

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

Robert Lee Hotz, Los Angeles
Times



Donald N. Langenberg

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

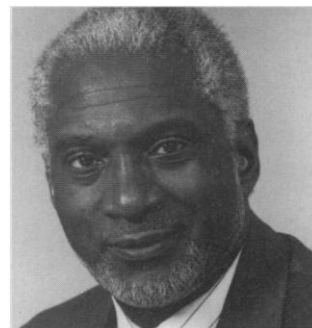
Jacqueline Barton, Cal Inst of
Tech



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

MEETING-AT-A-GLANCE

Time Schedule

All AM sessions: 8:30 AM - 11:30 AM (unless otherwise indicated)

All PM sessions: 2:30 PM - 5:30 PM (unless otherwise indicated)

TRACK	FRIDAY, 9TH	SATURDAY, 10TH	SUNDAY, 11TH	MONDAY, 12TH	TUESDAY, 13TH
Assessing and Managing Risk Hyatt	AM *Prudent Practices in Laboratory Handling and Disposal of Chemicals PM *Laboratory Research and Regulations: What Works? What Doesn't?	AM Innovative Chemical Separations and the Clean-up of National Nuclear Sites PM Siting Hazardous Facilities: Views on Fair Process and Outcome	AM Risk Assessment: The New Panacea; Regulatory Morass or Just a Tool? PM Science of Decision Making in a Complex World	AM Social Learning in the Management of Global Environmental Risks PM Assessing Health and Environmental Risks from Long-term Radiation Contamination in Chelyabinsk, Russia	AM *Biosafety: Issues of Risk and Responsibility in Biotechnology
Biological Diversity Conv Ctr Hyatt Stouffer	AM The Science of Biodiversity	PM The Ethics of Human Genetic Enhancement	AM Cultural Diversity in Psychological Structure and Functioning AM Building Evolutionary Trees: Evidence and Analysis AM/PM Coral Reefs: Global Change and Biodiversity Loss PM Diversity of Human Physiological Adaptability	AM/PM Heterochrony: Merging Evolutionary Perspectives in Paleanthropology, Paleontology, and Biology AM/PM Utilizing Africa's Genetic Affluence through Natural Products Research and Development	AM *The Microbial World: Foundation of the Biosphere AM Ethnogeriatrics: Biodiversity of Disease and Death Among Elderly People of Color PM 2:15PM-5:30 PM *Microbial Diversity: The Unseen Treasure
Educating for the Future Stouffer	AM Assessing Progress: Lessons Learned from Some Informal Science Education Programs AM Quantitative Literacy and Science Education PM Comprehensive School Health Programs: Promoting Public Health Through K-12 Education PM The National Science Foundation and Urban Science Education	AM From Curiosity to Science Through Linguistic Inquiry AM Science Literacy and Undergraduate Education PM Reforming Elementary Science Education in Urban Districts PM The Textbook of the Future	AM Assessing Systemic Reform from National Perspectives to Student Outcomes AM Bio-Resource Education: Giving Meaning to the Sciences of Life PM K-12 Math and Science Education: Is Change Really Taking Place? PM What Works: Successful University-based Outreach Programs	AM The Federal Role in Education: Effects of Changing Attitudes AM/PM Pseudoscience, Biology, and the Education of African American Students PM 2:30 PM - 4:00 PM Using Problem-based Learning to Bolster Achievement in Science for High School Students PM 4:00 PM - 5:30 PM Problem-based Learning in Undergraduate Science	AM "School Crossings" on the Information Superhighway PM Building Environmental Science Curricula for Youth and Undergraduates
Environment and Science on the Chesapeake Hyatt	AM The Middle Atlantic Environmental and Ecological Systems: Strategies for Sustainable Development		PM Preservation of Farmland and Open Space in the Northeast	AM Our Lancaster County (PA) Neighbors: The Old Order Amish PM *Biotechnology in Maryland PM The Restoration of the Chesapeake: A National Paradigm	
Environment and Sustainability Conv Ctr Hyatt	AM How Many People Can the Earth Support? PM Consumption and Population Growth: Twin Challenges to Sustainable Development	AM International Perspectives on Population, Consumption, and the Environment: Science and Policy Issues PM Limits to Agricultural Productivity PM Recovering Tropical Forests: Conservation, Development, and Local Communities	AM/PM The U.S. Environmental and Natural Resource Research Strategy	AM Dredged Material Disposal and Waste Management in the Nearshore Environment PM *Biotechnology and Aquaculture: Finfish Reproduction, Growth, and Development	AM *Engineering Functionality into Foods: Benefits for the Consumer
Examining Global Change Conv Ctr	PM The Open Exchange of Environmental Information	AM/PM Climate Change: The Second Assessment Report of the Intergovernmental Panel on Climate Change	AM Reconfigurations of Floodplain Management Since the Mid-continent Floods AM Remote Sensing of Climate Sensitive Parameters from Space PM Social Scientists Contributions to Remote Sensing	AM Assessing Ecological Implications of Changes in Climate PM Stratospheric Ozone Depletion by Halogens: Recent Achievements and Continuing Challenges	AM Surface Age Dating in Environmental Studies and Reconstruction of Global Change PM Interactions of Karst Geology and Ecology
Industry, Technology, and Engineering Conv Ctr Hyatt	PM Ocean Science and Engineering: Two Cultures Meet in the Ocean	AM Science and Technology in the NAFTA Framework PM High-Performance Work Transformations in Advanced Manufacturing	PM Technology Partnerships Between Industry and DOE Laboratories: How Do Taxpayers Benefit?	AM The Role of the DOE Energy Research Labs in Maintaining a Healthy Basic Science Capability AM/PM *Stimulating the Local Economy With High Tech Jobs: A Status Report	AM/PM New Directions in Industrial Research and Development
Information Age Hyatt Stouffer	AM *Frontier Applications in Computer Methods for Dynamic Systems	AM/PM *Artificial Life in Cyberspace PM National Information Infrastructure: Access and Use at the People and Policy Level	AM Building the Health Information Highway: Prognosis for a Cure PM Health Research and Education: Information for the Next Century	PM *Intelligent Agents: Software Assistants in Finding, Retrieving, and Analyzing Information	AM Cyberscience: Scientific Endeavors on the Internet
Mathematics and the Physical Sciences Conv Ctr Hyatt Stouffer	AM/PM Human Exploration of Space PM Recent Trends in Japanese Science and Technology	AM/PM *Frontiers of the Physical Sciences, 1996 AM The Universe: Views from Space PM *All Eyes on the Universe: Multi-wavelength Astrophysics	AM New Studies of Meteorites AM 9:30 AM - 11:30 AM *Mathematics for the Next Century: Knots PM 2:15 PM - 4:15 PM *Mathematics for the Next Century: Pattern Formation PM 4:15 PM - 6:15 PM *Mathematics for the Next Century: Geometric Arrangements PM The Discovery of Radioactivity: The Birth of Nuclear Physics PM The Search for Extraterrestrial Intelligence	AM *New Directions in Atomic, Molecular, and Optical Physics: Controlling Matter with Light AM Impact of the Global Positioning System (GPS) PM *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
Neuroscience, AM Behavior, and Language Conv Ctr Hyatt	AM The Architecture of the Sign in Signed Languages AM *The Developing Brain: Genes, Environment, and Behavior PM *The Brains Behind Human Communication: New Approaches to Research	AM *New Approaches to the Neurobiology of Language PM Sexual Differences in Brain and Behavior PM Language Deterioration or Language Evolution?: The View from Linguistics	AM/ PM Neural Network and Symbolic Approaches to Language	AM The Mind's Clocks: Circadian and Interval Timing	AM Limbic System's Mammalian Heritage: Normal/Deviating Emotion, Memory, and Homicidal Action
Policy, Science, and Engineering Conv Ctr Hyatt	AM Young Scientists in Transition: Career Challenges and Science Policy Implications PM *Science on the Editorial Page PM Attacking Science: Science Critics Meet Their Critics	AM Assessing Competitiveness in Research AM Implementation Strategies for "Platform for Action": The U.N. Conference on Women, Beijing	AM Science, Technology, and the States PM *Impacts of the 104th Congress on Science and Technology	AM Societal Returns to Investment in Research: New Directions, New Concerns PM *Communicating with Policymakers: Strategies for Scientists and Engineers PM Immigration of Scientists and Engineers: Social and Economic Impacts	AM *Science Careers in a Changing Economy AM The Critical Appraisal of Science and Technology Policy Analysis PM Innovative Collaboration: Student-Faculty Partnerships Explore Curriculum Development
Practice of Science Stouffer	AM Analytic Approaches to Fairness PM Advances in Peer Review Research	AM/ PM Not Just Mentors: Educating for the Responsible Conduct of Research	AM Research Ethics: We're All Accountable, So Who's Accounting? PM Ethical Standards for Science and Engineering		
Public Health and Medicine Conv Ctr Hyatt	AM Entertaining, Educational, or Alarming Messages? Public Health Issues and Popular Perceptions AM *Medicines Discovery in the 21st Century PM Our Changing Health Care System and the Future of the Academic Medical Center PM *Mathematical Problems in the Diagnosis and Treatment of Disease	AM *Scope of the AIDS Epidemic in the United States PM *AIDS: Epidemiology, Biology, and Prevention of HIV Infection PM *Molecular Medicine Enters the Mouth	AM 1995: A Year of Dramatic Shifts in Health Data Policy AM/ PM *Replacement Parts and Implantations for People AM Religious, Social, and Environment Factors that Influence Disease States PM Life Long Health: Beyond the Medical Model	AM/ PM *Global Change and Emerging Infectious Diseases	AM/ PM *Challenges in the Development of Medications for Opiate and Cocaine Addictions PM Alzheimer's Disease: Prospects for the Future
Science and International Security Conv Ctr Hyatt		PM Ballistic Missile Defense	AM/ PM International Arms Control: Lessons from the UNSCOM Experience	AM A Comprehensive Test Ban Treaty: Implications for National Security and Non-Proliferation PM An Assessment of the Nunn-Lugar Cooperative Threat Reduction Program	PM Environmental Refugees: Anticipation, Intervention, Restoration
Science and Society Conv Ctr Hyatt Stouffer	AM Intersection of Environment, Health, Professional Ethics, and Law AM The Sense of Justice: Evolutionary Origins of Moral and Legal Behavior PM Science, Technology, and Disability: 20th Anniversary Reflections PM 2:30PM - 5:00PM Women Nobelists: Their Work, Their Lives, and Their Impact on Science	AM Growing Up American: Dilemmas of the New Second Generation AM/ PM Uncertainty, Science, and the Media PM Women and Violence: Victims, Offenders, and Prevention Policies	AM Major Mental Disorder and Crime: New Data, New Policies? PM Histories of Psychiatry and Neuroscience PM Are Women Succeeding in Science?	AM The General Public's View about Science and Reasoning PM Life After 65: How Science Can Promote Successful Aging	AM/ PM Whither Research-Intensive Universities?
Science for All Hyatt Stouffer	AM/ PM Science for the Naked Eye, XXIII PM Making the Past Alive through Ceramics: Physical Sciences Meet Anthropology	AM 9:30 AM - 11:30 AM Youth Meets the Masters PM Science Is Fun!	AM Contributions of Science to Human Rights Truth Commissions	PM Mysteries of the American Landscape	AM/ PM Science Museums: Past, Present, and Future
SCIENCE INNOVATION Conv Ctr	AM/ PM Neuroscience and Technology: Non-Invasive Functional Brain Mapping AM/ PM Signal Transduction AM DNA Computing PM Quantum Computation	AM Neuroscience and Technology: New Views of Brain Function—Visual Memory AM Structural and Molecular Basis of Cancer Vaccines PM Chromosomal Instability as a Causal Factor in Cancer PM Structural Biology	AM/ PM Genome Studies and Applications AM/ PM Cardiovascular Science and Technology: Vascular Biology: Viruses as a Cause of Cardiovascular Disease AM/ PM Advances in AIDS Research	AM Cardiovascular Science and Technology: Cardiac MRI AM/ PM Reproductive and Developmental Biology AM/ PM Advances in AIDS Research PM Cardiovascular Science and Technology: Diseases of the Cytoskeleton and Contractile Apparatus	

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

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



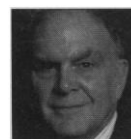
James L. McGaugh,
Univ of California-
Irvine
**Emotion,
Neuromodulatory
Systems, and
Memory Storage**

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**

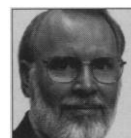


Alison S. Brooks,
George Washington
Univ
**Behavior and
Morphology in
Modern Human
Origins: New
Perspectives from
the South**



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**

AMSIE'96

Job Fair

FEBRUARY 12-13, 1996
BALTIMORE
CONVENTION CENTER
BALTIMORE, MARYLAND

Employers:

■ Academic Employers/University Labs ■ Non-Profit Organization and Government Facilities ■ Corporate Employers ■ AMSIE'96 Exhibitors

Looking for senior scientists, research investigators, tenure tracked-faculty, deans and department heads, research assistants and postdocs, grant administrators? ...

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■ Unlimited Job Postings (Special rates for SCIENCE advertisers)

■ No meeting fee required

Candidates:

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

■ Employers will be on-site in Baltimore to talk to you about real job openings

■ Hundreds of postings: various positions and levels of experience to review at your leisure

■ Bring multiple copies of your resume and visit as many employers as you wish

■ FREE, on-site Career Development Seminars conducted by top science recruiters and human resource professionals

■ Advance registration for AAAS members only

■ FREE to AAAS Members and AMSIE'96 registrants

■ Non-member, non-meeting attendees only \$25, on-site

Career Development Seminars

FREE to Job Fair and AMSIE'96 registrants

Workshop: How to Give Technical Presentations

SATURDAY, 2:30PM-5:30PM

SUNDAY, 8:30AM-11:30AM

Org by Paul Antaki, Antaki and Assoc, Inc
With fierce competition for academic and industrial positions, and research funding, this workshop will help you transform your work into easy-to-understand, persuasive presentations, whether presenting to managers, faculty members or funding agencies or at conferences.

Managing Your Career: Seven Factors to Mastering your Work Life

SUNDAY, 10:00AM-11:30AM

MONDAY, 2:30PM-4:00PM

Org by Dave Jensen, Search Masters Intl, Inc
In this session, scientific recruiter David Jensen discusses his experience in over a decade of informal study about careers and how they develop in the sciences. It will also highlight the six stages

of the science career, the possibility for crisis situations to occur in each stage, and strategies for overcoming such situations.

The Five Paths to the Science Job Market

SUNDAY, 4:00PM-5:30PM

MONDAY, 8:30AM-10:00AM

Org by Dave Jensen, Search Masters Intl, Inc
This presentation will highlight the five methods that scientists have used successfully to locate new positions: answering ads, job fairs, recruiters, personal networking and the internet. Discover what makes these five paths unique to science and technical professionals and how to make them work for you.

