track positions at the Assistant Professor level from qualified individuals with a basic research interest in the areas of tolerance/autoimmunity, germinal center biology, somatic mutation, repertoire development, apoptosis or Immunology of HIV. Candidates should possess a Ph.D., M.D. or M.D./Ph.D. degree or equivalent degree as well as a productive postdoctoral experience in related areas. The selected candidates will be expected to develop an independent, externally funded research program of the highest quality. Secondary appointments in Basic Science Departments are available. Qualified candidates should submit a curriculum vitae, names of 3 references, and a brief statement of research interests to: **Iñaki Sanz, MD, Unit Chief, Clinical Immunology/Rheum. Unit, Univ. of Rochester Medical Center, 601 Elmwood Ave., Box 695, Rochester, NY, 14642. Phone: 716-275-2891/Fax: 716-273-1070.**

**ASSISTANT PROFESSOR IN GENE THERAPY:** Faculty positions in Gene Therapy are available at the University of Rochester School of Medicine. The Clinical Immunology/Rheumatology Unit invites applications for a tenure-track position at the Assistant Professor-level from qualified individuals with a basic research interest in the field of gene therapy, particularly as it applies to immune regulation, inflammation and/or the biology of the synovial membrane and cartilage. Candidates should possess a Ph.D., M.D. or M.D./Ph.D. degree or equivalent degree as well as productive postdoctoral training in gene therapy or related areas. The selected candidate will be able to interact with a growing number of researchers working in the field of gene therapy. Secondary appointments in Basic Science Departments are available. Qualified candidates should submit a curriculum vitae, names of 3 references, and a brief statement of research interests to: **Iñaki Sanz, MD, Clinical Immunology/Rheumatology Unit, Univ. of Rochester Medical Center, 601 Elmwood Ave., Box 695, Rochester, NY, 14642. Phone: 716-275-2891/Fax: 716-273-1070.**

**POSTDOCTORAL POSITIONS IN IMMUNOLOGY** available immediately at the University of Rochester School of Medicine. Opportunities available to qualified candidates with a Ph.D., M.D., or equivalent degree and a research interest in the areas of tolerance/autoimmunity, molecular genetics of autoantibodies, somatic mutation of immunoglobulin genes, germinal center biology and VDJ recombination. Interested individuals should submit a CV, names of three references and a brief statement of research interest to: **Iñaki Sanz, MD, Clinical Immunology/Rheumatology Unit, Univ. of Rochester Medical Center, 601 Elmwood Ave., Box 695, Rochester, NY, 14642. Phone: 716-275-2891/Fax: 716-273-1070.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION GYNECOLOGIC ONCOLOGY

Position available immediately to investigate molecular oncogenesis of human ovarian surface epithelium. Current research is directed toward understanding genetic alterations in ovarian carcinomas, stromaepithelial interactions and cytokine/growth factor regulation in human ovary. Studies draw upon a readily available source of human clinical materials. Ph.D. and/or M.D. required with background in molecular biology and tissue culture. Please send curriculum vitae and names of three references to: Job Number 1940901, Ellen Lin, Cedars-Sinai Medical Center, SSB 610, 8723 Alden Drive, Los Angeles, CA 90048. FAX: 310-652-0415.

**POSTDOCTORAL POSITION** available to work with Drs. Sanford Markowitz and James Willson, Case Western Reserve University, in studies of colon cancer molecular and cellular biology. M.D. or Ph.D. degree with experience in molecular or cell biology needed. Please send a curriculum vitae, description of past research, and names and telephone numbers of three references to: Dr. Sanford Markowitz, U.C.R.C. Number 2, Room 200, 11001 Cedar Road, Cleveland, OH 44106. FAX: 216-844-8230.

**POSTDOCTORAL POSITION** available immediately to work on biosynthesis of human small nuclear RNAs, post-transcriptional modifications including cap formation, 3' end formation, purification/characterization of enzymes involved. Experience in molecular biology is required. Experience in protein purification desirable. Send curriculum vitae and names of three references to: Ram Reddy, Ph.D., Department of Pharmacology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. FAX: 713-798-3145; Email: rreddy@bcm.tmc.edu.

### POSTDOCTORAL POSITIONS Johns Hopkins Oncology Center

**POSTDOCTORAL POSITIONS** are available to isolate novel genes involved in the proliferation and/or differentiation of hematopoietic stem cells (see *PNAS* 91: 459-463, 1994). A strong background in molecular and cellular biology is desired. Starting salary of \$28,000. Please send or fax curriculum vitae and three references to: Donald Small, M.D., Ph.D., Oncology Center 3-109, Johns Hopkins University School of Medicine, 600 North Wolfe Street, Baltimore, MD 21287. FAX: 410-955-8897. *Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS** available for studies of mouse developmental genes using embryonic stem cell culture, transgenic and gene-targeting approaches. Experience in molecular biology, biochemistry or mouse embryology is desirable. Send curriculum vitae and three names of references to: Dr. Li-Na Wei, Department of Pharmacology, 3-249 Millard Hall, 435 Delaware Street SE, University of Minnesota, Minneapolis, MN 55455. Email: weixx009@maroon.tc.umn.edu. *The University of Minnesota is an Equal Opportunity Educator and Employer.*

### RESEARCH SCIENTIST- GASTROENTEROLOGY

Supervise and perform animal studies in connection with research on upper esophageal sphincter and trans-sphincteric flow. Responsible for animal surgery including decerebration and implantation of markers and electrodes in pharynx, upper esophageal sphincter (UES) and esophagus, concurrent recording of manometry and videofluoroscopy of pharynx and esophagus, electromyographic (EMG) recording from muscles of deglutition, microelectrode recording, lesion and stimulation studies of the brain stem controlling deglutition as well as electrophysiological single unit recording from afferent/efferent nerve fibers, histologic preparation and examination of brain tissue and upper tract, and data analysis of all experiments. Ph.D. in Physiology required. Education and/or experience must include research in visceral reflexes in *in vitro* and *in vivo* studies of acute and chronic animal preparations, including decerebration of animal, *in vivo* and *in vitro* electrophysiology and classical pharmacology techniques and single unit recordings from afferent/efferent nerve fibers (peripheral/visceral/cardiac, etc.) in animals in *in vivo* preparation. 8:00 a.m. to 5:00 p.m. \$27,302 per year. Send two copies of résumé and evidence of legal authority to work for any employer in the United States, referencing Job Order 960060 to: ALC Analyst, JETS-BMS, Alien Labor Certification, P.O. Box 7972, Madison, WI 53707-7972.

## POSITIONS OPEN



### POSTDOCTORAL RESEARCH POSITION

A **POSTDOCTORAL RESEARCH FELLOW-SHIP** is available immediately. The successful candidate will be working on cholesterol absorption in enterocytes which was shown to be protein-mediated. Experience in cloning techniques and in the isolation and purification of proteins is required. The salary will be in the range of \$50,000 to \$70,000 per annum. Contact: Prof. Dr. H. Hauser, Laboratorium für Biochemie IV, ETH Zentrum, CH-8092 Zürich, Switzerland.

A **POSTDOCTORAL POSITION** is available to study the role of coagulation factor XI and the contact activation proteins in hemostasis and thrombosis. Studies will incorporate a combination of protein chemistry/enzymology and molecular biology as well as the generation of knockout and transgenic mice. Applicants should have a strong background in molecular biology, protein chemistry, or with KO/transgenic mice. Send curriculum vitae and the names and telephone numbers of three references to: Dr. David Gailani, Departments of Pathology and Medicine, Vanderbilt University School of Medicine, 547 MRB II, 2220 Pierce Avenue, Nashville, TN 37232-6350.

**POSTDOCTORAL POSITIONS** to study the signal transduction of inflammatory macrophages. Projects include molecular biology of phagocytosis (see *Trends Cell Biol.* 5:93, 1995) and cytokine signal transduction. Experience in recombinant DNA technology strongly preferred. One position, funded for three years, requires an M.D. or an M.D./Ph.D. from a U.S. university; another position requires a Ph.D. Send curriculum vitae and three letters of reference to: Dr. Steven Greenberg, Columbia University, P&S 9-503, 630 West 168th Street, New York, NY 10032. FAX: 212-305-5775; Email: greenberg@cuccfa.cco.columbia.edu. *An Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL POSITION

A **POSTDOCTORAL POSITION** in the Departments of Pharmacology and Radiology is available. Candidates should have a Ph.D. in either medicinal or synthetic organic chemistry to join a research team to study CNS receptor function. Major emphasis will be using products of molecular biology to characterize new ligands. Experience in synthetic organic chemistry and its application in drug discovery will be helpful. Send résumé to: Dr. Hank F. Kung, Room 305, 37000 Market Street, Department of Radiology and Pharmacology, University of Pennsylvania, Philadelphia, PA 19104. Email: kunghf@sunmac.spect.upenn.edu.

**STAFF SCIENTIST** for company in northeast Ohio which develops, manufactures and sells diagnostic imaging equipment. Job duties: research, design/implement various types of new MRI techniques (sequences and support software); develop quality analysis software tools; design sequences for MR imager and develop tools to analyze their performance using the Modulation Transfer Function; prototyping new types of reconstruction algorithms, phase contrast and quantitative flow techniques; develop gated dynamic flow measurement for MR imager. Tools used: networking software, C, IDL and FORTRAN programming languages and UNIX and MSDOS operating systems and IBM PC and DEC Alpha workstations. Must have Ph.D. in biophysics or medical biophysics or bioengineering or foreign equivalent as determined by accredited credentialing agency and expertise in reconstruction algorithms and quality control/assurance research using Modulation Transfer Function and Magnetic Resonance Imaging (MRI) as evidenced by three years graduate research in that area and four publications or abstracts in the area of MRI and Modulation Transfer and hands on skill with C, FORTRAN, Network on UNIX workstations, UNIX, MSDOS and IBM PC and SUN or DEC Alpha workstations as verified by employer or professor testimonial and copies of publications. 40 hours per week, 8 am to 5 pm, Monday through Friday, \$52,530.00 per year. Send two résumés and cover letters (no calls) to: K. Shockey, Reference Number 1299, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

## POSITIONS OPEN

### POSTDOCTORAL POSITION *in vitro* Electrophysiology of Synaptic Transmission

An immediate two-year position which is renewable biannually pending availability of funds is offered to study long-term changes of primary afferent neurotransmission in a slice preparation of the spinal cord. Conventional intracellular and whole-cell patch-clamp recordings with infrared video-microscopy will be employed. Thus, a strong background in modern electrophysiological and in slice techniques of the nervous system is desirable. Please mail or FAX curriculum vitae and three qualified references to: Prof. Jürgen Sandkühler, Institute of Physiology II, University of Heidelberg, Im Neuenheimer Feld 326, D-69120 Heidelberg, Germany. FAX: +49-6221-563364.

### RESEARCH SCIENTIST

The Research Department of the Gemological Institute of America is seeking a **RESEARCH SCIENTIST** to fulfill a vital role as part of a research team involved with the acquisition of scientific data on gem materials. The candidate must have: 1) A Ph.D. in physics, materials science, geology or chemistry at time of appointment; 2) Good communication and organizational skills; 3) evidence of published research; and 4) an interest in gem materials. Send letter of interest, résumé, a brief statement of research interests, and the name, address, and telephone number of three references to: Personnel, P.O. Box 2110, Santa Monica, CA 90406.

**RESEARCH SCIENTIST:** Apply principles of nuclear magnetic resonance (NMR) spectroscopy and applications in analytical and biological chemistry to design and test components for NMR spectrometer including pulse programmers, signal averagers, radio frequency transmitters and receivers. Includes: design of experiments to test compatibility of components with emphasis on quality evaluation for analytical and biological chemistry applications; incorporate client requirements into NMR component design; design of new low cost NMR spectrometer; manage in-house application NMR laboratory including 300Mz magnet and NMR spectrometer and programming in C in Macintosh environment to develop computer interfaces with NMR components. Requirements: Ph.D. in physics or chemistry which included research in the design of NMR spectrometers and exposure to NMR instrumentation; 8 hours per day, 40 hours per week, \$55,000 per year. Apply at the **Texas Employment Commission, Houston, Texas** or send résumé to: **Texas Employment Commission, Alien Certification, TEC Building, Austin, TX 78778, Job Order Number TX7503336. Ad Paid by An Equal Employment Opportunity Employer.**

**MOLECULAR BIOLOGY TECHNOLOGIST** for health care and research facility in northeast Ohio. Job duties: tissue culture and molecular biology research using the following techniques: (1) For tissue culture: transfection, electroporation, drug sensitivity determination, drug selection, drug resistant cloning, retrovirus infection, Cosmid rescue, Genomic DNA extraction, virus infection, chromosome (DNA) transfection, preparation of chromosomes and determination of chromosome number, cell cycle analysis and cell sorting by flow cytometry. (2) For molecular biology: nucleic acid analysis including isolation of DNA and RNA, restriction digest of DNA and RNA, restriction digest of DNA, electrophoresis, hybridization, northern blotting, southern blotting, DNA slot blotting; protein analysis including isolation of protein, purification by immunoprecipitation, protein assay, western blotting; recombinant DNA techniques including preparation and transformation of competent *E. coli* cells, isolation of plasmid DNA from *E. coli*, construction of recombinant DNA; in situ hybridization including preparation of chromosomes, in situ hybridization of chromosomes using DNA probes, digital analysis of slides using fluorescence microscope with CCD video camera. Check chemical and radiation safety in the laboratory, ordering materials. Check laboratory for radioactive spills and make sure people are wearing their radioactive sensor badge. Must have B.S. in Biology. Applicant will qualify with degree/credentials determined equivalent by a credentials evaluation agency and two years experience with the techniques used in job duties. 40 hours per week, 9 am to 5 pm, \$33,200.00 per year. Send two résumés and cover letters (no calls) to: K. Shockey, Reference Number 1341, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

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**I**mmunex is a leading biopharmaceutical company, based in Seattle, focused on the discovery, development, manufacture, and marketing of products to treat cancer and autoimmune disease. Our business is saving lives.

### Bioinformatics Programmer Seattle, WA

Currently, we are expanding our Bioinformatics program to support a number of high throughput sequencing projects and are seeking a highly skilled professional to provide assistance. Responsibilities will include maintenance and updating of sequence databases and the design and development of relational databases and applications.

Successful candidate will have a minimum of 3 to 5 years software engineering experience, to include experience in systems analysis, design and development. You must have knowledge and skill in C, UNIX, Oracle RDBMS, and the Macintosh environment. The successful candidate must also have a background in the biological sciences or experience with a biopharmaceutical company. Experience with data modelling, Oracle Forms, Oracle Data Browser/Query, WWW/CGI/HTML interface to RDBMS preferred, but not required.

We are looking for highly motivated, self starters possessing good communication skills to interact with our scientific staff.

In addition to the opportunity for real growth, Immunex offers a competitive salary and benefits package. For consideration, please send cover letter and resume, referencing Job #4419.171 to:

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## DEPARTMENT OF PHYSIOLOGY & BIOPHYSICS UNIVERSITY OF CALIFORNIA, IRVINE POSTDOCTORAL & PROFESSIONAL RESEARCHER FELLOWSHIPS

Several positions for research in individual laboratories in the Department are available for candidates who have demonstrated research promise at the postdoctoral and professional researcher series level. The emphasis of research in the Department is the synergistic fields of molecular biophysics and cell signaling. The faculty of the Department and their research interests are:

Dr. Nancy Allbritton Dr. Kenneth Baldwin	Signal transduction by second messengers and protein kinases. Developmental, hormonal, and exercise factors regulating striated muscle gene expression.
Dr. Michael D. Cahalan Dr. Vincent J. Calozzo	Ion channels and $Ca^{2+}$ signaling in the immune system. Cellular and molecular mechanisms regulating the mechanical properties of skeletal muscle.
Dr. K. George Chandy Dr. J. Jay Gargus Dr. Alan L. Goldin Dr. George A. Gutman	Molecular biology of ion channels and their role in immune cells. Molecular analysis of membrane signaling proteins. Molecular biology of neural channels and receptors. Molecular and evolutionary studies of immunoglobulin and ion channel genes.
Dr. Harry T. Haigler	Molecular and cellular mechanisms by which polypeptide hormones control cell replication.
Dr. James E. Hall Dr. Janos K. Lanyi	Gap junctions, ion channels and water transport proteins. Transport and energy coupling in the membrane of <i>Halobacterium salinarum</i> .
Dr. Kenneth J. Longmuir	Intracellular metabolism, sorting, and transport of lipid in mammalian cells; membrane fusion.
Dr. Thomas L. Poulos	Protein crystallography; protein engineering; heme enzyme structure and function.
Dr. Hamid Said	Cellular and molecular mechanisms and regulation of intestinal vitamin transporters.
Dr. Ivan Soltesz Dr. Bruce Tromberg Dr. Larry E. Vickery Dr. Stephen H. White	Plasticity and modulation of inhibitory synaptic neurotransmission. Optical spectroscopy of tissues and cells. Protein engineering; molecular chaperones and protein folding. Membrane structure; peptide-bilayer interactions; protein-structure prediction.

Interested applicants should send curriculum vitae to:

**Dr. Janos K. Lanyi, Professor and Chair**  
Department of Physiology & Biophysics  
University of California, Irvine  
Irvine, CA 92717-4560  
<http://www.med.uci.edu/~p-and-b>

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## CORNELL UNIVERSITY

### PROVOST FOR MEDICAL AFFAIRS DEAN OF THE MEDICAL COLLEGE

Nominations and applications are invited for the position of Provost for Medical Affairs of Cornell University and the Stephen and Suzanne Weiss Dean of the Medical College.