Resume Writing/Critique Workshop

MONDAY, 10:00AM-11:30AM

TUESDAY, 2:30PM-4:00PM

Org by Alison French and Gregory Stokes, AAAS-Off of Human Resources
Learn how to design a resume that leads you to the perfect career opportunity. The session will focus on proven techniques for sharpening your resume.

For more information, contact Kevin Bullock
Mail: AMSIE'96 Job Fair, 1333 H. Street, NW, Washington, DC 20005
FAX: (202) 289-4021 E-mail: kbullock@aaas.org

How to Get a Book Published

MONDAY, 2:30PM-5:30PM

Org by Karen Reeds, Rutgers Univ Press

Hear three publishers give practical advice on how to prepare a book prospectus and find a publisher. This session will demystify the publishing process and give you the opportunity to talk with editors about your book ideas and proposals.

Interview and Presentation Skills

MONDAY, 4:00PM-5:30PM

TUESDAY, 8:30AM-10:00AM

Org by Alison French and Gregory Stokes, AAAS-Offc of Human Resources

Learn the proven techniques of successful interviewing and presentation skills.

Science Survival: A Practicum

TUESDAY, 8:30AM-11:30AM

Org by Susan Higman, Student Pugwash, USA

This session will address the realities of practicing science, ranging from finding a job, to securing funding, to setting up research infrastructure. The current job market for people with graduate degrees in the sciences will be discussed, as well as the outlook for the future. Explore potential employers: government, academia, private industry and the advantages and disadvantages of each of these; and the transition from academia to industry.

Opportunities in Pharmaceuticals, Medical and Scientific Companies

MONDAY, 8:30AM-10:00AM

Org by Jon Rogers, Boehringer Mannheim Pharmaceuticals

Learn what qualifications top pharmaceutical companies are

looking for and how you can use these qualifications to land yourself a job with a leading pharmaceutical company. Get a profile of Boehringer Mannheim and learn how this pharmaceutical giant utilizes research and scientific talents.

New Directions: Transitions to Alternative Careers

SUNDAY, 2:30PM-5:30PM

TUESDAY, 2:30PM-5:30PM

Org by Victoria McGovern, Univ of North Carolina - Charlotte

Find out "what are these alternative careers for scientists?" and discover how scientists bridge the gap between benchwork and the far different kinds of employment people outside of the laboratory depend on. Explore how to identify your transferable skills. Scientists who have successfully made the switch, will discuss

ANNOUNCING ...

AMSIE'96 Career Development Caucus

Tuesday, February 13, 1996

12:00 Noon - 2:00 PM

Don't miss this exciting event.

"Is There a Science Career for Me?"

A thought provoking dialogue between policy makers, educators, and scientists in the beginning stages of their careers.

See this page for more information.

their strategies for entering alternative fields and will address more focused questions in round-table discussions with participants.

Career Development Caucus

Is There a Science Career for Me?

TUESDAY, 12:00 NOON-2:00PM

Org by Judith Kildow, Mass Inst of Tech

This special caucus is for scientists in the early stages of their career or at a pivotal point of change. Speakers and participants will exchange ideas and take a hard look at how scientific

careers are evolving. Hear practical advice on how scientists are coping with the uncertainties of the current job market.

SPEAKERS

Shirley Malcom, AAAS
Moderator

Eliene Augenbraun, AAAS

M.J. Finley Austin, The Burroughs Wellcome Fund

Kevin Aylesworth, Offc of Sen Thomas Harkin

Geerhard Sonnert, Harvard Univ

Catherine Tenselau, Univ of Maryland - Baltimore County

Catharine E. Johnson, Johns Hopkins Univ - Schl of Med

PARTIAL LISTING AS OF PRESS TIME

Exhibitors

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

(Partial Listing as of 12/15/95)

- | | | | |
|--|---|---|--|
| Academia Book Exhibits (116) | Bio-Rad Laboratories (305) | Harvard University Press (218) | National Academy Press (222) |
| American Association for the Accreditation of Laboratory Animal Care (127) | The Boeing Company (212) | Heldref Publications (416) | National Institute on Drug Abuse (411) |
| American Association of Pharmaceutical Scientists (324) | Chlorine Chemistry Council (516) | Howard Hughes Medical Institute (318) | National Library of Medicine (616) |
| American Association of University Presses (119) | The Chronicle of Higher Education (524) | Incar (421) | National Science Foundation (513) |
| American Chemical Society (512) | Cornell Theory Center (223) | Island Press (409) | National Science Teachers Association (502) |
| Annals of Improbable Research (610) | Dover Publications, Inc (417) | The Johns Hopkins University Press (105) | Oxford University Press (317) |
| Association of Women in Science (510) | Ecumenical Roundtable on Science Technology and the Christian Faith (517) | Knight-Ridder Information (620) | Quaternary Studies (224) |
| Battelle Memorial Institute | Engineering Technology Center (407) | Knight-Ridder Information is a AMSIE'96 Sponsor | Scientists Center for Animal Welfare (406) |
| Biocon, Inc. (420) | GoodGuy & Company (509) | Mar Cor Services, Inc. (424) | Seattle Convention and Visitors Bureau (TBA) |
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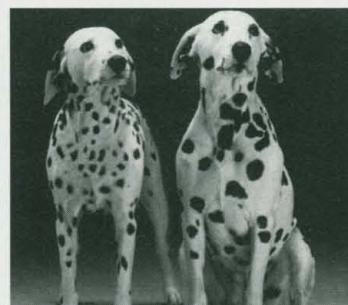
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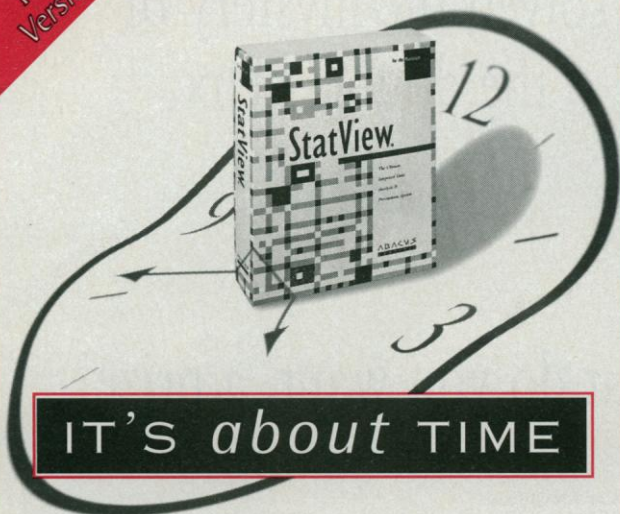
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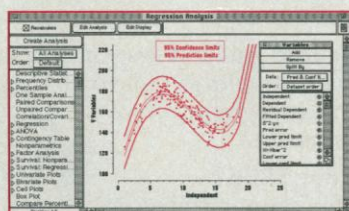
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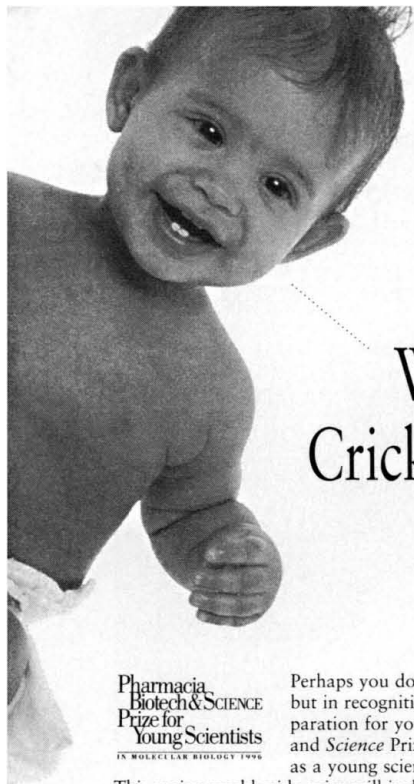
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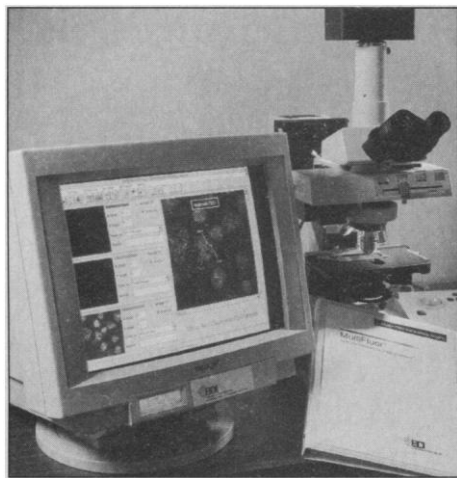
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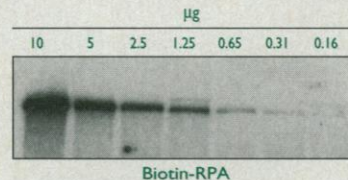
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Merck, the leader in the pharmaceutical industry, offers a competitive salary, an excellent benefits package, opportunities for professional growth and pleasant working conditions at our Rahway, NJ facility. Qualified applicants should send their resumes to: **Manager, Human Resources, Ad #171, Merck Research Laboratories, P.O. Box 2000, RY80-A3, Rahway, NJ 07065.** EEO/AA/VH/Employer.



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. Haggard
Chair, Search Committee - H.T. Hirst Professorship
Cornell University Medical College
1300 York Avenue
New York, NY 10021

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Climbing the Corporate Ladder—Using Scientific Skills

A year ago, Peter H. Khoury's bosses at Merck threw him a real challenge: developing the ad campaign launching the drug company's new chickenpox vaccine. "My academic background didn't prepare me for any of this," says Khoury, 35, whose Ph.D. in biology from Syracuse and MBA from Cornell did not include courses in TV or radio spots. "But it's fun, and I've grown in ways I don't think I would have if I'd stayed in academia." Khoury's move into business advertising may seem unusual for someone armed with a science Ph.D., as most scientists in business are found in R&D labs. But a growing number of young scientists, like Khoury, are leaving the lab to climb the rungs of the corporate ladder. And on the way up, they're learning what skills they need to add to their scientific bag of tricks.

Most important, say Khoury and several other scientists-cum-business-managers, is understanding that businesses are in business to make money. While some scientists learn this lesson on the job, others glean it from MBA courses. Such courses, says Jay Chigurupati, 32, vice president of Viral Therapeutics Inc. in Ithaca, New York, are helpful for two reasons. "One, you make many contacts in the business world, and two, the courses help you understand their [businesspeople's] thinking."

"If you know the objectives are to earn money and to be as competitive as possible in the marketplace, then many of the things

you face make more sense," says Russell Garlick, 41, who has worked in a variety of managerial positions for DuPont Medical Products, in Boston. Although he now directs a major R&D team, he left research for 2 years to broaden his background in

This is the first in a series of six pages in *Science* linked to features on *Science's* Next Wave, the new AAAS/*Science* World Wide Web project for young scientists (<http://sci.aaas.org/nextwave>). These pages will appear throughout 1996, each one simultaneous with the presentation of a new *Science's* Next Wave feature. This story focuses on scientifically trained people who made the transition to a new career niche as a corporate manager.

DuPont's business development group—a move that bumped him upward into his new position. "When you've only had R&D experience, you can sometimes wonder where the marketing guys are coming from," he explains. "It's only when you've been in that seat that you understand just how incredible are the pressures for profit."

Yet even scientists who grasp business's "golden rule" may not go far beyond the lab if they don't have people skills. "You can expect to not go high up the managerial ladder if you're not a people person," says Len Cutler, 67, who acknowledges that he prefers "to deal with things." Nevertheless, he pushed himself into managerial roles, heading several labs at Hewlett-Packard Laboratories, in Palo Alto, California, where he still manages 10 people as a distinguished contributor. "We have a technical ladder, too," he notes, "but people are occasionally on it because they haven't been good managers, so that one is tinged with a bit of failure."

Extroverted scientists may have a leg up on their more withdrawn peers. But too much self-confidence can work against you. "You may be the best scientist in the world, but having teamwork skills is just as, if not more, important in business," says Beatrice C. Langton-Webster, head of the strategic research unit in oncology at Berlex Labora-

tories Inc., in Richmond, California. Although Langton-Webster is heavily involved in directing and managing research, she says she "spends 40% of each day dealing with people and strategic business issues," not science. It has been years since she's been near the bench, and she imagines that her team would shudder at her approach.

For scientists eager to make a similar transition, she counsels "fine-tuning those people skills." Langton-Webster did so by taking many in-house and external company courses, and by picking up tips from other managers. A course on conflict resolution, for example, helped improve her managerial skills. "As scientists we're trained to get answers, to get resolutions to problems. But when you're in a team, everything is much grayer. In that class, I learned that problems can't always be resolved, but they can be managed."

In moving up the ladder, none of these scientists have thrown out their scientific training. They all insist that the ability to think logically, dissect problems, and articulate their thoughts gave them a solid step on the first rung of the ladder. "My specialized knowledge in physics is almost of no use," concedes Jed Dempsey, 35, an associate at McKinsey & Co., a business consulting firm in San Francisco. "But my general training in problem-solving is extremely useful." And in the more academically oriented biotech business, scientists find knowledge of biology and virology indispensable when talking with primary clients: physicians and hospital administrators. "You have to know the science behind your product," says Khoury, "even in advertising. If you don't, how can you possibly promote it to a physician?"

Indeed, in biotechnology, science and scientific credentials remain the keys to success. Scientists lacking doctorates are "going to have to constantly prove their abilities if they want to advance," says Kevin M. Egan, 42, manager of research fermentation at ICOS Corp. in Bothell, Washington, who has only a master's in biochemistry. Hoping to move higher, Egan is now completing an MBA. "That's one of the other routes to getting out of the lab," he says. And for any scientist in any field eyeing the corporate world's prizes, getting out of the lab and onto the corporate ladder is a necessary first step.

—Virginia Morell



For more information on making the transition to a science-based career as a corporate manager, please go to *Science's* Next Wave, on the World Wide Web at <http://sci.aaas.org/nextwave>, and look under the "New Niches" heading on the home page. There you will find the stories of "Role Models" who have already made this transition, along with "Resources" that will help you make it yourself.

AAAS/*Science* wish to thank the Alfred P. Sloan Foundation and the Knight-Ridder Information Group for their generous support of *Science's* Next Wave.