The Provost for Medical Affairs is the Senior Executive Officer of the University responsible for the University's academic and clinical programs in the health sciences, which are offered by the Medical College and Graduate School of Medical Sciences located at The New York Hospital - Cornell Medical Center in New York City. The Provost reports directly to the President of the University, meets regularly with the Cornell Board of Trustees and serves on the Board of Overseers of the Medical College and Graduate School of Medical Sciences. The Dean of the Graduate School of Medical Sciences reports to the Provost for Medical Affairs.

The Stephen and Suzanne Weiss Dean of the Medical College has responsibility for personnel, facilities, finance, planning and development as well as all programs of instruction and research and the medical faculty practice plan. The Dean serves on the Joint Board of the New York Hospital - Cornell Medical Center.

The Provost/Dean will provide not just stewardship but dynamic leadership as the Medical College mobilizes for the 21st Century with major recapitalization, refocus and enrichment of its missions in research, education and clinical care. The successful candidate will shape and implement a vision for an institution that interacts synergistically with an incomparable set of partners, including its sister colleges at Cornell University as well as its neighbors and affiliates, The New York Hospital and New York Hospital Care Network institutions, The Hospital for Special Surgery, Memorial Sloan-Kettering Cancer Center and The Rockefeller University.

A candidate for the position of Provost and Dean should be a nationally recognized leader in health science research and education with significant experience in the administration of such programs. The individual should hold an M.D. and/or Ph.D. degree and have demonstrated leadership qualities.

Review of candidates will begin immediately and continue until the position is filled. Nominations and applications, including a current curriculum vitae, should be addressed to: **Joanne Blauer, Secretary of the Search Committee, Cornell University Medical College, 1300 York Avenue, Room F-100, New York, NY 10021. EEO/AA/M/F/D/V.**

## POSITIONS OPEN

### AEROSPACE POSTDOCTORAL FELLOWSHIPS University of Houston System and NASA- L. B. Johnson Space Center

Sixteen two-year **FELLOWSHIPS**, third year possible, are immediately available for research on two-phase flows, hypersonics, aerospace structures, robotics, virtual reality, superconductivity applications, computer system architectures, legacy software programming, life support systems, DNA probes, food and nutrition, visual acuity, and bioradiation pharmacology. For detailed information, additional contacts, and an application form visit the world wide web site: <http://www.uh.edu/isso>. Application forms can also be obtained from: Aerospace Postdoctoral Fellowship Program Institute for Space Systems Operations, University of Houston, Houston, TX 77204-5505. Telephone: 713-743-9135; FAX: 713-743-9134. The University of Houston is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

### POSTDOCTORAL POSITIONS

#### Oncogenes—Tumor Suppressors—Transcription Cell Cycle

**POSTDOCTORAL POSITIONS** (one available immediately and several starting July 1, 1996) to study the mechanisms by which oncoproteins and tumor suppressor proteins function in transcriptional and cell cycle regulation (S. J. Weintraub *et al.*, A common factor is required for transactivation of different promoter elements by the adenoviral oncogene E1a. *Mol. and Cell Biol.* 12: 512-517, 1992; S. J. Weintraub *et al.*, The retinoblastoma protein causes the E2F site to switch from positive to negative element. *Nature* 358:259-261, 1992; S. J. Weintraub *et al.*, Mechanism of active transcriptional repression by the retinoblastoma protein. *Nature* 375:812-815, 1995). Dr. Steven Jay Weintraub, Departments of Internal Medicine and Cell Biology and Physiology, Washington University School of Medicine, Campus Box 8052, 660 South Euclid Avenue, Saint Louis, MO 63110.

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately to characterize and clone potassium channel genes in human vascular tissue. Applicant should have a strong background in molecular biology with experience in RNA and DNA isolation techniques, PCR analysis, Northern, Southern, and Western Blot analysis, and immunocytochemistry. Send curriculum vitae and names of three references to: Lewis J. Rubin, M.D., University of Maryland at Baltimore, Division of Pulmonary and Critical Care Medicine, 10 S. Pine Street, Suite 800, Baltimore, MD 21201-1192.

### VIROLOGIST POSTDOCTORAL RESEARCH ASSOCIATE

IIT Research Institute, an independent research and development organization, has an immediate position available for a **VIROLOGIST** with molecular biology experience. Applicants should be recent Ph.D. graduates with retrovirus or other RNA virus experience. A strong background in animal models and/or vaccine development would be a definite plus. Prior postdoctoral experience is not required. Interested candidates should send a curriculum vitae, along with a statement of research interests and names of three references to: Human Resources, Department S196, IIT Research Institute, 10 West 35th Street, Chicago, IL 60616. Equal Opportunity/Affirmative Action Employer.

A **POSTDOCTORAL POSITION** is available immediately to study the signal transduction mechanisms of sodium and potassium channel modulation by receptor activation. Applicants should have a Ph.D. and a strong background in either molecular biology or electrophysiology. Send curriculum vitae, reprints and names of three references to: Dr. Erwin Shibata, Department of Physiology and Biophysics, 5-472 Bowen Science Building, University of Iowa, Iowa City, IA 52242. FAX: 319-335-7330; Email: [erwin-shibata@uiowa.edu](mailto:erwin-shibata@uiowa.edu). The University of Iowa is an Affirmative Action/Equal Opportunity employer. Women and minorities are strongly encouraged to apply.

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH ASSOCIATE.

Research: to create and test recombinant structures of the core-forming E2 component of the pyruvate dehydrogenase complex for understanding the key role of E2's independent, mobile outer domains in the enhanced operation and the multi-effector regulation of the dedicated kinase and phosphatase components which regulate the complex and thereby control glucose utilization. Candidates must have experience in recombinant DNA techniques and enzymology and be available no later than the end of April 1996. Ph.D. required, send complete résumé, list of references to: Thomas E. Roche, Professor and Head, Department of Biochemistry, Willard Hall, Kansas State University, Manhattan, KS 66506.

### RESEARCH SCIENTIST COMPUTER CHEMISTRY MEDICINAL CHEMISTRY

The Institute of Medicinal Molecular Design, Tokyo, Japan, is seeking a **COMPUTER CHEMIST** or **MEDICINAL CHEMIST** to study computer-assisted drug design and discovery. Ph.D. or M.S. degree is required. Experience in protein structure handling, protein modeling, force field calculation, or quantum chemistry is desirable. Send a curriculum vitae, three letters of recommendation, and a statement of research interest to: Dr. Akiko Imai, President, Institute of Medicinal Molecular Design, 4-1-11 Hongo, Bunkyo, Tokyo 113, Japan.

### RESEARCH SCIENTIST

Ecogen Inc., an agricultural biotechnology company located in Langhorne, Pennsylvania, has an immediate opening for a **RESEARCH SCIENTIST** skilled in two or more of the following disciplines: membrane biochemistry, membrane biophysics and molecular modelling—computational chemistry. Candidates must have a Ph.D. degree in the appropriate discipline. Postdoctoral experience preferred. Please send your résumé and salary history to: Ecogen Inc., Reference Number 96-4, P.O. Box 3023, Langhorne, PA 19047-3023. Equal Opportunity Employer.

# January 19 - March 19 Scientists as Corporate Managers

## On-line profiles of industry executives and MBA programs geared specifically for scientists.

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- Kevin Egan—manager of research fermentation for the biotech firm, ICOS.
- Peter Khoury—senior promotion manager for the Merck vaccines unit.
- A special look at MBA programs, including the Cornell University Johnson Graduate School of Management's accelerated MBA for scientists.

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## Executive Director

Southern California Coastal  
Water Research Project

The Southern California Coastal Water Research Project (SCCWRP) located in Westminster seeks an Executive Director to lead an interdisciplinary research program focused on anthropogenic and environmental factors affecting marine resources in the Southern California Bight and to relate these findings to existing or proposed environmental control policies and requirements. SCCWRP is a public agency governed by representatives of four large wastewater agencies, US EPA Region IX, three Regional Water Quality Control Boards, and the California State Water Resources Control Board.

The director leads a staff of 24 in coordinated laboratory and field studies in biology, chemistry, toxicology, and oceanography. The director works with the governing body to develop program priorities, administers the organization, directs the activities of scientific and other staff, develops the annual research plan and budget, produces the annual report and other publications, coordinates activities with participating agencies, attracts external funding, and represents SCCWRP.

The director must possess strong managerial, scientific, and communication skills. Qualifications should include demonstrated abilities to manage a scientific enterprise and staff of professionals, to develop and manage budgets, to procure funding, and to speak and write effectively.

Desirable qualifications include an advanced degree and experience in marine environmental research. Salary and benefits will be commensurate with qualifications. Applicants should submit a statement of qualifications and resume to: SCCWRP Search, c/o CSDLAC, POB 4998, Whittier, CA 90607 by February 15, 1996. Applications will be kept confidential. SCCWRP is an Equal Opportunity Employer.

## FACULTY POSITION NEUROSCIENCES

The Geriatric Research, Education and Clinical Center at the Veterans Affairs Puget Sound Health Care System (VAPSHCS) Seattle Division, and the Division of Gerontology and Geriatric Medicine, Department of Medicine, and the Department of Pharmacology at the University of Washington are jointly recruiting a full-time faculty member at the **RESEARCH ASSISTANT or RESEARCH ASSOCIATE PROFESSOR** level, commensurate with qualifications. Candidates must hold the degree of Ph.D. and/or M.D., have at least two years of postdoctoral experience, and have a strong interest in basic mechanisms of aging or in diseases related to the elderly. The successful candidate is expected to develop a strong independent neurosciences research program in cellular biology, molecular biology and/or biochemistry. Applicants will be able to interact with other neuroscientists and neurogeneticists including a strong core of individuals working on Alzheimer's disease, at both the VAPSHCS and at the University of Washington. Applicants can participate in the training and teaching activities of the Division of Gerontology and Geriatric Medicine and the graduate program of the Department of Pharmacology. The closing date for applications is February 20, 1996. Applicants should send a curriculum vitae, three letters of recommendation, and brief statements summarizing research accomplishments and future plans to Dr. Gerard D. Schellenberg, Associate Director for Research, GRECC (182B), Veterans Affairs Puget Sound Health Care System, 1660 South Columbian Way, Seattle WA 98108. The VAPSHCS and the University of Washington are Affirmative Action, Equal Opportunity Employers. Women and minorities are encouraged to apply.

# CARDIOVASCULAR PHARMACOLOGY

## Sr/Principal Scientist

The R. W. Johnson Pharmaceutical Research Institute conducts research in a number of therapeutic areas for the Johnson & Johnson companies: Cilag, Ortho-McNeil Pharmaceutical, Ortho Biotech and Ortho Dermatological. We have an excellent drug discovery research opportunity on our Thrombin Research Team located in **Spring House, PA** (suburban Philadelphia).

While working in a very interactive and collaborative environment, the successful candidate will establish independent 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 handling administrative aspects of lab work. *In vivo* experience with pharmacological models is mandatory.

Qualified candidates will have a PhD in Biological Sciences, at least one full term of postdoctoral fellowship, and 3-5 years of experience in independent scientific research in an academic or pharmaceutical research organization. A strong track record of publication in high-quality, peer-reviewed professional journals is a plus.

We offer a competitive salary and excellent benefits, including medical/dental insurance, 401(k) plan and our LIVE FOR LIFE Wellness Program with on-site fitness center. Please forward a copy of your curriculum vitae suitable for scanning into our database (i.e., clean/clear, no graphics and preferably unfolded) to: Dept. 544, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

We are an equal opportunity employer and support diversity in the workplace.



**THE R.W. JOHNSON  
PHARMACEUTICAL RESEARCH INSTITUTE**

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## Homer T. Hirst III Professorship of Oncology in Pathology Cornell University Medical College New York, NY

Cornell University Medical College (CUMC) invites applications and nominations of outstanding researchers for an Endowed Professorship in Oncological Pathology. The area of research should be related to the broad area of tumor biology. Genetic approaches to metastatic disease is a potential area of interest. The primary appointment will be in the Department of Pathology. The department is under the leadership of Daniel M. Knowles, M.D. and it now has 30 full-time faculty members. Ongoing collaborations exist between CUMC, Memorial/Sloan-Kettering Cancer Center and The Rockefeller University. These three institutions also participate in the joint tri-institutional MD/PhD program.

In addition to its anatomic and laboratory diagnostic functions, the Department will have 3 major research foci: vascular biology, immunobiology, and this new area, tumor biology/carcinogens. Therefore, we are seeking an outstanding individual who has an international reputation for excellence in research and teaching. The candidate must also possess exceptional interpersonal and grantsmanship skills. The successful candidate will also have documented abilities to foster collaborative and interdisciplinary initiatives, and a commitment to develop a group in tumor biology within the department. Candidates will hold either an MD, Ph.D., or MD/Ph.D. They are expected to have credentials sufficient to be appointed at the tenured, full professor level.

An attractive, competitive salary, start-up package and newly renovated research space will be offered. Candidate screening will begin in January/February and continue until the position is filled.

Direct nominations or applications with a letter of interest, curriculum vitae, and names, addresses and telephone numbers of at least three references should be sent to:

**Dr. David P. Hajjar**  
Chair, Search Committee - H.T. Hirst Professorship  
Cornell University Medical College  
1300 York Avenue  
New York, NY 10021

*Cornell University Medical College is an  
Equal Opportunity/Affirmative Action Employer.  
Women and minority candidates are encouraged to apply.*

## THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

### Chairperson, Department of Medical Biochemistry

The Ohio State University College of Medicine has reinitiated the search for applications and nominations for the position of chairperson of the Department of Medical Biochemistry. The department has 15 full-time faculty recognized for research strengths in cellular, molecular and physical biochemistry. It participates in the education of medical and dental students and in an integrated biochemistry graduate program comprised of biochemists in departments and centers throughout The Ohio State University campus. Medical Biochemistry is one of five basic science departments in the College of Medicine. The college is part of a nationally-ranked comprehensive health sciences center. This recruitment is a priority of the new Dean of the College of Medicine, Dr. Bernadine Healy. A generous start-up package and potential for departmental growth is anticipated.

A Ph.D. and/or M.D. or equivalent degree and qualifications for appointment at the rank of professor are required. The successful candidate will also have a distinguished record of scholarly productivity, an internationally recognized research program, aptitude for administering an integrated academic program and demonstrated leadership and organizational skills. Any area of research specialization in biochemistry will be considered, including multidisciplinary orientation to the molecular basis of disease.

Review of applications will begin on March 1, 1996. The search will continue until the position is filled. Materials, including an application letter, full curriculum vitae and the names and addresses of four references, should be directed to **Thomas N. Hansen, M.D., Chair, Search Committee, Medical Director's Office, Children's Hospital, 700 Children's Drive, Columbus, Ohio 43205.**

*The Ohio State University is an affirmative action/equal opportunity employer. Women and under-represented minorities are encouraged to apply.*

## DEPARTMENT OF PATHOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Pathology, University of California, Irvine, anticipates openings with starting dates between January 1, 1996 and December 31, 1996 in (i) Faculty positions (Assistant/Associate/Full Professors in the adjunct and clinical series), and (ii) Research positions (Researcher, Specialist and Postgraduate Researcher series). The current faculty and their research interests are:

P. Carpenter	Oncogenes and metastasis-associated genes in breast and ovarian cancer
B. Choi	Neurobiology, neurotoxicology
L. M. de la Maza	<i>Chlamydia trachomatis</i> : immunopathology and vaccine development
J. Emerson	NMR and Alzheimer's disease
J. Hiserodt	Immunology and immunotherapy of malignancy
Y. Kikkawa	Pulmonary biology, P450 and free radical pathology
R. Newman	Organ transplantation
E. Peterson	<i>Chlamydia trachomatis</i> : immunopathology and pathogenicity
W. E. Robinson	HIV/SIV: Immunopathology and Experimental Therapeutics
M. Samoszuk	Hematopathology, cytokines in lymphomas, new therapeutics
M. Selsted	Host defense mechanisms in granulocytes; mucosal immunity; antimicrobial function of the lung
J. Thompson	Hematopathology, Immunotherapy of malignancy
N-S. Wang	Ultrastructure and Pathology of lung and pleura

**Candidates should send CV to Yutaka Kikkawa, M.D., Professor and Chair, Department of Pathology, UCI-COM, D440 Med Sci, Irvine, CA 92717.**

*The University of California, Irvine: rooted in education, enriched by diversity.*



### CHAIRPERSON, DEPARTMENT OF PEDIATRICS

The School of Medicine and Biomedical Sciences, State University of New York at Buffalo, is seeking candidates for the A. Conger Good-year Chairman of Pediatrics. Applicants for the position of tenured professor and chair of the department of pediatrics will have overall responsibilities for pediatrics in the academic medical center which includes the Children's Hospital of Buffalo, a free-standing children's hospital, and seven additional teaching hospitals affiliated with the State University of New York at Buffalo. We are seeking candidates with proven leadership ability, administrative experience, and academic excellence to provide leadership to the Department of Pediatrics. Candidates must be certified by the American Board of Pediatrics, or equivalent, and be recognized as a national or international leader in academic medicine. Qualifications of the candidate for the rank of professor with tenure include distinction in pediatrics as well as demonstrated leadership in patient care, research, teaching and administration. *The State University of New York at Buffalo is an Affirmative Action/Equal Opportunity Employer and is especially interested in identifying qualified women and minority candidates for this position. The State University of New York at Buffalo does not discriminate on the basis of age, creed, color, handicap, national origin, race, religion, sex, marital or veteran status.* Nominations and applications, including a curriculum vitae, should be sent to: **Michael E. Cohen, M.D., Chair, Search Committee for Pediatrics, Department of Neurology, Children's Hospital of Buffalo, 219 Bryant Street, Buffalo, NY 14222.**