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POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS MOLECULAR AND CELL BIOLOGY

The Molecular and Cell Biology Department of the University of Texas at Dallas invites applications for two **TENURE-TRACK ASSISTANT PROFESSOR** positions (appointment at higher levels is possible) to begin September 1, 1996. One search seeks to identify candidates with interests in any area of structural molecular biology, although preference will be given to an individual who uses electron microscopy techniques. The second search will concentrate on applicants who are molecular biologists with interests in disease processes, pathogenic mechanisms, or evolution. The Department is actively involved in basic research, graduate training at the doctoral level and educating a select group of undergraduate students. Applicants should have at least two years of postdoctoral experience and demonstrate a vigorous and independent research program capable of obtaining external support. Teaching responsibilities will include participation in appropriate graduate and undergraduate courses. Start-up packages, salary and teaching requirements are competitive. Review of applications will begin immediately and applications will be accepted until February 29, 1996. Indication of sex and ethnicity for Affirmative Action statistical purposes is requested as part of the application but not required. Applicants should forward a curriculum vitae, three letters of reference and short descriptions of research plans and teaching interests to:

Academic Search Number 2023
(Structural Mol. Biol. Position) or

Academic Search Number 2024
(Molecular Biology Position)

The University of Texas at Dallas
P.O. Box 830688

Richardson, TX 75083-0688

WWW: www.utdallas.edu/dept/biology/

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ASSISTANT PROFESSOR TERRESTRIAL ECOSYSTEMS

The Swiss Federal Institute of Technology in Zurich (ETHZ) invites applications for an **ASSISTANT PROFESSOR** of Terrestrial Ecosystems. The person appointed should have a strong research interest in the biological structure and functioning of soils, in interactions between soils and the flora and fauna, and in anthropogenic influences on the soil community. She/he is expected to develop a close collaboration with members of the Institute of Terrestrial Ecology as well as with other colleagues at ETH. The successful candidate should have a significant record of research in organismic ecology and experience in quantitative methods. She/he is expected to participate in the teaching program within the field of terrestrial ecology at all levels.

The post of an assistant professor has been established to further the career of younger scientists. It is available for three years in the first instance, and is renewable for another three years; it offers a scientist with outstanding accomplishments the opportunity to be promoted to the rank of an associate professor (tenure track).

Please apply with curriculum vitae and a list of publications by March 31, 1996 to: **President of ETHZ, Prof. Dr. J. Nüesch, ETH Zentrum, CH-8092 Zurich.** The ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.

UNIVERSITY OF CALIFORNIA, LOS ANGELES ORGANIC CHEMISTRY FACULTY POSITION

The Department of Chemistry and Biochemistry of the University of California, Los Angeles intends to make one or more tenure-track faculty appointments in organic chemistry at the **FULL, ASSOCIATE, or ASSISTANT PROFESSOR** level. Applicants with interests in any area of organic chemistry will be considered. Depending on the level, candidates must give evidence of potential or demonstrated distinction in scholarship and teaching. Applications should include a curriculum vitae, a description of proposed research not exceeding four pages, and letters of recommendation from at least three professional references. Applications should be completed no later than March 15, 1996 and directed to: **Chair, Organic Search Committee, Department of Chemistry and Biochemistry, University of California, Los Angeles, CA 90095-1569. FAX: 310-206-3722.** The University of California is an Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS MICROBIOLOGY

Medical school microbiology department with active Ph.D. program invites applications for two tenure-track/tenured faculty positions available July 1, 1996 or later at the level of **ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR or PROFESSOR**. Major responsibilities will include establishment/direction of independent research programs and participation in team teaching of medical, dental and graduate courses. Research environment and start-up support are excellent. Faculty rank, tenure status, and salary will be commensurate with training, experience, and professional accomplishments. Outstanding candidates in all fields of microbiology are encouraged to apply, but preference may be given to investigators with established research programs and funding who study molecular aspects of viral or bacterial pathogenesis. Minimum requirements include a doctoral degree in microbiology or related field and at least two years of postdoctoral research experience. Submit curriculum vitae, bibliography, description of research program, summary of active and pending research grants, copies of several major publications, and names of three professional references to: **Faculty Search Committee Chair, Department of Microbiology, Campus Box B-175, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262.** Review of applications will begin on March 1, 1996, and continue until appointments are made or the search is terminated. UCHSC is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN MICROBIOLOGY

Applications are being accepted for a full-time, tenure-track position at the **ASSISTANT PROFESSOR** rank. Primary consideration will be given to an individual using genetic approaches to study molecular microbiology and microbial regulation. Applicants must have a Ph.D., postdoctoral experience, and a commitment to research and teaching. The successful candidate is expected to develop an extramurally funded research program involving undergraduate and graduate students, and teach an undergraduate course in cell chemistry as well as courses in their specialty. Review of applications will begin March 1, 1996, and continue until the position is filled. Send letter of application, curriculum vitae, reprints, statement of research goals, and three letters of reference to: **Dr. John F. Stolz, Department of Biological Sciences, Duquesne University, Pittsburgh, PA 15282.** Duquesne University, an Affirmative Action/Equal Opportunity Employer, strongly encourages applications from women and minority candidates.

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.

CELL/MOLECULAR BIOLOGIST

A **FACULTY POSITION** is available in the Division of Basic Sciences. Candidates must have a doctorate degree, postdoctoral or teaching experience in a relevant field preferred, and a commitment to interdisciplinary teaching. The candidate will participate in teaching histology, medical genetics, and other first and second year Basic Sciences courses. Primary emphasis is on medical student education and other on research and/or other academic activities. Position begins July 1, 1996. Salary and rank will be commensurate with experience and qualifications. Send curriculum vitae to: **Douglas R. Rushing, Ph.D., Chair, Basic Sciences Search Committee, University of Health Sciences-College of Osteopathic Medicine, 2105 Independence Boulevard, Kansas City, MO 64124-2395.** Affirmative Action/Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH

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

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.

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Senior Research Scientist - Group Leader, Gene Expression

You will work with a multidisciplinary group of Ph.D. and associate scientists that will identify, characterize, synthesize, and express genes involved in human diseases to develop new targets for therapeutic drugs. This position requires a Ph.D. in molecular biology/cell biology and at least five years research experience. Expertise in mammalian gene expression, proven ability to work with a multidisciplinary group coordinating overall expression efforts, experience in embryonic stem cell work, and expertise in using viral vector systems are highly desirable. Strong communication and problem solving skills are required. Reference ADSCIPH01

Associate Scientist - Molecular Genetics, General Expression, Biotechnology

A position will be available in the Department of Biotechnology Research for a BA/BS level (with experience) or MS level (with research thesis) graduate in the area of molecular genetics/expression. The person should be well versed in basic molecular biology techniques, especially in cloning and gene expression evaluation. Some background in tissue culture techniques is preferred. Applicants should have a desire for problem solving and independence in conducting research. Reference ADSCIBI01

Senior Scientist - Library Production

Develop and implement a program in cDNA library construction and high density screening. A Ph.D. in Genetics, Molecular Biology, or a related field and relevant postdoctoral experience are required. Qualified candidates will have a demonstrated research experience in gene identification, isolation, and analysis including expertise in large insert cloning vectors. Reference ADSCIPH01

Associate Scientist - Molecular Biology

Responsibilities include the construction and analysis of cDNA and genomic cDNA libraries and the development of methods for screening high density library arrays in support of gene cloning and characterization programs. An MS or equivalent and relevant experience in molecular biology, including gene cloning, are required. Reference ADSCIBI01

Senior Scientist - Biochemist

We are searching for a Biochemist who will work on the functional characterization of unknown proteins as part of our genomics program. General skills in biochemistry including protein purification, enzymology, protein binding, etc. are required. Applicants must have a Ph.D. degree in Biochemistry or a related discipline and postdoctoral experience in the study of structure/function relationships of proteins. Reference ADSCIPH01

Associate Scientist - Biochemist

A BS or MS in Biochemistry or related discipline and experience in general biochemical techniques are required. The position involves the functional characterization of proteins of unknown function as part of our genomics program. Reference ADSCICH01

Senior Scientist - Bioinformatics

Implement an interactive, team-oriented program to develop and apply the software systems required to support gene identification and analysis, structural biology, database and laboratory information management systems. A Ph.D. in the sciences and postdoctoral experience are required. Qualified candidates will have demonstrated research experience in both biology and computer sciences. Interactions with external collaborators will require outstanding oral and written communication skills. Reference ADSCIPH01

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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 interdepartmental 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 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.*

SIGNAL TRANSDUCTION AND GENE THERAPY POSITIONS

The University of Florida (UF) Brain Institute (<http://www.ufbi.ufl.edu>) is recruiting for 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.*

EAST CAROLINA UNIVERSITY SCHOOL OF MEDICINE

The Department of Pharmacology invites applications for a tenure-track **ASSISTANT PROFESSOR** position. Successful applicants are expected to have a minimum of two years postdoctoral experience, an excellent record of scholarship and either research support or the potential to develop and maintain an active, independent research program. Preference will be given to applicants with training and postdoctoral experience in molecular biology and the ability to apply these to the solution of pharmacological problems. Participation in the teaching of medical and graduate students is also required. Please send curriculum vitae, statement of research interests, and at least three letters of recommendation to: **Dr. Wallace R. Wooles, Chairman, Department of Pharmacology, School of Medicine, East Carolina University, Greenville, NC 27858.** Applications will be received until April 15, 1996. Federal law requires proper documentation of identity and employability at the time of employment. *East Carolina University is an Affirmative Action/Equal Opportunity Employer and invites applications from women and minority scientists.*

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

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MOLECULAR BIOLOGIST RADIATION ONCOLOGY DEPARTMENT DUKE UNIVERSITY

The Department of Radiation Oncology at Duke University Medical Center seeks applications for an individual with training and interest in the molecular biology of hyperthermia. We seek scientists who will interact with clinical and basic science faculty in translational research to: 1) advance knowledge regarding regulation of heat shock and stress responses, in general; and 2) work toward the development of gene therapy approaches that involve the use of hyperthermia. The research environment is located in a new multidisciplinary medical science research facility, with opportunities to collaborate with a variety of outstanding scientists with expertise in molecular biology, signal transduction, angiogenesis, pharmacology, inflammation, cell cycle regulation/apoptosis and tumor physiology. This institution has the largest active clinical hyperthermia program in the United States. Applicants at the **ASSISTANT to ASSOCIATE PROFESSOR** level are encouraged to apply. The position is available immediately. Please send a cover letter which discusses research goals and current interests, curriculum vitae and names of three references to: **Mark W. Dewhirst, DVM, Ph.D., Chairman, Search Committee, Department of Radiation Oncology, Box 3455, Duke University Medical Center, Durham, NC 27710.**

BOTANIST

The Biology Department of Florida Southern College is seeking a botanist trained in ecology, plant physiology, and genetics to fill a **FACULTY POSITION** beginning September 1996. The position is a continuing faculty slot made available by a retirement. The successful candidate will have a Ph.D. degree and a strong interest in teaching undergraduate biology majors. Research is encouraged and should be designed to include undergraduate science majors. Rank is open, and the Nelson White Chair in the Life Sciences will be available to qualified applicants. Send curriculum vitae, letter of application, and three letters of recommendations to: **Dr. Ben F. Wade, Vice President and Dean of the College, Florida Southern College, 111 Lake Hollingsworth Drive, Lakeland, FL 33801-5698.**

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 Barriónuevo, 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.*

POSITIONS OPEN

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, Minorities/Females.*

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.*

ASSISTANT PROFESSOR OF BIOLOGY

In order to replace a faculty member who has taken a temporary administrative position, the Department of Biological Sciences of Baldwin-Wallace College invites applications for a **THREE-YEAR, NON-TENURE-TRACK** position beginning fall of 1996. Applicants must possess a Ph.D. in the Biological Sciences and have a strong commitment to teaching at the undergraduate level. Responsibilities include teaching courses in genetics, molecular biology (for biology majors), and general biology (for non-majors). Baldwin-Wallace, located in a suburb of Cleveland, is a private, liberal arts college with 2,780 full-time undergraduate students in day, evening, and weekend programs, and particularly welcomes candidates who desire to work in such an environment. Please submit a statement of teaching and research interests, curriculum vitae, official transcripts, and arrange to have three letters of recommendation sent to: **Dr. Stephen D. Hilliard, Chairman, Department of Biological Sciences, Baldwin-Wallace College, 275 Eastland Road, Berea, OH 44017-2088.** Review of applications will begin on March 1, 1996, and will continue until the position is filled. *Baldwin-Wallace is an Equal Opportunity/Affirmative Action Employer.*

ENVIRONMENTAL TOXICOLOGIST The University of Texas at El Paso (UTEP)

UTEP, through its NIH-funded Border Biomedical Research Center, seeks a tenure-track **ASSISTANT or ASSOCIATE PROFESSOR** with expertise in molecular or cellular toxicology. Special consideration will be given to candidates with a focus on the environmental impact of xenobiotics. The successful candidate will have a strong commitment to research and teaching at both the undergraduate and graduate levels, including new doctoral programs in the biological and environmental sciences. Send résumé, statement of research interests, teaching philosophy, and a list of three references (name, address, telephone) to: **Dr. Larry Jones, Search Committee, UTEP, Department of Biological Sciences, El Paso, TX 79968-0519.** Review of applications begins March 1, 1996. *The University does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services.*

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In this challenging position, you will be responsible for the identification and study of novel growth factors involved in early embryonic development—particularly that of the vascular and nervous systems.

To qualify, you must have a proven record of research achievement and scholarship, a PhD or equivalent and post-doctoral training. Our ideal candidate will also possess a strong background in molecular biology techniques applied to developmental biology.

If you have the dedication, spirit and flexibility to rise to our many challenges, send your resume to: Chiron Corporation, Human Resources, Box #95-402, 4560 Horton Street, Emeryville, CA 94608. We are an equal opportunity employer.



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HEALTH SCIENTIST ADMINISTRATOR (HSA), GS-601-15

THE NATIONAL INSTITUTES OF HEALTH, NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES, BETHESDA, MD is seeking an HSA as the Director, Minority Biomedical Research Support (MBRS) Branch. The incumbent will plan and direct a program of competitive institutional research and resource grants to increase the number of ethnic minority faculty, students, and investigators in the biomedical sciences and to broaden the opportunities for research participation by ethnic minorities. In addition, he/she will serve as a staff scientist with responsibilities for the scientific administration of a portfolio of MBRS grants.

Applicants must possess specific knowledge, skills and abilities (KSAs) in order to qualify for this position. In addition to the KSAs, there are a number of documents that must be submitted when applying for this position. To obtain position information, qualifications and application requirements, please call the

**NIGMS PERSONNEL OFFICE
(301) 594-2749**

TDD Number (301) 402-6327. *Announcement closes 2/12/96.* U.S. citizenship is required.

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GROUP LEADER PCR Robotics

Digital Gene Technologies, Inc. a new La Jolla, California based biotechnology company in the dynamic field of genomics, specializes in the automation of assays to determine gene expression patterns and establishing gene expression databases. We are recruiting highly motivated and dedicated individuals who possess the necessary skills to help advance DGT into the forefront of genomics discoveries.

This position requires experience with robotic hardware and software applications. You will lead a group of scientists dedicated to run an automated PCR robotic workstation and analyze samples utilizing automated sequencers. The candidate will be expected to develop a close working relationship with our Bioinformatics and Molecular Biology departments. A Ph.D. is preferred.

For consideration, please send your CV along with salary history and expectations to:

Digital Gene Technologies, Inc.
11149 N. Torrey Pines Road, Suite 110
La Jolla, CA 92037



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Head, Department of Biochemistry University of Arizona

The Department of Biochemistry is conducting a search for a person to be appointed Head of the Department. Applications and nominations of experienced biochemists should be submitted as soon as possible, and preferably not later than March 31, 1996; review of applications will begin on that date and will continue until the position is filled. Applications and nominations should be sent to **Professor Gordon Tollin, Chair, Head-Search Advisory Committee, Department of Biochemistry, PO Box 21088, The University of Arizona, Tucson, AZ 85721.**

The department focuses broadly on education and research in biochemistry, and has undergraduate programs leading to the Bachelor of Science degree, and graduate programs aimed at advanced education and research leading to the Ph.D. The degree program serves needs of students with varied career goals and aspirations in biochemistry research and education. The department is also responsible for biochemistry education in the Medical College.

The Biochemistry Department spans three University of Arizona Colleges (Agriculture, Medicine and Science), with resources drawn from, and faculty appointed in, variously, one or more of the three colleges. The department's facilities are distributed on both the Main and Health Sciences campuses. The department head reports to the Dean of the College of Science, and is responsible for providing proactive academic leadership, for planning and administration of the department's educational and research programs, for managing the department's budgets, research accounts, facilities and personnel, and for leading the faculty in long-term strategic planning that responds to changing environments, needs, opportunities and realities that affect academic and research programs. The successful candidate must be one who demonstrates promise of carrying out the responsibilities of the department head in a collegial, constructive partnership with the faculty and the University administration. The successful candidate must also have an established record of research funding and productivity in any area of biochemistry as evidenced by national and international recognition, and proven ability to train graduate and postdoctoral scientists. Furthermore, it is expected that the department head will maintain an active research program.

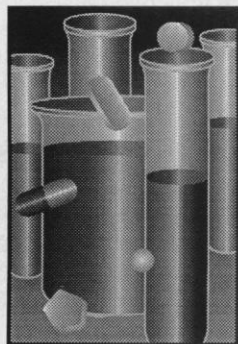
Applicants/nominees must submit an up-to-date *curriculum vitae* and publication list, the names of at least three references, and a 1- or 2-page statement. The written statement (which will be made public within the department) should give an assessment of challenges, problems and opportunities confronting a biochemistry department in its academic mission as part of a major public research university and in terms of biochemistry as an evolving discipline in the context of the current and anticipated environment for scientific research and education.

THE UNIVERSITY OF ARIZONA, AN EQUAL OPPORTUNITY/AFFIRMATIVE/ACTION/ADA EMPLOYER ENCOURAGES APPLICATIONS FROM WOMEN AND MEMBERS OF UNDERREPRESENTED MINORITY GROUPS.

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cilities located at our Corporate Headquarters in Research Triangle Park, N.C.

RESEARCH SCIENTIST Assay Development for Chemical Libraries

This position will be responsible for developing and validating novel solution- and solid-phase assays for chemical libraries. The range of assays will include soluble and cell-based receptor binding, enzyme inhibition and ELISAs. Additional responsibilities include the development of automation and detection for high throughput assays of libraries.

This position requires a BS/BA in the biological sciences with at least 3-6 years experience developing a broad range of biochemical assays or an MS in the biological sciences with at least 1-3 years experience developing a broad range of biochemical assays. Specific experience in running cell-based, receptor binding, and enzyme inhibition assays is essential. Experience with laboratory automation and optical detection methods is a plus.

The rewards of working at Glaxo Wellcome include an excellent salary, a flexible benefits package, and a beautiful headquarters campus with ultra-modern facilities. For confidential consideration, send your resume and salary history, indicating the position title, to: **Human Resources, Job #ASC067001, Glaxo Wellcome, P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please) An Equal Opportunity Employer M/F/D/V

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HEALTH SCIENTIST ADMINISTRATOR (HSA) GS-601-12/13/14

NIH/National Institute of General Medical Sciences
Division of Pharmacology, Physiology,
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Biochemistry and Biorelated Chemistry Branch

The incumbent serves as an HSA and staff scientist, responsible for managing the programming and evaluation of a portfolio of grant applications concerned with the areas of organic chemistry. He/she advises grantees and professional staff members regarding the research aspects of grants within his/her purview and serves as a sole source of technical competence. In addition, he/she develops program activities relating to various multi-disciplinary approaches in organic chemistry.

Applicants must possess specific knowledge, skills and abilities (KSAs) in order to qualify for these positions. In addition to the KSAs, there are a number of documents that must be submitted when applying. To obtain position information, qualifications and application requirements, please call the

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TDD Number (301) 402-6327. *Announcement closes 2/26/96. U.S. citizenship is required.*

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SENIOR SCIENTIST

SCIOS NOVA is an established San Francisco Bay Area biopharmaceutical company engaged in the discovery, development, and commercialization of novel human therapeutics, focused chiefly on cardio-renal disease and inflammation targets.

This senior-level Scientist is sought to lead our new Research Protein Chemistry group. You will work closely with the Recombinant Expression group to design expression systems for production of protein reagents for multiple research project teams. You will provide protein purification and characterization for Research projects. You must be prepared with a Ph.D. and 4-8 years' experience, including postdoctoral work. Extensive protein purification experience is desirable, particularly from recombinant sources.

Competitive salaries, excellent benefits package and a very dynamic work environment support these positions. Please respond to: Scios Nova, Human Resources/Job Code 96-001, 2450 Bayshore Parkway, Mountain View, CA 94043. Or FAX to 415/962-5966. EOE.

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UCLA NEUROSCIENCE

The University of California, Los Angeles, as part of a major initiative in neuroscience, is seeking to fill four tenure-track junior faculty positions in the College of Letters and Science and the School of Medicine. The positions are intended to be broadly defined to encompass the full range of areas within basic neuroscience.

Molecular Neurobiology: molecular analysis of processes such as synaptic transmission and neural integration.

Cellular/Synaptic Neurobiology: studies of the signal transmission at synapses and/or of the control of neuronal excitability.

Systems Neurobiology: studies of multineuronal networks, from small ensembles to circuitry underlying complex behavior.

Behavioral Neuroscience: studies of the neural basis of learning. Outstanding applicants in other areas of behavioral neuroscience, especially visual or cognitive neuroscience, will also be considered. This appointment will be in the Department of Psychology.

All appointees will teach at the undergraduate, graduate and/or medical school levels in their areas of expertise.

For all positions, submit a CV, reprints, preprints and a statement of research interests and goals. Also arrange for three letters of recommendation to be sent to the appropriate search committee. The application deadline has been extended to 29 February 1996. For the molecular, cellular and systems positions, send application materials to the Brain Research Institute, UCLA, Box 951761, Los Angeles CA 90095-1761. For the behavioral neuroscience position, the address is BNS Search Committee, Department of Psychology, UCLA, Box 951563, Los Angeles CA 90095-1563.

NEUROPHARMACOLOGIST

Neurogen Corporation is a dynamic pharmaceutical company in the field of neuroscience. Neurogen scientists are developing novel therapeutics for neurological and psychiatric disorders.

Neurogen is currently seeking a highly motivated person to fill a senior scientist position in the Pharmacology Department. This position requires a Ph.D. in Pharmacology, Neuroscience or related discipline with 2-3 years postdoctoral experience in receptor-based, cell-based and enzyme based assays. Knowledge in and experience with the pharmacology of second messenger pathways, ion channels and peptide receptors is desirable.

Neurogen is located in Branford, Connecticut, close to New Haven. We offer a comprehensive compensation program consisting of competitive salary, equity participation, 401K plan, health and medical programs as well as relocation assistance.

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Senior Cardiorenal Pharmacologist

In this broad-based, hands-on position, you will support several Project Teams and encourage the exploration of novel mechanistic targets. This will involve heading a group/lab in the development of animal and in vitro models of cardiovascular and renal diseases, and the evaluation of novel agents and mechanisms in such.

We seek a Ph.D. with 4-10 years of post-doctoral experience in cardiovascular and/or renal pharmacology, physiology or equivalent. Job # 95-JLW-2465

With over 50,000 employees worldwide, and nearly \$10 billion in annual sales, we've established ourselves as a respected global business and innovative leader in the changing health care industry. For consideration, please send your resume with salary history to: Abbott Laboratories, Job # _____, Dept. 583, AP6B, 100 Abbott Park Road, Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke Free Environment.

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POSITIONS OPEN

PLANT POPULATION BIOLOGIST

The Department of Botany, College of Natural Sciences, invites applicants for an **ASSISTANT PROFESSOR**, tenure track position to begin 1 August 1996 pending final approval. The department seeks an individual who will develop an outstanding research program on Hawaiian and/or alien species with possible specializations in species or population dynamics, population genetics, breeding systems, reproductive ecology, or plant/animal interactions. Primary teaching responsibilities will include an introductory course in the undergraduate Biology Program and in the area of his/her research specialization within the Botany Department. Minimum qualification is a Ph.D. in botany, an appropriate field of biological sciences, or its equivalent. Desirable qualifications include teaching experience, postdoctoral training, and field-oriented research in tropical terrestrial or marine ecosystems or conservation biology. Submit curriculum vitae, statements of teaching philosophy and research interests, reprints of up to three publications, and a list of three or more references including mail and Email addresses and telephone numbers to: **Chairperson, Department of Botany, 3190 Maile Way, University of Hawaii at Manoa, Honolulu, Hawaii 96822**. Review of applications will begin after 29 February 1996. Inquiries may be made to botany@hawaii.edu or FAX: 808-956-3923. *The University of Hawaii at Manoa is an Affirmative Action/Equal Opportunity Employer. Women and members of Minority Groups are strongly encouraged to apply.*

BIOLOGY TENURE-TRACK POSITION

An animal physiologist, with interest in endocrinology and/or neuroscience who could teach Human Anatomy and Physiology, Human Biology, Cell-Genetics and possibly Comparative Animal Physiology. We would like a person eager to participate in student-faculty collaborative research in a liberal arts atmosphere marked by close working relationships among students and between students and faculty. Ph.D.s should send transcripts, curriculum vitae, three letters of reference that speak to teaching effectiveness, and a letter of application describing biology teaching experience and philosophy of teaching to **Jerry Woolpy, Earlham College, Richmond, IN 47374**. Apply before February 23, 1996. *Earlham College is an Affirmative Action/Equal Opportunity Employer. We particularly encourage applications from women, racial minorities, and Quakers.*

RESEARCH TRAINING FOR DENTAL GRADUATES

Positions are available in an NIH-supported advanced **POSTDOCTORAL RESEARCH** program at the University of Louisville School of Dentistry. Areas of research include Cell and Molecular Biology, Immunology, Endocrinology, Microbiology, and Biochemistry. Term of appointment: 2-3 years. Candidates should have a dental degree and postgraduate training or a demonstrated interest in research. U.S. citizenship or permanent residency required. Clinical time provided. Contact: **Linda Mitchell, 301 School of Dentistry, 501 South Preston Street, Louisville, KY 40292**. Telephone: 502-852-7507; FAX: 502-852-7240.

Biology: One-year **SABBATICAL REPLACEMENT POSITION**. Earlham College seeks a one year replacement to teach Ecology, Biological Diversity, and Entomology or Invertebrate Biology. Ph.D. or A.B.D. should send transcripts, curriculum vitae, three letters of reference that speak to teaching effectiveness, and a letter of application to **Jerry Woolpy, Earlham College, Richmond, IN 47374**. Apply before February 23, 1996. *Earlham College is an Affirmative Action/Equal Opportunity Employer. We particularly encourage applications from women, minorities, and Quakers.*

POSTDOCTORAL POSITION

We are interested in the function, structure, nucleolar localization signals and processing of three intron-encoded small nucleolar RNAs [*PNAS* 90:635 (1993); *MCB* 13:4382 (1993); *PNAS* 90:9001 (1993); *BBA* 1260:230 (1995); *Genomics* 30:400 (1995)].

Send curriculum vitae and names of two references to: **G. Eliceiri, Pathology Department, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, MO 63104**. FAX: 314-577-8489. *Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.*

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In the U.S.: Contact Janis Crowley
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Fax: (202) 682-0816
E-mail: science_classifieds@aaas.org

In Europe: Contact Debbie Cummings
Phone: (44) 01223 302-067
Fax: (44) 01223 576-208
E-mail: science@science-int.co.uk

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POSITIONS OPEN

PLANT PATHOLOGIST/VIROLOGIST ASSISTANT OR ASSOCIATE SCIENTIST

The Department of Plant Pathology, Washington State University-Prosser invites applications for a tenure-track position at the **ASSISTANT** or **ASSOCIATE SCIENTIST** level to begin fall of 1996. The position is 100 percent research, emphasizing identification, characterization, and control of plant viruses, viroids, and phytoplasma. Particular emphasis will be on development and application of methods to detect, identify, and eliminate agents that cause virus-like diseases of fruit trees. Additionally, the individual selected will be expected to provide technical leadership and policy guidance (up to 20 percent time) to a program that develops and distributes virus-free fruit tree clones to researchers and industry representatives nationwide and will be responsible for obtaining a Departmental Permit from Animal and Plant Health Inspection Service (APHIS) that will allow continuation of this work. Minimum requirements are a Ph.D. in Plant Pathology/Virology with emphasis in the identification, characterization, and control of plant viruses, or virus-like agents, such as viroids or phytoplasma; demonstrated record of research; and publications in refereed journals in research area. Additional desirable qualifications include: experience with viruses and viroids in fruit trees, control measures, and regulatory protocols; demonstrated skills in supervision and administration of virus testing and certification programs, interacting with industry groups, and ability to obtain grant funds; and willingness to participate in departmental activities including supervising graduate students. Initial screening begins March 1, 1996. Send letters of application, curriculum vitae, copies of transcripts, and names, addresses, telephone numbers, FAX and Email address of three references to: **Dr. Gaylord Mink, Plant Pathology/Virology Search Committee, WSU-PROSSER 24106 N. Bunn Road, Prosser, WA 99350-9687. Telephone: 509-786-9250; Email: gmink@beta.tricity.wsu.edu.** *Equal Opportunity/Affirmative Action Employer/ADA.*

PROGRAM DIRECTOR/COORDINATOR

Applications are invited for the position of **PROGRAM DIRECTOR** of the University of Wisconsin System, Women and Science Program and Coordinator of the University of Wisconsin Oshkosh Science Outreach Program. Each is a half-time position. The appointment may be either at a senior level with tenure or as continuing academic staff, depending upon experience. Qualifications: Ph.D. in mathematics or a science; college teaching experience; expertise in gender, race and ethnicity issues in science required. Success in obtaining extramural grants in science education; outreach and/or administrative experience preferred. Responsibilities: coordination and development of both programs; proposal writing; and communication and interaction with faculty, staff and administrators at the University of Wisconsin Oshkosh, at other University of Wisconsin System campuses, and in school districts.