### BOTANIST

Tenure-track position at **Assistant Professor** level to begin September 1996; Ph.D. and postdoctoral experience required. The Biology Department at Western Washington University invites applications from botanists with expertise in plant growth and development, including those studying the cellular or developmental aspects of plant responses to the environment. Teaching responsibilities will include introductory plant biology, an intermediate level biology course, and advanced courses in the area of expertise. The successful applicant will be expected to maintain an active research program involving advanced undergraduate and graduate (MS) students and to seek extramural funding. The department is committed to excellence in undergraduate teaching, with research playing an important role in the educational process. The Biology Department recently occupied a new four-story building; a greenhouse is scheduled for completion in Summer 1996. Western Washington University is located in northwest Washington, near the foothills of the Cascade Mountains. Applicants should submit a curriculum vitae, concise statements of interests and accomplishments in both teaching and research, a transcript or list of science coursework, and the names, addresses, and phone numbers of four references to: **David Morgan, Search Committee Chair, Department of Biology, MS 9160, Western Washington University, Bellingham, WA 98225-9160. Phone: (360) 650-3627; FAX: (360) 650-3148; e-mail: morgan@biol.wvu.edu. Further information at <http://www.wvu.edu/~biology.html>.** We will begin reviewing applications on 2 February 96, and the position will remain open until filled. *An affirmative action/equal opportunity employer.*

**The National Center for Toxicological Research (NCTR)** announces an opening for the position of **Associate Director for Research**. Applications must be received by March 31, 1996. NCTR is part of the U.S. Department of Health and Human Services/Food and Drug Administration (FDA) and is located 35 miles south of Little Rock, Arkansas. The mission of NCTR is to conduct peer-reviewed scientific research that supports and anticipates the FDA's current and future regulatory needs. This involves fundamental and applied research specifically designed to define biological mechanisms of action underlying the toxicity of products regulated by the FDA. This research is aimed at developing methods to improve assessment of human exposure, susceptibility, and risk. This position exercises administrative and programmatic control over the Office of Research. The Office includes approximately 150 research and support staff, with about 100 doctoral-level investigators. This opening is a civil service position in the Senior Biomedical Research Service (SBRS). The SBRS salary range is \$67,941 to \$148,400. Applicants must have a doctorate in medicine, veterinary medicine, biology, microbiology, pharmacology, physiology, chemistry or closely related physical or biological science; demonstrated experience involving research, analysis and evaluation of scientific data related to the study of the biological effects of potentially toxic chemical substances and chemical toxicants found in the environment, and strong managerial experience or potential. Submit application material to **John Anderson, Office of Human Resources and Management Services, Food and Drug Administration, Room 7B-32, HFA-408, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857.** For further information contact Mr. Anderson by phone on (301) 4431755 or by fax on (301) 443-6703.

## ASSOCIATE SCIENTIST

**Athena Neurosciences, Inc.** is an established biotechnology-based company committed to the discovery & development of new products to diagnose and treat diseases of the central nervous system. We currently have an associate scientist position open at our South San Francisco facility.

This position involves investigation of CNS disorders and includes characterization of a transgenic model of Alzheimer's Disease. The position requires at least two years' experience in quantitative *in situ* hybridization and autoradiography using CNS tissue. A background in CNS anatomy and experience with other morphologically-based quantitative imaging techniques, histochemistry, and immunohistochemistry is highly desirable.

Athena offers competitive salaries and benefits. Please send resume to: **Athena Neurosciences, Inc., HR Dept., Attn: Job# S0112-AS, 800 Gateway Blvd., South San Francisco, CA 94080. EOE**



## DIRECTOR

**Center for Accelerator Mass Spectrometry (CAMS)  
Environmental Programs Directorate  
Lawrence Livermore National Laboratory (LLNL)**

The Lawrence Livermore National Laboratory is seeking a Director for the Center for Accelerator Mass Spectrometry (CAMS), an independent research organization within the Environmental Programs Directorate.

The Center operates the world's most versatile and productive AMS facility in execution of research programs in biomedicine, climate research, the geosciences, industrial and technological applications, and arms control. Collaborative programs with the nine campuses of the University of California, and other domestic and international academic, agency and industrial researchers include archaeology, oceanography, the geosciences, and a broad range of the biosciences and clinical applications. The Center is committed to ongoing development of its current spectrometer and is planning to add one or more specialized AMS spectrometers as part of the evolution of its research program. In addition to its AMS capabilities, the Center shares and develops with Sandia California impressive tools for ion microprobe analysis and general nuclear analytical techniques.

We seek candidates with a demonstrated record of research innovation in nuclear, earth or life sciences and with entrepreneurial accomplishments in leading multidisciplinary research organizations. An earned Ph.D. in one of the above disciplines is essential. The position is available immediately. For information contact Jay Davis, e-mail: [jcd@llnl.gov](mailto:jcd@llnl.gov). US Citizenship and the ability obtain a Department of Energy "Q" clearance are required.

LLNL offers a challenging work environment, unique collaborative opportunities with the nine University of California campuses, and a competitive salary/benefits package. Interested applicants please send a resume, three letters of references and a brief statement of research interests to: **Rene Sorensen, Recruiting and Employment Division, Dept. AJSC1C6RS, Lawrence Livermore National Laboratory, P.O. Box 5510, Livermore, CA 94551-5510.** We are proud to be an Equal Opportunity Employer. M/F/D/V.

University of California



### UNIVERSITY OF VERMONT ASSISTANT/ASSOCIATE PROFESSOR MICROBIAL PATHOGENESIS

The Department of Microbiology and Molecular Genetics invites applications for a tenure-track faculty position. We are soliciting applicants who have demonstrated superior talent and productivity in the area of molecular mechanisms of microbial or viral pathogenesis, including host-pathogen interactions. Applicants must hold a doctoral degree in microbiology or related discipline and must have postdoctoral research experience. The successful candidate will be expected to establish a vigorous, independent research program and to participate in teaching microbiology at the undergraduate, graduate and/or medical school level. Details about departmental research interests and the University may be viewed on the Internet at <http://salus.med.uvm.edu/mmg/mmg.html>. Applicants should submit a letter of interest accompanied by a curriculum vitae, a description of research and teaching interests and should arrange for three letters of reference sent to: **Dr. Paula Fives-Taylor, Professor and Search Committee Chair, Dept. of Microbiology and Molecular Genetics, Stafford Hall, University of Vermont, Burlington, VT 05405.** Review of applications will begin immediately and continue until the position is filled. *The University of Vermont is an equal opportunity, affirmative action employer. Women and minorities are encouraged to apply.*

### Aquatic Microbial Ecologist

The Wadsworth Center, New York State Department of Health, seeks an aquatic microbial ecologist with a strong background in physiology and/or molecular biology of algae and/or bacteria, and with grantsmanship to develop a new research program on drinking and surface water systems or biofilms. We particularly encourage applications from candidates who use innovative approaches to address public health problems in a broad sense. Salary will be commensurate with experience. The successful candidate will also be eligible for faculty appointment in the School of Public Health, State University of New York at Albany. The Wadsworth Center is a comprehensive public health laboratory with a staff of 800 which includes 170 Ph.D.-level research scientists. Letter of application, accompanied by a curriculum vitae and names of three references should be sent by February 23, 1996 to **Dr. G. Y. Rhee, Wadsworth Center, New York State Department of Health, PO Box 509, Albany, NY 12201-0509.**

*The New York State Department of Health is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply.*

### FACULTY POSITION PLANT PHYSIOLOGY/PLANT MOLECULAR BIOLOGY

The Institute of Paper Science and Technology (IPST) is seeking a Plant Scientist to augment their Forest Biology Program by establishing a research program based on the application of modern techniques to problems in plant physiology. This program should attract external funding. The Institutes' Forest Biology Program is currently focused on the multiplication of softwoods through somatic embryogenesis and the improvement of softwoods and hardwoods through molecular biology. Candidates with a Ph.D. in Plant Physiology, Plant Molecular Biology, Genetics or related areas are encouraged to apply. IPST has extensive, well equipped Biochemistry and Plant Physiology laboratories. Start-up funds are available. This position includes research, teaching, and the direction of graduate students.