Send letter of application, résumé, three current letters of recommendation and transcripts to: **Michael Zimmerman, Dean, College of Letters and Science, University of Wisconsin Oshkosh, Oshkosh, WI 54901.** For more information call **Telephone: 414-424-1210; Email: mz@vaxa.cis.uwosh.edu.** Closing date: March 29, 1996. *The University of Wisconsin Oshkosh is an Affirmative Action/Equal Opportunity Employer.*

ENVIRONMENTAL SCIENTIST

The Department of Biology and Environmental Science at The University of New Haven seeks candidates for a tenure-track **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** level faculty appointment. Candidates are expected to have expertise in either a) freshwater or coastal wetlands ecology with a focus on biogeochemical processes or b) ecotoxicology. Preference will be given to candidates who have experience in applied environmental problem solving at multiple scales, and geographical information systems. Duties will include teaching graduate courses in ecology and specialty and undergraduate introductory biology, and to develop a research program that can interface with those of other faculty and support student projects and theses. The department offers a B.S. and M.S. in Environmental Science with graduate program concentrations in environmental ecology, geology, health and management and GIS. There are also interactions with programs in environmental engineering, chemistry, education and occupational health and safety. Applicants should send a curriculum vitae, a statement of teaching experience and philosophy, a summary of current and anticipated research activity, and the names and telephone numbers of at least three references by February 19, 1996, to: **Search Number 95-54, Search Committee Chairperson, University of New Haven, 300 Orange Avenue, West Haven, CT 06516.**

POSITIONS OPEN

The University of Chicago/Radiation and Cellular Oncology invites applications for a **SENIOR LEVEL** (professor) **FACULTY POSITION.** We seek an internationally recognized expert in radio-protector research and aminothiol mediated chemoprevention with significant skills in tumor biology and cell separation systems (Ph.D. and/or M.D.) to establish and direct an expanding program in chemoprevention related to radiation oncology. Successful candidate must possess strong and integrated expertise in tumor biology, biophysical methods of cell separation, molecular and cellular mechanisms underlying the antimutagenic properties of aminothiols, and murine models of mutagenesis and carcinogenesis. Candidate's professional interests and achievements should be complementary to the Department's existing programs in radiation biology, molecular biology, gene therapy, and chemoprevention. Participation in teaching elective courses in radiation biology for radiation therapy residents and medical students is expected. The successful candidate will have a rigorous research program supported by extramural funding. Candidates should submit a curriculum vitae, statements of research and teaching interests, up to five selected reprints, and three references to: **University of Chicago, Radiation and Cellular Oncology Search Committee, 5841 South Maryland Avenue, MC0085, Chicago, IL 60637.** *The University of Chicago is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR BIOORGANIC OR BIOINORGANIC CHEMISTRY University of California, Santa Cruz

The Department of Chemistry and Biochemistry invites applications for a **JUNIOR FACULTY POSITION** beginning fall of 1996. Salary commensurate with qualifications and experience. Candidates must have a Ph.D. or equivalent in Chemistry or related field, a commitment to teaching at both the undergraduate and graduate levels, and outstanding potential for an independent research program in bioorganic or bioinorganic chemistry. Preference will be given to candidates whose research interests complement the programs of our faculty. Applicants should submit a curriculum vitae, a brief description of research and teaching interests, and arrange to have three confidential letters of recommendation sent to: **Dr. Phil Crews, Chair, Bioorganic/Bioinorganic Search Committee, Department of Chemistry and Biochemistry, University of California, Santa Cruz, CA 95064.** Refer to provision number 508 in all correspondence. *USCS is an Equal Opportunity/Affirmative Action Employer. We especially welcome applications from qualified women and minority candidates.* Closing date for the receipt of completed applications is March 29, 1996.

CENTER DIRECTOR AND FULL PROFESSOR. University of Florida, Institute of Food and Agricultural Sciences, Citrus Research and Education Center (CREC), Lake Alfred, Florida. A Ph.D. in an agricultural or related science with administrative experience and demonstrated leadership in directing major research or extension programs required. The CREC Director provides leadership for a faculty and staff of 253 people, including 38 UF/IFAS faculty, and coordinates multidisciplinary research and extension activities on citrus statewide. The CREC is located near Winter Haven, 45 miles southwest of Orlando and 50 miles east of Tampa. Contact: **Dr. J. W. Noling, IFAS, CREC, 700 Experiment Station Road, Lake Alfred, FL 33850. Telephone: 941-956-1151; FAX: 941-956-4631; Email: JWN@GNV.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.*

TWO POSTDOCTORAL POSITIONS available immediately. One position would involve the structure-function and pathophysiology of constitutively active α_1 -adrenergic receptors through mutagenesis and transgenics. The other position involves the generation of transgenic mice to components of the plasminogen system in order to study structural requirements for functional integrity. Previous experience with molecular biology, and transgenics/animal physiology is desirable. Applicants should send a current curriculum vitae and a list of three references to either: **Dr. Dianne Perez** (for adrenergic receptors), **Mail Code FF3, or Dr. Victoria Ploplis** (for plasminogen system), **Mail Code FF2, Department of Molecular Cardiology, Research Institute, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. FAX: 216-444-9263.** *The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR Basic Science Molecular Biologist Division of Liver and Pancreas Transplantation University of California, Los Angeles

Applications are invited for a tenure-track basic science faculty position at the **ASSISTANT PROFESSOR** level in the Division of Liver and Pancreas Transplantation, Department of Surgery, UCLA. Candidates should have a Ph.D. with broad training in molecular and cell biology and research ability in the areas of molecular and transplantation immunobiology, liver directed gene therapy and/or regulation of liver growth. The successful candidate will be expected to establish an independent research program and to play a central scientific role in a large academic department. Teaching responsibilities will be limited. An attractive salary, benefit start-up package and fully equipped laboratory suite have been reserved for this recruitment. Send letter of application, curriculum vitae and three letters of recommendation to: **James S. Economou, M.D., Ph.D., Transplant Scientist Search Committee, The Dumont—UCLA Transplant Center, 10833 Le Conte Avenue, Room 77-132 Center for the Health Sciences, Los Angeles, CA 90095-6904.**

NEW POSITION—EXECUTIVE DIRECTOR Risk Sciences and Public Policy Institute School of Hygiene and Public Health Johns Hopkins University

Immediate faculty opening for **EXECUTIVE DIRECTOR** of new institute. Working with Co-Directors, the Executive Director will initiate and manage activities of this school-wide program with components in education, research and consultation. She or he will coordinate a multidisciplinary faculty; develop graduate/postgraduate programs; coordinate classes, seminars, symposia; and identify funding opportunities. The Executive Director will initiate and collaborate in research. Faculty rank and tenure status commensurate with qualifications.

Qualifications: A doctorate in relevant area of science or public policy, minimum of five years experience related to risk assessment, excellent (written and oral) communication skills and a strong publication record. Prefer experience in policy-related positions and fund-raising. Applicants should send curriculum vitae plus names and addresses of three references to:

**Jonathan M. Sarnet, M.D., M.S.
Thomas A. Burke, Ph.D., M.P.H.
Co-Directors, Risk Sciences and
Public Policy Institute
615 North Wolfe Street, Room 6039
Baltimore, MD 21205**

Johns Hopkins University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE: Neuroanatomy of schizophrenia. Experience with large sectioning techniques, human thalamic anatomy or stereology would be useful. Excellent salary and benefits for qualified applicant, must be U.S. citizen/resident. Send résumé and 3 reference phone numbers to: **Keith A. Young, Ph.D., Neuroscience Lab (11s), Waco VAMC, 4800 Memorial Drive, Waco, TX 76711. Email: young.kcith@temple.va.gov.http://swinfo.tamu.edu/gmc/psych/schiz.htm.**

RESEARCH ASSOCIATE

Transplant immunology laboratory at UCLA requires a research associate with PhD or equivalent proven experience in cellular and molecular immunology. Microsurgical skills in rodent allografts a major asset. Needed immediately. Please send curriculum vitae and 3 references to: **Daniel Shoakes MD, Harbor-UCLA Medical Center, Box 5, 1000 W. Carson St., Torrance, CA 90509. FAX: 310-222-2856. Email: dshoakes@ucla.edu.** *UCLA is an Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIP in Cell Biology/Immunology available immediately for work on marrow cells and cytokines in genetic studies of mice dealing with regulation of marrow-bone cell interactions. Ph.D. required and position involves interactions with a large, multidisciplinary lab of Ph.D.'s and M.D.'s performing osteoporosis-related research. Salary and benefits are competitive. Apply to: **Ms. C. Farrell, Pettis VA Medical Center (151), 11201 Benton Street, Loma Linda, CA 92357.**

POSITIONS OPEN

POSTDOCTORAL POSITION is available immediately to study a recently discovered growth factor action, rapid activation of the hexose monophosphate shunt by a novel activation mechanism of glucose 6-phosphate dehydrogenase. Candidate should have a Ph.D. or M.D. with a background in protein biochemistry, cell biology, and molecular biology techniques. Send curriculum vitae, cover letter, and three references to: **Robert C. Stanton, M.D., Chief, Renal Division, Deaconess Hospital and Jolin Diabetes Center, Harvard Medical School, 99 Brookline Avenue, Boston, MA 02215. FAX: 617-632-1861.**

POSTDOCTORAL POSITION in Cardiac Muscle Physiology. The section of Cardiology at the Bowman Gray School of Medicine is seeking candidates to study cellular mechanisms of Heart Failure. Candidates require a M.D. or Ph.D. degree, and experience in developing experimental models of Heart Failure and measurement of force and calcium responsiveness on single isolated cardiac myocytes. Send current curriculum vitae and three letters of reference to: **Dr. Pieter de Tombe, Cardiology, Bowman Gray School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157-1045. Equal Opportunity/Affirmative Action Employer.**

A POSTDOCTORAL POSITION is available immediately to study the negative inotropic effects of anesthetic agents on the mammalian heart. Previous experience with muscle preparations, particularly heart papillary or trabecular preparations, is strongly desired. Familiarity with calcium-sensing dye fluorescence measurements would be helpful. Please Email: **Julian@Zeus.bwh.harvard.edu** and/or send curriculum vitae and statement of experience to: **Dr. Fred Julian, Department of Anesthesia Research Laboratories, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.**

POSTDOCTORAL POSITION

POSTDOCTORAL POSITION available now for the study of hypoxia regulation of gene expression. Background in molecular biology or signal transduction preferred. Applicants should send curriculum vitae and two letters of recommendation to: **Dr. Jaime Caro, Cardeza Foundation, Thomas Jefferson University, 1015 Walnut Street, Philadelphia, PA 19107. FAX: 215-923-3836.**

Childrens Hospital Los Angeles **POSTDOCTORAL POSITION** available immediately to work on an NIH-funded project focused on the biophysical mechanisms of cell motility. Studies concentrate upon the relation of focal changes in cytoskeleton and signaling to shape change and motion in human neutrophils and other cells. Digital imaging microscopy, fluorescence spectroscopy, and biochemical techniques are employed. Experience with actin chemistry, cell culture, signal transduction as well as good working knowledge of computers desirable. Send current curriculum vitae and names of three references to: **Dr. Thomas Coates, MS Number 54 Division of Hematology/Oncology, Childrens Hospital Los Angeles, 4650 Sunset Boulevard, Los Angeles, CA 90027. FAX: 213-660-9321. Email: tom@hemonc.usc.edu. Equal Employment Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available to study regulation of GABA and NMDA receptors in mammalian neurons. Applicants should have background in cell culture, molecular biology, and receptor-ligand interactions. Send résumés and names of references to: **Dr. Maharaj K. Ticku, Department of Pharmacology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7764. Email: ticku@uthscsa.edu. UTHSC-SA is an Equal Employment Opportunity/Affirmative Action Employer.**

JUNIOR FELLOW IN EXPERIMENTAL NEUROSCIENCE

Senior **POSTDOCTORAL POSITION** available to study aspects of developmental neurobiology using molecular, cellular, and transgenic animal systems. Candidates should have a background in molecular or cellular approaches to nervous system development. Experience with transgenic technology and neuroanatomy is useful. Send curriculum vitae and the names of three references to: **Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, California 92121.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS MOLECULAR AND CELLULAR ASPECTS OF REPRODUCTION AND DEVELOPMENT At The University of Kansas Medical Center Center for Reproductive Sciences

Faculty and research topics include: **Glen Andrews**—gene expression in reproductive tract; **Lydia Arbogast**—tyrosine hydroxylase regulation; **Sudhansu Dey**—embryo development and implantation; **George Enders**—spermatogenic cell regulation; **Joan Hunt**—immunobiology of pregnancy; **Girish Shah**—pituitary gene regulation; **Michael Soares**—trophoblast differentiation and cell signaling; **Joseph Tash**—sperm motility regulation; **Paul Terranova**—cytokines and ovarian cell function; **James Voogt**—prolactin control; **Michael Wolfe**—regulation of gonadotropin gene expression.

Support is provided by a NIH Training Grant and other sources. Send a letter indicating research interest and preceptor choice(s), curriculum vitae and three letters of recommendation to: **Dr. S. K. Dey, Department of Physiology, Kansas University Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160. SDEY@KUMC.EDU. Minorities and women are encouraged to apply.**

RENSSELAER POLYTECHNIC INSTITUTE Postdoctoral Position in Solid State Physics Troy, New York 12180-3590

A POSTDOCTORAL POSITION in the Department of Physics, Applied Physics, and Astronomy is available for a period of up to three years. The work is in the area of solid state physics, and involves the synthesis and study of new semiconductor compounds for thermoelectric refrigerator and generator applications. A combination of interests in inorganic chemistry and semiconductor physics is required. An understanding of electrical and thermal transport properties of solids is desirable. Expected start date is early 1996. Applications should be addressed to: **Kate Spilker, Solid State Postdoctoral Position, Department of Physics, Applied Physics, and Astronomy, Rensselaer Polytechnic Institute, Troy, NY 12180-3590.** An application must include a curriculum vitae and a list of three professional references. *Rensselaer Polytechnic Institute is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.*

POSTDOCTORAL POSITION

NIH-supported postdoctoral position available immediately to study the regulation of glycosylphosphatidylinositol biosynthesis in mammalian cells. The proposed studies will involve protein purification, the expression of recombinant proteins, and fluorescently labeled lipid and protein membrane fusion assays. Previous experience in one or more of these areas is highly desirable. Applicants should send a curriculum vitae and the names and addresses of three references to: **Dr. Victoria Stevens, Division of Cancer Biology, Department of Radiation Oncology, Emory University School of Medicine, 145 Edgewood Avenue, S.E., Atlanta, GA 30335-3801. Email: vlsteve@unix.cc.emory.edu. Emory University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL TRAINING PROGRAM RHEUMATOLOGY/IMMUNOLOGY DIVISION Tufts/New England Medical Center

POSTDOCTORAL RESEARCH POSITIONS available. Focus: studies of molecular mechanisms of *B. burgdorferi* attachment to host cells. T cell responses in Lyme disease, and immune regulation in inflammatory arthritis. Mentors: **A. C. Steere, J. Coburn, L. Glickstein, R. Roubenoff, R. R. Isberg, B. T. Huber.** Funding: NIH training grant (permanent US resident). Applications (curriculum vitae, three reference letters) to: **Allen Steere, New England Medical Center, Box 406, 750 Washington Street, Boston, MA 02111. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available to study gene regulation and molecular pathogenesis of the Epstein-Barr virus. Experience in molecular biology required; experience in mammalian cell culture and virology preferred. Send curriculum vitae and three letters of reference to: **Dr. Shannon Kenney, 211 Lineberger Comprehensive Cancer Center, CB Number 7295, University of North Carolina, Chapel Hill, NC 27599-7295. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN



Wayne State University

POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

Two **POSTDOCTORAL/RESEARCH ASSOCIATE** positions are available April 1, 1996 for two years (renewable), to study genes specific to early mouse embryogenesis, with the emphasis on the development of the extraembryonic tissues and genomic imprinting. Candidates should have broad, in-depth experiences in techniques of molecular biology. Experience in mouse genetics and embryology are also desirable. Annual salary will be \$24,000 to \$28,000 for a recent Ph.D. and \$28,000 to \$35,000 for a senior postdoctoral fellow. In addition, a generous package of fringe benefits, such as full health insurance coverage, will be provided. Send curriculum vitae and names of three references to: **Dr. Minoru S. H. Ko, Center for Molecular Medicine and Genetics, Wayne State University School of Medicine, 5047 Gullen Mall, Detroit, MI 48202, USA. Wayne State University is an Equal Opportunity/Affirmative Action Employer. All WSU Buildings and Structures are Smoke Free.**

POSTDOCTORAL FELLOWSHIPS Genetic Epidemiology and Molecular Genetics

POSTDOCTORAL FELLOWSHIPS in Genetic Epidemiology and Molecular Genetics are available in the Department of Psychiatry at Washington University, St. Louis, Missouri. M.D. or Ph.D. candidates may have degrees in Genetics, Molecular Biology, Bio-statistics, Mathematics, Psychology or Psychiatry. Participation in research groups conducting family and/or molecular studies of Bipolar Disorder, Unipolar Disorder, Schizophrenia, Attention Deficit Disorder, and Alzheimers' Disease accompany a strong didactic program. Methodological linkage and association projects are also in progress. This is an NIMH Institutional Postdoctoral Fellowship Grant so only United States citizens and Permanent Residents may apply. Please send a letter of application including research interests, transcripts, a copy of your curriculum vitae and the names of three references to: **Theodore Reich, M.D., Washington University School of Medicine, Department of Psychiatry, 4940 Children's Place, St. Louis, MO 63110. Washington University is an Equal Opportunity/Affirmative Action Employer.**

POPULATION/COMMUNITY ECOLOGIST

POSTDOCTORAL RESEARCH ASSOCIATE position to investigate the life-history factors regulating plant population and forest community patterns in relationship to land-use history in north-central Massachusetts. The research will involve designing analyses and field studies to explain well-documented patterns of plant distribution associated with human and natural disturbance. The researcher should complement our strengths in forest and community ecology, conservation biology, and plant autoecology, should have strong quantitative skills, and be interested in working in an interdisciplinary setting. Please send curriculum vitae, description of research interests, supporting materials, and three letters of recommendation to: **Dr. David R. Foster, Harvard Forest, P.O. Box 68, Petersham, MA 01366 by March 1, 1996. Harvard University is an Equal Opportunity Employer. Applications from women and minorities are strongly encouraged.**

POSTDOCTORAL POSITION Washington University School of Medicine

Available to study the molecular and genetic mechanisms of metal and xenobiotic metabolism in human pulmonary and neurodegenerative diseases (PNAS 92:2539 & 4249, 1995). Experience in cell and molecular biology required. Send curriculum vitae and names of references to: **Dr. Jonathan D. Gitlin, Department of Pediatrics, Washington University School of Medicine, St. Louis Children's Hospital, 1 Children's Place, St. Louis, MO 63110. Email address: GITLIN@KIDSA1.WUSTL.EDU. Washington University is an Affirmative Action/Equal Opportunity Employer.**

TENURE-TRACK FACULTY

The University of Rhode Island invites qualified persons to apply for a tenure-track faculty position in air/sea-exchange chemistry. The position will be available from July 1, 1996. We expect to make an appointment at the Assistant Professor level, but outstanding applicants at the Associate level may be considered also. The University of Rhode Island will provide eight months per year of salary support with the balance to be funded by the person's research projects.

A Ph.D. will be required by the time of hire. The applicant must demonstrate the potential to establish a research program leading to fundamental contributions in the field and eventually to intellectual leadership at the national and international levels; to advise graduate students; and to teach graduate courses in marine and atmospheric chemistry. For the rank of Associate Professor the applicant must also demonstrate a strong record of independent research and publication with national or international recognition. The area of expertise includes but is not limited to air/sea exchange of gases or particles. Preference may be given to applicants who can complement existing programs at the Graduate School of Oceanography and to applicants who can work in a multi-disciplinary environment, in areas such as marine and atmospheric chemistry, physical oceanography, biological oceanography, and climatology.

Send curriculum vitae, the names of four references, and a summary of research interests to Professor J. Merrill, Search Committee Chair, Marine and Atmospheric Chemist (Log #091186), University of Rhode Island, PO Box G, Kingston, RI 02881. The position will remain open until filled. The committee will begin review of applications on 3/1/96. The University of Rhode Island is an Affirmative Action/Equal Opportunity Employer; women and minorities are encouraged to apply.

UNIVERSITY OF RHODE ISLAND



FACULTY POSITION

Applications are being accepted by the Department of Biomedical Engineering, Duke University, for a tenure track faculty position. Preference will be given to candidates having a Ph.D. or equivalent in materials, mechanical, chemical or biomedical engineering and research interests in one or more of the following areas: biofluid and cellular mechanics, biological transport phenomena, and drug delivery. The position is intended primarily as an entry level appointment, but applications from more senior investigators will be considered. In addition to maintaining a vigorous research program, new faculty will be expected to participate in graduate and undergraduate instruction in one or more of the following areas: surface and interfacial phenomena, biomaterials, drug delivery, tissue/cellular engineering, chemical thermodynamics, and transport in biological systems. A curriculum vitae including a list of publications, current research funding, teaching interests, and a description of research activities should be sent to: **David F. Katz, Chair, Search Committee, Box 90281, Department of Biomedical Engineering, Duke University, Durham, NC 27708-0281.**

Duke University

Duke University is An Equal Opportunity/Affirmative Action Employer.

GLOBAL CAREER OPPORTUNITIES

MRC

MEDICAL RESEARCH COUNCIL Laboratory of Molecular Biology TENURE-TRACK POSITIONS IN MOLECULAR BIOLOGY

The Protein and Nucleic Acid Chemistry Division invites applications from scientists to develop an independent programme of research.

Successful applicants will join the present Divisional Staff of about 60 scientists, visitors and graduate students working on problems relating to molecular immunology and cancer biology, molecular haematopoiesis, selection technologies and gene therapy, molecular bioenergetics, transcription and retrovirology. Applications to work in these or related areas would be considered. An excellent range of shared biochemical and cell culture facilities, instrumentation, computing and workshops is available.

Salary will be at an appropriate point on the MRC non-clinical scientific scale (equivalent to the University Academic scale), ranging from £14,317-£26,430 for an initial period of 3-5 years, during or after which time suitable candidates would be considered for tenure.

Applications including CV, a brief research proposal and the names and addresses of four professional referees should be sent by February 1996, quoting reference PNAC/TTRW to:

**Sheila Jenkins
Personnel Officer
MRC Centre
Hills Road
Cambridge
CB2 2QH
United Kingdom**

*The Medical Research Council is an
Equal Opportunities Employer.*

MEETINGS

Current Topics in Gene Expression Systems 1996 *Pichia pastoris*

March 3-6, 1996

Catamaran Resort Hotel, San Diego, California

The 1996 Current Topics in Gene Expression Systems meeting will be a three-day event. The meeting will focus on recombinant protein expression in the yeast, *Pichia pastoris* and will cover a variety of topics including:

- *Pichia pastoris* cell biology
- Posttranslational modifications/processing of proteins expressed in *Pichia pastoris*
- Optimization of expression
- Scale-up and fermentation
- Commercialization and industrial applications
- New developments in *Pichia pastoris* expression technology

Registration fee is \$245 for Nonprofit, Academic, and Government employees; \$295 for employees of for profit corporations. The registration fee includes continental breakfast, lunch, and refreshments during the three meeting days. Registration deadline is February 9, 1996.

Call for papers: The 1996 Current Topics in Gene Expression Systems meeting provides an opportunity for scientists to present their work in an oral or poster presentation. Please contact Karen Vespe for information on abstract submission.

For more information on the meeting contact Karen Vespe at Invitrogen Corporation. Phone: 619-597-6277, Fax: 619-597-6201, e-mail: kvespe@invitrogen.com.

This meeting is cosponsored by Invitrogen Corporation and Research Corporation Technologies.

POSITIONS OPEN

POSTDOCTORAL POSITIONS MICROBIAL METABOLIC ENGINEERING Department of Microbiology and Cell Science University of Florida

Applications are invited for two **POSTDOCTORAL POSITIONS** (two-year minimum) which are available immediately for talented individuals with experience in microbial genetics and microbial physiology. Research focuses on the development novel biocatalysts for the conversion of lignocellulose and other residues into bulk chemicals such as fuel ethanol. Current studies involve sugar transport systems, gene regulation, ethanol tolerance, batch/continuous culture, and the development of bioconversion processes. Funding for these positions is provided by a combination of federal grants (USDA and DOE) and industrial contributions. Please send curriculum vitae, statement of experience, and the names of three individuals who can be contacted as references to: **L. O. Ingram, Department of Microbiology and Cell Science, P.O. Box 110700, University of Florida, Gainesville, FL 32611. FAX: 904-392-5922.**

POSTDOCTORAL POSITION CANCER GENETICS/BIOLOGY University of California, San Francisco

Applications are invited for a **POSTDOCTORAL FELLOWSHIP** in a multidisciplinary research program directed toward an understanding of the mechanisms of carcinogenesis, tumor progression and response to therapy. Research projects include the study of mechanisms of genomic instability, mechanisms of telomere maintenance and loss, DNA repair and sensitivity to DNA damage, apoptosis, cloning and analysis of oncogenes and suppressor genes, and quantitative and molecular cytogenetics. Interested individuals should send a curriculum vitae, graduate transcripts, research interests, and three letters of recommendation to: **Dr. William C. Dewey, Radiation Oncology Research Laboratory, University of California, Mission Center Building Room 200, 1855 Folsom Street, San Francisco, CA 94103-0806. Telephone: 415-476-9062; Email: Dewey@dmc.ucsf.edu.** Applicants must be a U.S. citizen or permanent resident. An Equal Opportunity Employer.

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.**

POSTDOCTORAL POSITIONS available to study mechanisms of gene regulation and signal transduction in T-cell activation and apoptosis. Current studies focus on Rel/NF κ B transcription factors, CD28 signaling (*MCB* 15:4260, 1995), JNK/SAPK kinase cascade in proliferation and apoptosis (*JBC* 271:631, 1996), and cloning of PAK- and JNK-binding proteins using 2-hybrid system. Applications should be addressed to: **Dr. Tse-Hua Tan, Immunology Section M929, Baylor College of Medicine, Houston, TX 77030. Baylor College of Medicine is an Affirmative Action/Equal Opportunity/Equal Access Employer.**

POSTDOCTORAL POSITION to study the molecular genetics of human DNA replication. Epstein-Barr and papilloma virus sequences and immunoglobulin, globin, and *myc* gene families are being used as model systems both *in vivo* and *in vitro* to define mammalian origins of replication and to study their cell cycle regulation. Apply by mail and a FAX copy to: **Dr. Carl Schildkraut, CH 416, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, New York, NY 10461. FAX: 718-430-8574; Email: schildkr@accomm.yu.edu. Equal Opportunity Employer.**

POSITIONS OPEN

STATISTICAL RESEARCH ASSOCIATE

Plans data collection, collects data from experiments and studies (including multiple large-scale studies) in environmental epidemiology, and analyzes and interprets data. Applies statistical methodologies, including analysis of discrete and spatially indexed data and GIS programming for ARC/INFO and MAPINFO, to provide information for epidemiological research. Applies analysis of dose-effect relationship and risk assessment using generalized linear, additive and nonlinear autoregressive models in time-series approaches. Plans methods to collect information and participates in study design, development and assessment. Evaluates reliability of source information, adjusts and weighs raw data, and organizes results into a form compatible with analysis by computers or other methods. Uses knowledge of molecular biology and immunology to interpret environmental epidemiological data and presents data by computer readouts, graphs, charts, tables, written reports or other methods. Manages highly complex and large data sets in UNIX, X-Windows, and DOS using variety of statistical tools (including S-PLUS and SAS). Describes sources of information, and limitations on reliability and usability. Analyzes statistics to identify differences in relationships among sources of information. Prepares manuscripts and grant proposals. Requirements: B.S. in Mathematics, Statistics or Computer Science and at least two years of experience in applied statistics with applications in molecular biology and immunology. Prior education, training and/or experience must include the job duties described above. \$26,948 per year. 40 hours per week. Submit two copies of résumé and evidence of U.S. citizenship or legal authorization to work in the United States which is not restricted to a particular employer, citing Number 950267, to: **Mr. Travis Bartel, Jobs, Employment and Training Services, 201 East Washington Avenue, P.O. Box 7972, Madison, WI 53707-7972.**