IPST is a Research University/Graduate School with strong industrial links. The current Forest Biology program at IPST consists of four faculty members, five regular technical staff plus postdocs and graduate students. Funding comes from competitive grants and contracts and is now supported annually by \$500,000 of internal funds. The Institute is located on the Georgia Tech campus in midtown Atlanta. Through the IPST-Georgia Tech Alliance, IPST has experienced substantial growth in academic programs, research activities, and infrastructure support. Interested candidates should send resume, transcript, and three professional references to: **Ms. Patricia Hughes, IPST Human Resources Manager, 500 10th Street., NW, Atlanta, GA 30318-5794 or Fax to (404) 894-5302.**

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# European Science Education

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**SCIENCE**

**Department of Pharmacology  
University of Minnesota Medical School  
TENURE/TRACK POSITIONS  
(Assistant Professor, Associate Professor and Professor)**

Applications are invited for **TENURE/TRACK FACULTY POSITIONS** in the Department of Pharmacology, University of Minnesota Medical School. Successful candidates are expected to establish an outstanding, independent research program, in addition to participating in team-taught undergraduate/graduate medical courses in the area of molecular pharmacology. Requirements for **Assistant Professor** positions include a Ph.D. in Pharmacology or other basic medical sciences or an M.D., and at least 2 years of postdoctoral research experience. Candidates with a strong research background and experience in using state-of-the-art approaches involving cellular, molecular, genetic or biophysical techniques to study problems relevant to pharmacological sciences are preferred. Applicants must have demonstrated involvement in research and published in leading peer reviewed journals.

Appointments as **Associate Professor (Tenured)** or **Professor (Tenured)** will be considered for applicants with professional distinction in published research, teaching and evidence of consistently attracting extramural funding for research. Appointments at these ranks must meet the minimum qualifications established by the University of Minnesota.

Applicants should indicate the rank they are applying for and send a copy of their curriculum vitae, reprints of important publications, a statement of research plans and names of three references to: **Dr. S. Ramakrishnan, Chairperson of Search Committee, Department of Pharmacology, 3-249 Millard Hall, University of Minnesota, 435 Delaware Street, S.E., Minneapolis, MN 55455. Deadline for receipt of applications is March 31, 1996. University of Minnesota is an equal opportunity educator/ employer and offers an excellent academic research environment.**

For further information about the Department of Pharmacology and its programs, access the Department's home page (<http://brain.med.umn.edu/index.html>) on the Web.

**MICROBIOLOGY/GENETICS**

**Indiana University Kokomo**

The Department of Biological & Physical Sciences invites applications for a tenure-track position at the Assistant Professor level commencing August 1996. Responsibilities include teaching, at the undergraduate level, Microbiology (both lecture and lab) for nursing and allied health students, and, on an alternating year basis, upper level courses in Microbiology, Genetics and an additional course for non-majors. Although teaching is a prime responsibility, research and service are also required. Publication is expected,

Desired qualifications include an earned doctorate, and a strong commitment to undergraduate teaching, research and publication. Preference will be given to individuals with a strong emphasis in microbiology. Salary is competitive and includes an excellent fringe benefits package. Although the review process will commence February 12, 1996, applications will be accepted until the position is filled.

Send resume, copies of undergraduate and graduate transcripts, three letters of reference, and telephone numbers of references to:

**Dr. Robert Roales  
Chairperson, Department of Biological  
& Physical Sciences  
Indiana University Kokomo  
P.O. Box 9003  
Kokomo, IN 46904-9003  
E-mail: RRoales@IUKFS1.IUK.Indiana.EDU**

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# CANCER PREVENTION RESEARCHER

The H. Lee Moffitt Cancer & Research Institute and the College of Medicine at the University of South Florida are seeking applicants for a tenure-earning Associate or Full Professor faculty position for a laboratory based independent researcher with expertise in translational research. This position will be in the Cancer Prevention Program.

The successful candidate will be a doctoral level (MD or Ph.D.) investigator who will have responsibility for conducting laboratory research in the area of molecular and immuno-histochemical markers for the early detection of preneoplastic conditions and early cancer. This research should lead to the design of interventions to target these markers with chemopreventive agents. The successful candidate will also have an established track record of obtaining external funding and five years academic or research experience at, or comparable to, the Assistant Professor level. The position will include heading up the Molecular Core Laboratory designed to support marker studies initiated by clinical researchers at the Cancer Center.

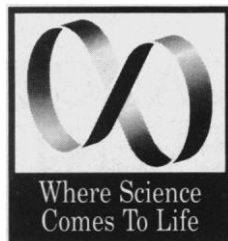
H. Lee Moffitt Cancer Center & Research Institute, adjacent to the Health Sciences Center on the University of South Florida's Tampa Campus includes a modern, 162-bed inpatient and ambulatory facility for children and adults, a 25-bed bone marrow transplantation program, a recently established high volume screening program including a fixed site and mobile unit and a new basic research facility.

Send inquiries and current curriculum vitae to Gail Shaw, M.D., Program Leader, Office of Faculty Recruitment, 12902 Magnolia Drive, Tampa, Florida 33612. Applicants must be post-marked by deadline date of February 8, 1996.



**H. LEE MOFFITT CANCER CENTER  
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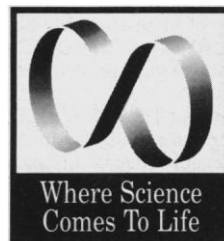
#### **FOR MORE INFORMATION, CONTACT**

**MAIL:** Kevin Bullock  
AMSIE'96 Job Fair, 1333 H Street, NW,  
Washington, DC 20005

**FAX:** (202) 289-4021

**E-mail:** [kbullock@aaas.org](mailto:kbullock@aaas.org)

**American Association for the Advancement of Science**



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**MAIL:** Kevin Bullock  
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Washington, DC 20005

**PHONE:** (202) 326-7049

**FAX:** (202) 289-4021

**E-mail:** [kbullock@aaas.org](mailto:kbullock@aaas.org)

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# AMSIE'96 JOB FAIR

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



## CANDIDATE Advance Registration Form

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File No. \_\_\_\_\_

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City \_\_\_\_\_ State/Country \_\_\_\_\_ Zip/Post Code \_\_\_\_\_

Phone-B (\_\_\_\_\_) \_\_\_\_\_ H (\_\_\_\_\_) \_\_\_\_\_

EMAIL \_\_\_\_\_ Visa Type (if non-US citizen) \_\_\_\_\_

Do you plan to attend AMSIE'96? ☐ Yes ☐ No AAAS Membership No. \_\_\_\_\_  
(No. found on SCIENCE label. NEW member enter new)

### FEES

#### Member or AMSIE'96 Registrant

#### Non-Member or Non-Registrant

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Candidates Not Attending FREE \$10

Payment Method: ☐ Check enclosed ☐ VISA ☐ MasterCard Card # \_\_\_\_\_

Signature \_\_\_\_\_ Expiry Date \_\_\_\_\_

### DISCIPLINE (please check the one option which best describes your primary discipline)

#### Agricultural, Biological, & Medical Sciences

- |  |  |                                       |  |
|--|--|---------------------------------------|--|
| <input type="checkbox"/> Agric. Sciences | <input type="checkbox"/> Biochemistry  | <input type="checkbox"/> Botany       | <input type="checkbox"/> Cell Biology    |
| <input type="checkbox"/> Ecology         | <input type="checkbox"/> Endocrinology | <input type="checkbox"/> Genetics     | <input type="checkbox"/> Immunology      |
| <input type="checkbox"/> Marine Biology  | <input type="checkbox"/> Medicine      | <input type="checkbox"/> Microbiology | <input type="checkbox"/> Molecular Biol. |
| <input type="checkbox"/> Neuroscience    | <input type="checkbox"/> Pharmacology  | <input type="checkbox"/> Physiology   | <input type="checkbox"/> Zoology         |

#### Chemistry

- |                                     |                                       |                                    |                                  |
|-------------------------------------|---------------------------------------|------------------------------------|----------------------------------|
| <input type="checkbox"/> Analytical | <input type="checkbox"/> Biochemistry | <input type="checkbox"/> Inorganic | <input type="checkbox"/> Nuclear |
| <input type="checkbox"/> Organic    | <input type="checkbox"/> Physical     |                                    |                                  |

#### Earth Sciences

- |                                      |  |                                       |
|--------------------------------------|--|---------------------------------------|
| <input type="checkbox"/> Atmospheric | <input type="checkbox"/> Geology/Soil Sci. | <input type="checkbox"/> Oceanography |
|--------------------------------------|--|---------------------------------------|

#### Engineering

- |                                       |                                     |                                   |  |
|---------------------------------------|-------------------------------------|-----------------------------------|--|
| <input type="checkbox"/> Aeronautical | <input type="checkbox"/> Biomedical | <input type="checkbox"/> Chemical | <input type="checkbox"/> Electrical/Electronic |
| <input type="checkbox"/> Nuclear      |                                     |                                   |  |

#### Mathematics & Computer Science

- |   |                                      |                                     |
|---|--------------------------------------|-------------------------------------|
| <input type="checkbox"/> Computer Science | <input type="checkbox"/> Mathematics | <input type="checkbox"/> Statistics |
|---|--------------------------------------|-------------------------------------|

#### Physics & Astronomy

- |   |   |   |                                  |
|---|---|---|----------------------------------|
| <input type="checkbox"/> Astron./Astrophys. | <input type="checkbox"/> Atomic/Molecular | <input type="checkbox"/> Plasma           | <input type="checkbox"/> Nuclear |
| <input type="checkbox"/> Optics & Laser     | <input type="checkbox"/> Particle         | <input type="checkbox"/> Condensed Matter |                                  |

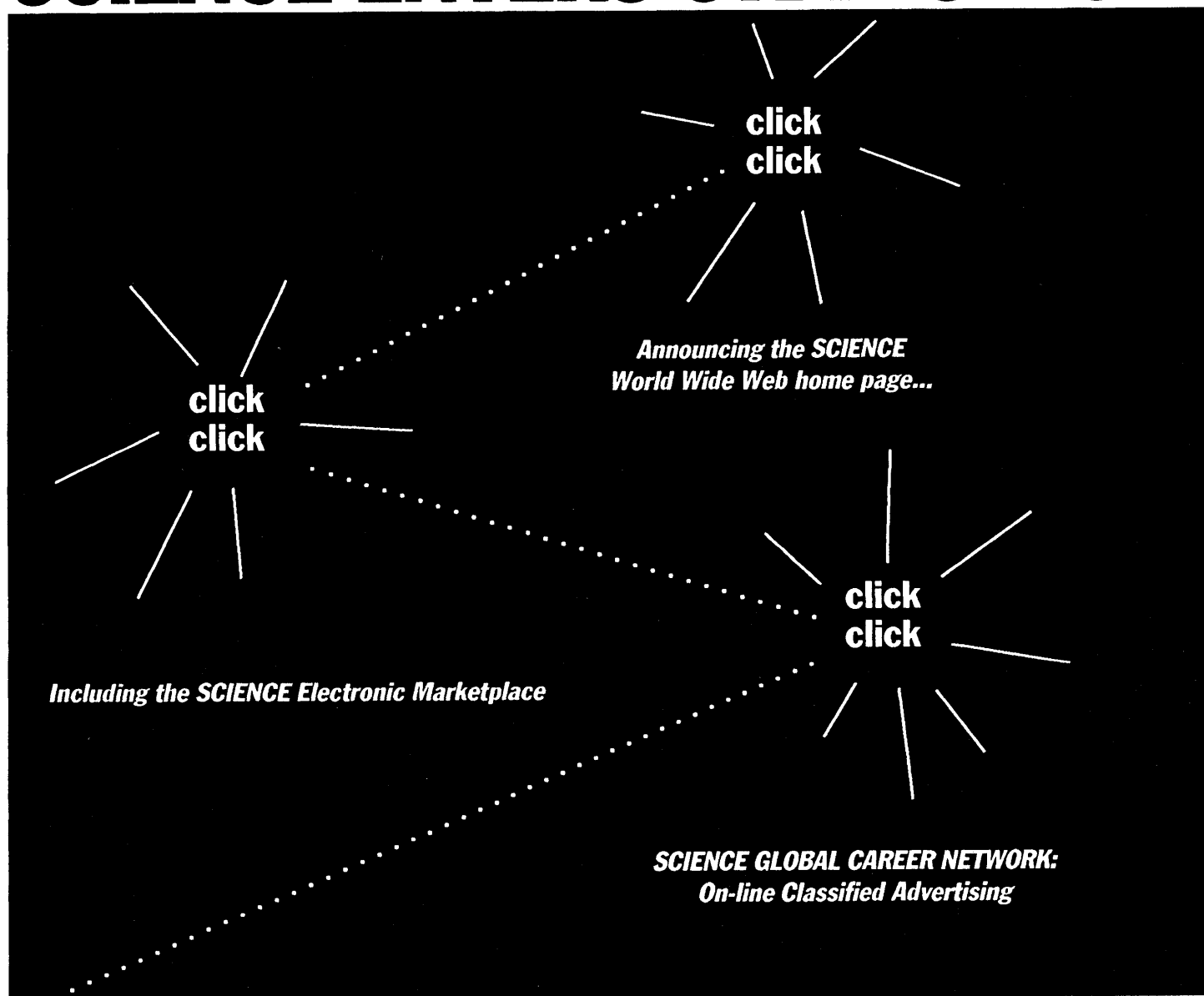
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- |  |   |  |                                     |
|--|---|--|-------------------------------------|
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| <input type="checkbox"/> Language Sciences | <input type="checkbox"/> Science Policy   | <input type="checkbox"/> History & Philosophy of Science |                                     |

**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.

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Our newly formed department of Computational and Structural Sciences now needs an NMR Spectroscopist to develop multidimensional NMR techniques and apply them to drug discovery research. This department will occupy modern facilities within the new central research and development facilities at Harlow, which will be completed in 1996. State-of-the-art instrumentation, including 500 and 600 MHz spectrometers and well-equipped data analysis and support facilities complement the research enterprise.

The successful candidate will have a PhD in Physics, Chemistry or Biochemistry and a sound knowledge of

NMR theory combined with a strong experimental background in multidimensional techniques. This position ideally suits someone with postdoctoral experience, and whose background includes applications of NMR methods to investigations in biological systems including proteins, nucleic acids, their complexes and/or protein-ligand interactions.

Our remuneration package incorporates a highly competitive salary and wide range of benefits including bonus, pension and medical plans, share-matching scheme, profit-related pay, generous holidays and good sports and social facilities. Relocation assistance will be available where applicable.

If you can bring your own important contribution to this vital area, please send your full cv, quoting Ref: NMRS/DE, to The Human Resources Manager, New Frontiers Science Park (North), Third Avenue, Harlow, Essex CM19 5AD.



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Am Institut für Physikalische und Theoretische Chemie, Naturwissenschaftliche Fakultät II (Biologie, Chemie und Pharmazie), ist zum 1. 10. 1997 eine

### C 4-Professur für Theoretische Chemie

(Lehrstuhl; Nachfolger Prof. Dr. J. Ladik)

wieder zu besetzen.

Zu den Aufgaben gehört, das Fachgebiet in Forschung und Lehre angemessen zu vertreten. Es werden Bewerberinnen/Bewerber gesucht, die aktuelle Gebiete der theoretischen Chemie bearbeiten, insbesondere die Theorie der Festkörper und/oder der Oberflächen sowie der Katalyse. Die Bereitschaft zur intensiven Zusammenarbeit mit den übrigen Arbeitsgruppen der Fakultät wird erwartet.

Einstellungsvoraussetzungen sind ein abgeschlossenes Hochschulstudium, pädagogische Eignung, Promotion und Habilitation oder der Nachweis gleichwertiger wissenschaftlicher Leistungen.

Zum Zeitpunkt der Ernennung dürfen Bewerberinnen/Bewerber das 52. Lebensjahr noch nicht vollendet haben.

Die Universität Erlangen-Nürnberg strebt eine Erhöhung des Anteils von Frauen in Forschung und Lehre an und bittet deshalb Wissenschaftlerinnen nachdrücklich um ihre Bewerbung.

Bewerbungen von Schwerbehinderten werden bei gleicher Eignung bevorzugt berücksichtigt.

Bewerbungen mit den üblichen Unterlagen (Lebenslauf, Verzeichnis der Schriften und Lehrveranstaltungen, beglaubigte Kopien von Zeugnissen und Urkunden) werden bis zum **15. Februar 1996** an den Dekan der Naturwissenschaftlichen Fakultät II (Biologie, Chemie und Pharmazie) der Universität Erlangen-Nürnberg, Universitätsstraße 40, D-91054 Erlangen, erbeten.

**Friedrich-Alexander-Universität  
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## Pharmacologist

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You demonstrate enthusiasm, dynamism and you wish to invest yourself in a stimulating scientific environment. Excellent interpersonal skills are necessary to manage a small team of technicians.

If you are interested in this post, please submit your application file (Curriculum Vitae, handwritten letter) to **PUBLIVAL/1010- 27 Route des Gardes - 92190 Meudon - (FRANCE)**

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Cambridge, MA on the MIT Campus in Cambridge

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March 2: 12:00 pm - 4:00 pm

San Francisco, CA on the Stanford Campus in Palo Alto, May 3-4

La Jolla, CA at The Scripps Research Institute, October 4-5

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# FUNDAMENTAL ISSUES IN VISION RESEARCH: MOLECULAR AND CELL BIOLOGICAL APPROACHES

sponsored by the National Eye Institute, NIH

August 11 - 24, 1996

This laboratory/lecture course is intended for graduate students and postdoctoral fellows currently training in molecular biology, cell biology, and neurosciences who are **not** currently involved in vision research, and others in **early** stages of vision research who wish to broaden their interest in the field. Selected students in NEI-sponsored training grants who are now involved in research in related, but non-vision projects, may apply. Limited to 20 students.