VIRAL OR BACTERIAL PATHOGENESIS

Two **POSTDOCTORAL POSITIONS** are currently available in the Department of Microbiology at the University of Colorado Health Sciences Center (UCHSC) at Denver. One position is in the laboratory of **Randall K. Holmes, M.D., Ph.D.**, Professor and Chair, to work on molecular characterization of the diphtheria toxin repressor and/or development by genetic engineering of new chimeric toxins for use as vaccines. The other position is in the laboratory of **Kathryn V. Holmes, Ph.D.**, Professor, to work on characterization of coronavirus-receptor interactions and/or analysis of the replication and pathogenesis of coronaviruses. A Ph.D. in microbiology, cell or molecular biology, biochemistry, genetics or a related field is required. Research facilities and environment for professional development are excellent. Salary is commensurate with training and experience. Submit curriculum vitae, bibliography, and names of three professional references either to: **Dr. Randall Holmes** or to **Dr. Kathryn Holmes, Department of Microbiology, Campus Box B-175, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. UCHSC is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION to study the induction of voltage-gated currents during development of sensory and ganglion-cells of the inner ear. Approaches include whole-cell recordings, RNase protection assay, cDNA library screening, and PCR. Experience with one or more of these techniques preferred. Send curriculum vitae and letters of reference to: **Dr. Bernd Sokolowski, University of South Florida, Department of Surgery MDC 16, 12901 Bruce B. Downs Boulevard, Tampa, FL 33612. FAX: 813-974-2669; Email: bsokolow@com1.med.usf.edu.**

VERTEBRATE BIOLOGIST/ECOLOGIST

We have approval for a one-year replacement position starting July 1996. Ph.D. required and teaching experience is desirable. The successful candidate will team-teach courses in introductory biology and ecology in the fall and vertebrate zoology and ecology in the spring. There may be opportunities for directing undergraduate students in research. Please forward a letter of application with curriculum vitae, statement of teaching philosophy and three letters of recommendation by February 12, 1996 to: **Dr. Randy Fuller, Chair, Biology Department, Colgate University, Hamilton, NY 13346-1398. Women and minorities are encouraged to apply. Colgate University is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

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.**

Regents' Research **FELLOWSHIPS** in animal disease biology. Training in research programs emphasizing molecular and immunological aspects of bacterial, viral, and parasitic infections. Attractive stipends funded through the Louisiana Education Quality Support Fund. Quality through achievements in microbiological, immunological, biochemical, or veterinary biomedical studies, competitive GPA and GRE scores, and U.S. resident status. Contact: **Dr. J. Storz, Department of Veterinary Microbiology and Parasitology, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803. Telephone: 504-346-3312; FAX: 504-346-5715. Louisiana State University is an Affirmative Action Employer.**

CYTOGENETIC TECHNOLOGIST

Culture amniotic fluid by *in-situ* methods for chromosome analysis. Direct cytogenetic analysis of chorionic villi and also short term cultures for chromosome preparations. Synchronize blood and bone-marrow cultures for high resolution chromosome analysis. Direct FISH analysis of amniocytes to rule out aneuploidies. Prepare slides for cytogenetic analysis. Band slides by GTG-banding. C-banding, NOR straining, fluorescence straining. Analyze mitotic cells under microscope for structural and numerical abnormalities. Photomicrograph mitotic cells, develop negatives, print pictures, cut chromosomes, arrange karyotypes and identify rearrangements using cytogenetics nomenclature. 35 hours per week, 8:00 a.m. to 4:00 p.m., \$26,832 per year, one year of experience required, B.A. Degree in Zoology, Biology or Biochemistry, must have academic courses in cell biology, biochemistry, and molecular cell biology. Apply to the nearest Job Service or send résumé including social security number to: **Job Service, 1105 Briggs Avenue, Durham, NC 27703. DOT Code 078.261-026 Job Order number NC3051700.**

COURSES & TRAINING

BIOLOGY OF DISEASE VECTORS COURSE COLORADO STATE UNIVERSITY FORT COLLINS, COLORADO, USA 16 June to 28 June 1996

The course provides a broad perspective of vector biology and emphasizes modern molecular and quantitative techniques. Subjects covered include: gene regulation, molecular systematics, genetic manipulation, blood-feeding, behaviour and population biology. The course is designed primarily for advanced students (M.S., Ph.D.), postdoctoral fellows and faculty. Enrollment is limited to 30 students. Financial aid may be provided based on need. For application forms and further information contact: **Dr. Stephen Higgs, Arthropod-borne and Infectious Diseases Laboratory, Foothills Campus, Colorado State University, Fort Collins, CO 80523-1682, USA. Telephone: 970-491-8604; FAX: 970-491-8323; Email: shiggs@vines.colostate.edu. Colorado State University is an Equal Opportunity/Affirmative Action institution and complies with all federal and Colorado state laws, regulations, and executive orders regarding affirmative action requirements in all programs.**

MASTER OF SCIENCE BIOLOGICAL SCIENCES

We offer a two-year, research intensive program in cell and molecular biology, microbiology, and cellular and systems physiology. Teaching assistantships include a stipend of \$11,000 for eleven months per year and full tuition remission. **Department of Biological Sciences, Duquesne University, Pittsburgh, PA 15282. Telephone: 412-396-6332. biology@duq3.cc.duq.edu. http://nexus.chemistry.duq.edu/snes/biology/index.html.**

ICAgen,

a biopharmaceutical company devoted to discovering new drugs through a thorough understanding of ion channels, is expanding both its biology and chemistry divisions.

As a privately held company with laboratories in Research Triangle Park (RTP), N.C., we are the only U.S. company exclusively focused on ion channel drug discovery for broad-ranging therapeutic applications in metabolic, cardiovascular and nervous system diseases.

Our approach is to bring a skilled and motivated team of scientists together to tackle the unlimited possibilities for the discovery of compounds which interact with ion channels.

BIOLOGY

• Electrophysiology

Ph.D. Electrophysiologists at ICAgen lead our biology team using biophysical, molecular and computational approaches in the study of ion channel modulation. Successful candidates must be experienced in a wide range of electrophysiological methods.

• Molecular Biology

Ph.D. As a scientist in this group, you will take a leading role in exploring ion channel subtypes involved in disease. You must have experience in cloning, expression, mutagenesis and tissue distribution studies.

• Cell Biology/Pharmacology

Two Positions - Ph.D. and MS/BS. You will be involved in all phases of ion channel drug discovery, including the development and completion of high-throughput screening assays. Experience in assay development is required.

CHEMISTRY

• Organic Chemistry

Three Positions - Ph.D. ICAgen is recruiting a core team of chemists to initiate its organic synthesis group. It is essential that you have experience in medicinal chemistry, molecular simulation methods or diversity/combinatorial chemistry techniques. At least one position will be filled by a candidate with at least 3-5 years of industry experience.

Ph.D. Candidates must have 2-5 years of postgraduate experience. Biologists with direct experience in the research of ion channels are preferred. Chemists with experience in heterocyclic chemistry will receive priority.

Resumes with references **clearly stating the specific position applied for** should be sent to:
ICAgen, Inc. Human Resources, P.O. Box 14487, RTP, NC 27709

An Equal Opportunity Employer



IMMUNOLOGIST/ MICROBIOLOGIST

Merck Research Laboratories in West Point, Pennsylvania, a world leader in biological and pharmaceutical research, is looking for a skilled immunologist/microbiologist for basic research and development work on bacterial vaccines.

A successful candidate must have sound training in the immunology of bacterial infections and in immunochemistry. This position requires experience in the development of immunoassays (RIA/ELISA) and opsonin assays in humans and laboratory animals, maintenance of bacterial strains, immunization and sample collection from laboratory animals, cell and tissue culture. Experience working in a GLP setting and excellent interpersonal skills would be an advantage.

A Ph.D. in Immunology or Microbiology with relevant postdoctoral experience or M.S. in Microbiology, Immunology, or equivalent with 5+ years relevant experience is required.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter to: **Personnel Manager, Ad #B-44, MRL Human Resources, WP42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486.** EEO/AA/V/Employer.



DIRECTOR - ARGONNE NATIONAL LABORATORY

Argonne National Laboratory is owned by the U.S. Department of Energy and operated by The University of Chicago. It is one of the nine "multi-program" national laboratories. It has an annual research budget of nearly \$500 million and approximately 5,000 employees. Approximately one-third of the employees are scientists or engineers.

The director of Argonne National Laboratory reports to a board of governors and is an ex-officio member of the board.

The director of Argonne functions as its principal executive and works with the board of governors, the Department of Energy, and the senior managers of the laboratory to create a strategy, this includes selecting R&D programs and establishing budget priorities. The director plays a key role in assembling the resources, both public and private, to carry on and support the laboratory.

The new director must nurture cooperative arrangements among industry, the national laboratories and universities. The director also must develop effective working relationships with the Department of Energy, other federal agencies and the Congress.

The position affords the new director a strong voice in the shaping of national policy on science and technology.

Candidates may come from universities, government, national laboratories or industry. Irrespective, the ideal candidate has had a management role in a research and development organization with a diverse mission.

The new director must have credentials of scholarship and visibility in some field representative of the core activities of Argonne; the director may be appointed to the faculty of The University of Chicago.

The search committee will begin reviewing applications and nominations in early February. Argonne is an equal opportunity/affirmative action employer.

Please send all applications, nominations and referrals to:

Mr. Arthur M. Sussman
Vice President for
Argonne National Laboratory
The University of Chicago
9700 South Cass Avenue
Argonne, Illinois 60439-4832





FACULTY POSITION IN MOLECULAR PATHOLOGY

Tenure-track faculty positions are available in the Department of Pathology for highly qualified individuals possessing either the MD or PhD degree. The individual(s) selected should be trained in either cell biology or molecular biology and have a strong record of publication as well as the potential of developing an outstanding, independent research program. Research experience in molecular atherosclerosis, microbicidal pathogenesis, or human genetics is desired. These positions will be available in the summer or late spring of 1996. An attractive recruitment package, including highly competitive salaries and excellent fringe benefits, will be offered to the successful candidate(s). Interested applicants should send a Curriculum Vitae, the names of three references, and a brief statement of future research interests to: **Dolph O. Adams, MD, PhD, Chairman, Search Committee, Duke University Medical Center, Box 3712, Department of Pathology, Durham, NC 27710.**

**Duke University
Medical Center**

Duke University is An Equal Opportunity/Affirmative Action Employer.

Head of Scientific Information Technology

Affymax is an innovative venture dedicated to the development of new technologies to revolutionize the process of drug discovery. We have recently become one of the Glaxo Wellcome plc companies, the world's largest pharmaceutical company.

An exciting new opportunity exists for a creative individual to take a leadership role in developing and maintaining scientific information systems for Affymax, to work with other Glaxo sites on chemical information and compound registration, and to take a lead position on the application of computing tools to combinatorial chemistry. Ph.D. in a biological or chemical science or computer science with at least 6 years experience in chemical information technology, preferably using MDL software (REACCS, MACCS, or ISIS) required. Demonstrated knowledge of molecular modeling tools, particularly Tripos and MSI/Biosym desirable; UNIX experience a plus. Must have demonstrated ability to lead an information technology group, have excellent presentation and influencing skills, be able to communicate with all levels and disciplines within the organization and be able to travel regularly.

We offer an excellent compensation/benefits package. Please send your resume to Affymax Research Institute, Human Resources, Dept. Job#EG344, 3410 Central Expressway, Santa Clara, CA 95051. EOE.

affymax



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. Choh	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.

Senior Faculty Position in Molecular Pharmacology School of Pharmacy University of Southern California

The Department of Molecular Pharmacology and Toxicology at the School of Pharmacy, University of Southern California seeks applications for a tenure track faculty position at the level of Professor or Associate Professor. The Department provides an excellent research environment with groups conducting research in free radical biochemistry and toxicology, gene expression and regulation, neurobiology, and signal transduction. Selection will be based on a research record in the area of cell and/or molecular biology with research interests expanding the existing areas of strength. The successful candidate is expected to have a proven record of independent extramural research support, and to participate in teaching of professional and graduate students in the Pharmacy School.

Interested candidates should send curriculum vitae and the names, addresses and telephone numbers of three references to **Professor Alex Sevanian, Chair, Search Committee, University of Southern California, PSC 700, 1985 Zonal Avenue, Los Angeles, California 90033.** Evaluation of the application will begin January 31, 1996 and continue until the position is filled.

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

POSTDOCTORAL SCIENTIST

STRATAGENE, a leader in the development and manufacture of molecular biology research products, has an immediate opening for a qualified Postdoctoral Scientist to work on an exciting project located in Washington, D.C., in collaboration with the Naval Research Laboratory. Qualified candidates should have a Ph.D. in Molecular Biology or Biochemistry, extensive experience in sequencing nucleic acids, and excellent quantitative skills. An understanding of physical chemistry is highly desirable.

The successful completion of this project may lead to full-time employment at Stratagene in La Jolla, California. Interested candidates should send a resume to: **Stratagene, 11011 N. Torrey Pines Rd., La Jolla, CA 92037, Attn: Professional Staffing 21060-95A. AA/EOE.**



STRATAGENE®

ASSISTANT PROFESSOR OF FOREST ECOLOGY

The Department of Forestry at Michigan State University is seeking applicants for a full-time (12-month) tenure-track, assistant professor of forest ecology position (70% research, 30% teaching appointment). The successful applicant is expected to build a nationally recognized scholarly research program in forest ecosystem ecology; teach two semester courses per year in forest ecology, one at the undergraduate and one at the graduate level; be actively involved in M.S. and Ph.D. graduate education; and contribute to the interdepartmental Ecology and Evolutionary Biology Program. Candidates must have a Ph.D. in plant or forest ecology and at least one degree in forestry. A commitment to excellence, an interest in working with the woody component of forested ecosystems, a knowledge of current research technologies in plant ecology, and professional experience in ecology research and teaching are primary search criteria.

Applications will be accepted until February 29, 1996 or until the position is filled. The university is committed to building a diverse faculty, so candidates from underrepresented groups are especially encouraged to apply. A complete application will consist of a letter of intent, curriculum vitae, and four letters of reference. Send this application to:

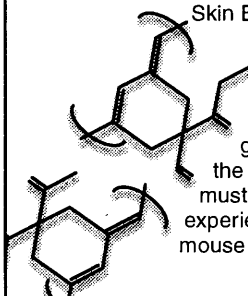
**Melvin R. Koelling, Chair
Ecology Search Committee
Department of Forestry
Michigan State University
East Lansing, MI 48824-1222**

Phone inquiries can be directed to the search committee chair at (517) 355-0096.

Molecular Genetics Postdoctorate Research Without Boundaries

That's what you'll find at Unilever Research. As one of the world's largest consumer products companies, we offer hundreds of brands and thousands of products that are sold in more than 100 countries. And the driving force behind them all is scientific research.