The goal of this course is to present, in depth, the exciting theoretical and experimental approaches to fundamental research problems in vision so that the students can evaluate the potential for active research in this field. The faculty will describe and direct laboratories of ongoing research in the tissues of the eye of invertebrates and vertebrates. Subjects will be presented in tutorial, lecture, seminar and laboratory formats, emphasizing close contact between students and faculty in each subject area. A typical day will include a tutorial describing a specific disease entity followed by lectures from basic scientists studying molecular and cellular biological problems in a tissue. Afternoons and evenings will be devoted to laboratory exercises or demonstrations and seminars.

*Costs of attending the course, including travel, housing, and meals at the MBL will be supported by a fellowship fund from NEI.*

**Director:** David S. Papernaster, University of Texas Health Science Center, San Antonio. **Associate Directors:** David C. Beebe, Washington University; John E. Dowling, Harvard University; Joram Patigorsky, National Eye Institute; and Elio Raviola, Harvard Medical School.

**Application Deadline:** March 15 (Early admission is possible for outstanding candidates whose applications are received prior to the March 15 deadline).

**For application forms contact:** Carol Hamel, Admissions Coordinator, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543-1015; Tel: (508) 289-7401, ext 401; Internet: [admissions@mbi.edu](mailto:admissions@mbi.edu); World Wide Web: <http://www.mbl.edu>.



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The General Secretariat of The King Faisal International Prize is pleased to invite universities, scientific societies, research centres, and other learned circles throughout the world to nominate qualified candidates for the above Prize. The 1997 topic is:

### PHYSICS

#### Nomination Conditions:

##### 1. Nominated work must:

- a) be published and original;
- b) represent a contribution of the highest distinction;
- c) benefit mankind and advance scientific knowledge.

##### 2. Nominations must include;

- a) an official letter of nomination detailing the scientific justification for the nomination;
- b) a typed CV detailing the nominee's academic background and experience and listing all the nominee's published works;
- c) six (6) copies of each nominated work;

*Nominated works will not be returned.*

- d) three (3) recent colour photos;
- e) full contact details.

*Items b-e may be submitted by the nominating body or the nominee*

##### 3. Nominations must be submitted by official nominating bodies as specified herein and not by individuals or political parties.

In order for nominees to qualify, *all* conditions must be fulfilled. Required documentation must be received by The King Faisal International Prize **no later than 31 May 1996**.

The decision of the Prize's Selection Committee is final. Winners will be announced in January 1997 and will be honored at an official ceremony later in the year in Riyadh.

Each winner receives:

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*Joint winners share the cash prize.*

Please send nominations by airmail to:

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## ANNOUNCEMENT

### WORKSHOP ON TOXICITY OF ALTERNATIVES TO CHLOROFLUOROCARBONS (CFCs)

The National Research Council's Committee on Toxicology will hold a one and one-half day workshop on the toxicity of alternatives to chlorofluorocarbons on March 7 to 8, 1996 in Irvine, California. The workshop will evaluate all aspects of toxicity of CFC substitutes with emphasis on cardiac sensitization. The workshop is being held as a satellite meeting of the Society of Toxicology meeting in Anaheim, California. There is no charge for attending the workshop, but preregistration is encouraged due to limited space. For further details, contact: Dr. Margaret McVey, National Research Council, 2101 Constitution Avenue NW, Washington, DC 20418. Telephone: 202-334-2545; FAX: 202-334-2752; Email: mmcvey@nas.edu.

## COURSES AND TRAINING

**MOLECULAR BIOLOGY** for Teaching College Faculty. A five-day project-based **LABORATORY COURSE** presenting fundamental molecular techniques including restriction analysis, hybridization and PCR. Designed for teaching faculty. July 22 to 26, 1996 at Elon College in Burlington, North Carolina, with a possible second session. \$1,000 fee includes room and board. Application deadline: April 1, 1996. Sponsored by Elon College and Carolina Biological Supply Company. Contact: Dr. Helen Kreuzer. Telephone: 910-538-6374.

### "MEMORY: RECORDING EXPERIENCE IN CELLS AND CIRCUITS"

Sponsored by the National Academy of Sciences. February 17 to 20, 1996, Arnold and Mabel Beckman Center in Irvine, California. Registration fee: \$175 by February 1, 1996. For more information contact Michelle Pizzuti, Section of Neurobiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510, USA. Email: michelle.pizzuti@qm.yale.edu or on World Wide Web at the following url: <http://info.med.yale.edu/neurobio/memory>.

## SYMPOSIUM

**GLOBAL GENETIC RESOURCES:**  
Access, Ownership and Intellectual Property Rights  
Beltsville, Maryland, May 19-22, 1996  
Association of Systematics Collections/USDA/ARS

For information: Beltsville Symposium XXI, Attn: Virginia Hupfer, Building 003, Room 204, 10300 Baltimore Avenue, Beltsville, MD 20705. Telephone: 301-504-6108; FAX: 301-504-6357, Email: mbohning@ars-grin.gov.

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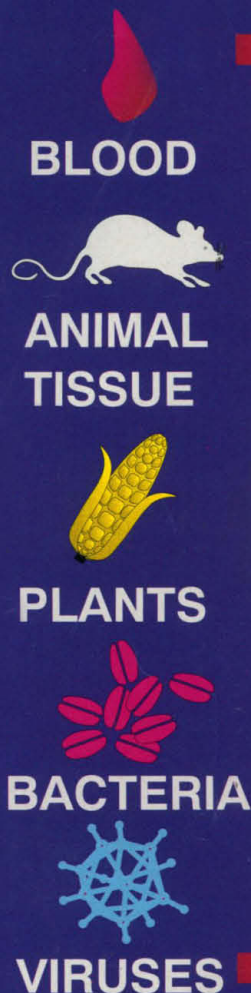
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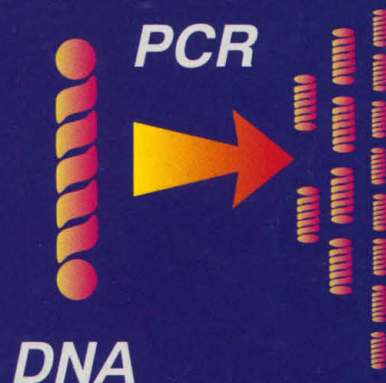
1993  
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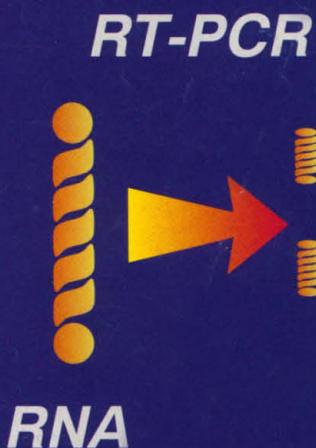
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D	T	G	R	O	A	L	P	H	A	I	3	0	9	I	U	P	I	E	0	M	E
S	E	E	O	4	H	E	R	E	G	U	L	I	N	D	I	J	F	M	P	O	D
Y	R	S	M	F	X	I	N	T	E	R	L	E	U	K	I	N	8	C	L	R	J
S	L	A	B	G	P	G	R	O	G	A	M	M	A	I	W	D	N	E	E	N	V
T	E	R	O	F	A	R	6	F	G	F	9	X	N	N	P	O	O	L	I	E	X
E	U	E	P	5	H	O	C	Y	T	O	K	I	N	E	S	M	F	L	O	C	P
M	K	F	O	L	P	B	N	H	U	I	L	2	Y	3	N	G	E	F	T	R	2
S	I	I	I	I	L	E	T	A	F	U	Q	7	L	I	F	H	J	A	R	O	S
5	N	C	E	V	A	T	F	F	G	E	V	I	T	A	T	I	G	C	O	S	S
Q	1	U	T	K	F	A	J	E	H	Q	P	A	C	O	C	L	C	T	P	I	I
H	X	L	I	J	G	N	R	K	D	1	T	I	D	Y	I	1	S	O	H	S	D
R	G	D	N	F	T	I	L	1	0	S	D	N	M	W	S	5	F	R	I	F	O
N	E	R	Y	T	H	R	O	P	O	I	E	T	I	N	A	P	3	T	N	A	B
A	4	Y	6	P	Z	W	H	C	C	A	Z	E	G	F	B	D	N	F	K	C	I
W	L	L	M	B	R	A	N	T	E	S	M	I	F	V	F	G	K	Q	Z	T	T
I	I	A	N	G	I	O	G	E	N	I	N	H	B	E	G	F	N	T	4	O	N
L	P	L	A	C	E	N	T	A	G	R	O	W	T	H	F	A	C	T	O	R	A
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