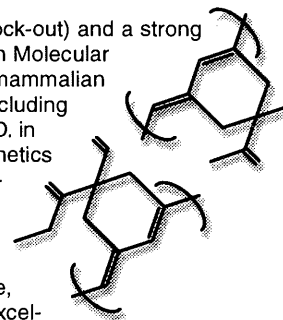
Since we introduced our first product in 1902, Unilever scientists have developed a constant flow of highly innovative products and technologies. Our international commitment to scientific breakthroughs in skin research has resulted in the development of our world-class Skin Care Research Center in Edgewater, NJ, where a Postdoctoral position is now available for a highly-motivated and talented scientist with a strong interest in Skin Biology.



As part of our team, you will study functions of cytokines and growth factors of the skin. Applicants must have previous experience in generating mouse mutants by gene

targeting (knock-out) and a strong background in Molecular Biology and mammalian cell culture including ES cells. Ph.D. in molecular genetics or related science is required.

In return for your expertise, we offer an excellent salary, a comprehensive flexible benefits package, retirement and savings plans, tuition reimbursement, and a progressive work environment that's conducive to challenge. For consideration, send your resume to: Ms. Jane Goodwin, Human Resources, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. Equal Opportunity Employer.



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WORLD CLASS RESEARCH**

DEAN MOUNT SINAI SCHOOL OF MEDICINE

Mount Sinai School of Medicine is searching for a nationally recognized leader in academic medicine to serve as Dean upon the retirement of Nathan G. Kase, M.D. Mount Sinai School of Medicine is a research-intensive medical school with a strong and growing base of NIH support and very substantial new research facilities. Major new initiatives range from primary care to gene therapy and structural biology. The School of Medicine has an exceptional faculty (both full-time and voluntary) of leading clinicians, scientists, and educators, and its student body is highly select. It has a number of major new educational initiatives, such as in primary care, humanities and medicine, and engineering and medicine. The School of Medicine is

**Mount
Sinai**

SM

affiliated with The Mount Sinai Hospital, a premier, successful 1,167-bed tertiary and quaternary care referral center, and The Mount Sinai Health System, a regional, integrated health system with numerous important educational and research opportunities. The School of Medicine also sponsors education and training programs at high-quality health-care facilities in the local region. Qualified candidates should send a curriculum vitae to: **Dr. Arthur Aufses, Jr., Chairman, Department of Surgery and Chair, Dean Search Committee, The Mount Sinai Medical Center, One Gustave L. Levy Place, Box 1259, New York, NY 10029-6574.** The Mount Sinai Medical Center is an equal opportunity/affirmative action employer

The Mount Sinai Medical Center of New York



香港城市大學
City University
of Hong Kong

City University of Hong Kong is a well-established degree-granting institution in Hong Kong directly funded by the government through the University Grants Committee (Hong Kong). The University is committed to excellence in teaching and research and to maintaining close relationship with the community and industry with the aim to providing quality education for professional excellence. The student population for 95-96 is 16,234. The medium of instruction is English.

Associate/Assistant Professors
Department of Biology and Chemistry
[Ref.A/236/29]

The appointees will assist in the design and teaching of one or more of the following subject areas : Environmental Chemistry/Molecular Biology/Molecular Toxicology; undertake research, consultancy and administrative duties as required by the Department.

Applicants should have a doctorate degree in Environmental Chemistry/Molecular Biology/Molecular Toxicology or a related subject. Candidates with relevant teaching, research and consultancy experience, research publications and professional qualifications preferred.

Salary and Conditions of Service

Associate Professor	:HK\$58,800 - \$78,990
	:HK\$53,110 - \$63,225*
Assistant Professor	:HK\$37,850 - \$63,225

*Appointees with salary at HK\$53,110 per month or above may be considered for the title of Associate Professor.

(Exchange rate : US\$1 = HK\$7.8 approximately)

Appointment may be on superannuable terms with provision for retirement benefit or on fixed term contract with gratuity payable at 15% of basic salary upon satisfactory completion of contract. Generous fringe benefits include medical and dental schemes, 46 days' annual leave, passages and housing assistance where applicable.

Information and Application

Information concerning the posts and the University is available on the University's World Wide Web home page <http://www.cityu.edu.hk> or the University's listserver accessed by E-mail at "POMAIL@CTYLNK.CITYU.EDU.HK" or from the Personnel Office, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong (Fax : 852-2788 1154 or 852-2788 9334, E-mail: PORECRUT@CITYU.EDU.HK). Please send your application with a current curriculum vitae and the names and addresses of three academic referees to the Personnel Office by the end of March 1996.

AMGEN®

RESEARCH SCIENTIST POST DOCTORAL FELLOW

Amgen is a global pharmaceutical company that develops, manufactures and markets human pharmaceuticals based on advanced cellular and molecular biology. Due to the diversification of the product lines there is an opening for a PhD with 1 to 2 years post-doctoral experience in Experimental Haematology. A solid background in FACS analysis of rare cells and experience in In-vitro clonal assays is essential.

This uniquely challenging position will be based in Amgen's laboratory in Brussels and involves both basic and clinical research in Cellular Therapy.

Initially, this position will be offered for a period of 12 months with the possibility of converting to a permanent position thereafter. For a confidential, more detailed information exchange, candidates should fax/mail their CV and relevant documents with full contact details to the consultants:

THORBURN-GEIGER GROUP, POB 1225, 1001
LAUSANNE, SWITZERLAND,
Fax +41 21 6131029, Ref: 426



MAX-PLANCK-INSTITUT
FÜR MARINE MIKROBIOLOGIE

The Max-Planck-Institute for marine Microbiology, Bremen, Germany, invites applications for a

Leader of the Research Group for Molecular Ecology

to study the structure, function and evolution of natural microbial communities from aquatic ecosystems, and their role in the biogeochemical cycles.

The successful candidate should have several years of postdoctoral experience in the application of molecular techniques to characterize microbial communities and a record of original research in the field of molecular microbial ecology.

The position is limited to 5 years and the salary is according to the German C3 level. New laboratory space and funds for research and equipment are available. Fellowships for postdoctoral coworkers and graduate students may be negotiated. Selected applicants will be invited to a colloquium in Bremen in April-May.

Applications, including a curriculum vitae, a list of publications and a short description of future research objectives are invited within two months to:

Prof. Dr. B.B. Jørgensen
Max-Planck-Institut für marine Mikrobiologie
Celsiusstr. 1
28359 Bremen, Germany



GRANTS FOR INTERNATIONAL JOINT RESEARCH IN THE AREAS OF MATERIALS, ENERGY AND GLOBAL ENVIRONMENT

The New Energy and Industrial Technology Development Organization (NEDO), a Japanese governmental implementing agency supervised by the Ministry of International Trade and Industry (MITI) of Japan, has been carrying out an International Joint Research Program since 1988. This program aims to contribute to the enhancement of the international level of industrial technology as well as to the advancement of international exchange by supporting international joint research teams which conduct superior research. In addition to supporting international joint research teams which conduct original and innovative basic research in the materials area, international joint research teams which conduct research in the energy area and the global environment area will be provided with grants in FY 1996. The program in the global environment area will be conducted jointly with the Research Institute of Innovative Technology for the Earth (RITE).

Research grants will be provided to "International Joint Research Teams" which fulfill the following main requirements:

1. Each team, in principle, must be composed of four or more researchers;
2. Each team must consist of researchers of two or more different nationalities;
3. The research organizations where the team members' major activities take place must be located in two or more countries.
4. Each team must appoint a research coordinator and an accounting coordinator. The accounting coordinator must be responsible for accounting matters and function as the liaison between the team and NEDO.

The accounting coordinator's organization and research site must be located in Japan, and he/she must be able to communicate with NEDO in Japanese about all accounting matters. The research coordinator can also hold the post of accounting coordinator.

FY 1996's program is shown below.

Research Area	Field of Research	Amount of Each Grant	Number of Themes to be Adopted	Recipients of Applications
Materials	1) Basic research concerning the investigation and elucidation of materials 2) Basic research concerning the practical use of materials	about 30,000,000 yen in FY 1996	3 themes	NEDO (Note a.)
Energy	Practical research on electric power generation technologies using oil-alternative energy, on load leveling technologies and on global environment conservation related to such technologies.	about 30,000,000 yen in FY 1996	3 themes	
Global Environment	(Basic research) Basic research on conservation and improvement of the global environment.	about 24,000,000 yen in FY 1996	1 theme	RITE (Note b.)
	(Practice research) Practical research concerning the production, generation and use of oil-alternative energy (excluding electric power generation technologies) which contributes to the conservation and improvement of the global environment	about 30,000,000 yen in FY 1996	3 themes	

(Recipients of applications)

Note a. Materials and Energy area

International Joint Research Division,
Industrial Technology Department
New Energy and Industrial Technology Development Organization (NEDO)
Address : PO Box 1151, 29F, Sunshine 60 Bldg.
3-1-1 Higashi-Ikebukuro, Toshima-ku,
Tokyo, 170 Japan
Phone No. : 81-3-3987-9357
Telefax No.: 81-3-3981-1536

Note b. Global environment area

Research Proposals Reception Section,
Research Planning Department
Research Institute of Innovative Technology for the Earth (RITE)
Address : 9-2 Kizugawadai Kizu-cho Soraku-gun,
Kyoto, 619-02 Japan
Phone No. : 81-774-75-2302
Telefax No.: 81-774-75-2314

Please be informed that the amount of each grant and the number of themes to be adopted may be changed, and that this grant program is subject to government budget approval. A research team may submit an application a maximum of two times for a grant on the same subject.

The application period is from January 18, 1996 to April 18, 1996.

No applications will be accepted later than April 18th.

ATTENTION: If there are some discrepancies in a submitted application, for example, it does not follow the Application Guidebook or the research contents are different from the proposed research area, it will be considered invalid.

PENN

UNIVERSITY OF PENNSYLVANIA

POSTDOCTORAL RESEARCH INTERDISCIPLINARY VASCULAR BIOLOGY ENDOTHELIAL MECHANO-TRANSDUCTION

Three postdoctoral positions are available in July 1996 to work on mechanical force-sensing systems in endothelial cells. This is an interdisciplinary project directed at the mechanisms by which endothelial cells respond to changes of blood flow forces*. Such responses regulate flow-mediated vascular tone, vascular wall remodeling, and the localization of atherosclerosis. The positions offer opportunities for biomedical researchers to participate in engineering and computational approaches to biology, and for engineers to become involved in vascular cell and molecular biology. Cardiovascular research experience desirable but not essential.

Two appointments of candidates with backgrounds in molecular biology/biochemistry are anticipated. Experience in signal transduction and related areas is desirable.

One appointment in bioengineering/computational sciences is anticipated. Experience in cellular mechanics, fluid dynamics, or cell imaging (broadly defined), with advanced computer skills is desirable.



Ben Franklin's University

This group will become part of the new Institute for Medicine and Engineering upon completion of the Advanced Science and Technology building in 1997. Send curriculum vitae, names and addresses of three references and a statement of research experience and career interests to: Dr. Peter F. Davies at the following current address: Department of Pathology - MC 6079, The University of Chicago, 5841 S. Maryland Avenue, Chicago, Illinois 60637. E-mail: pd12@midway.uchicago.edu

*Davies, PF, 1995 Physiological Reviews 75:519:560.

The University of Pennsylvania is an equal opportunity/affirmative action employer.

Gene Therapy • Senior Faculty Position •

The USA Comprehensive Sickle Cell Center seeks an investigator with a strong research program in gene therapy and an interest in applying their expertise to sickle cell disease. The successful candidate will join our NIH-funded Comprehensive Sickle Cell Center as a senior faculty member. Departmental affiliation and rank (Associate Professor or Professor) will be determined based on past experience and interest. Extremely attractive salaries and start-up packages are available.

Interested applicants need to forward a curriculum vitae and have three letters of reference sent by April 1, 1996.

• Faculty Position •

The USA Comprehensive Sickle Cell Center and the Department of Structural and Cellular Biology seeks an individual with substantial expertise in the preparation and use of vectors for gene therapy. The successful candidate will be appointed as a tenure track Assistant Professor in the Department of Structural and Cellular Biology. He or she will also be a member of our NIH-funded Comprehensive Sickle Cell Center and will become Director of the Vector Core Laboratory within our gene therapy program. Competitive salaries and start-up funding are available. Excellent opportunities exist for collaborative research.

Interested applicants should send a curriculum vitae, statement of research interests, and three letters of reference by April 1, 1996.

Send applications to: Dr. Steven R. Goodman, Director, USA Comprehensive Sickle Cell Center & Chairman, Department of Structural & Cellular Biology • University of South Alabama College of Medicine • CSAB 138 • Mobile, Alabama 36688-0002

The University of South Alabama is an Affirmative Action/Equal Opportunity Educational Institution

Pharmacologists

Headquartered in the San Francisco Bay Area, **Arris Pharmaceutical Corporation** is a successful young biopharmaceutical company using an integrated, team-oriented approach to drug discovery. The rapid expansion of our protease inhibitor R&D efforts has created several openings for a select group of skilled Pharmacologists.

Working with a multi-disciplinary team of scientists, you will evaluate and develop new protease inhibitors with significant therapeutic value in the areas of **inflammation, oncology, and infectious diseases** (viral, fungal and bacterial). You will design, initiate, monitor and interpret pharmacological studies in academic & contract laboratories. The chosen candidates will have at least 5 years of relevant experience in one or more of the aforementioned therapeutic areas; excellent written/verbal communication skills; and demonstrated experience setting up contract studies.

We offer an excellent salary, benefits, equity participation and career advancement opportunities with a progressive, growing company. Please forward your resume to: **Arris Pharmaceutical Corporation, Human Resources Dept., Attn: Job# SMHG16, 385 Oyster Point Blvd., Suite 3, South San Francisco, CA 94080. EOE**



University of California, San Diego School of Medicine

Two Tenure Track or Tenured Positions in Immunology

Applications are invited for two available positions at the assistant professor or full professor rank in basic immunology. Areas of interest should include: signal transduction in immunological functions, protein trafficking related to receptor assembly and antigen presentation, structure related to function in immuno-specific molecules, the role of cytokines, cell adhesion molecules and inflammatory reactions in immune responses, mechanisms of host-pathogen interactions, development of immune systems, functional organization of immunity-relevant organs and mechanisms and genetics of autoimmune responses. Rank and salary commensurate with experience and based on UC scale.

Applicants should have a M.D. or Ph.D. degree with relevant postdoctoral experience and demonstrated ability to conduct an independent research program using modern techniques. They should also have skills and interest in teaching. Submit curriculum vitae, bibliography, statement of professional goals and research interests and names and addresses of 5 references to:

Immunology Search Committee
c/o Gordon N. Gill, M.D.
University of California, San Diego
9500 Gilman Drive, #119 CMM Bldg.
La Jolla, CA 92093-0650

Application deadline: April 15, 1996
EOE/AA

Manager Model Development and Bird Facilities Laboratory

Embrex, Inc. an Agricultural Bioengineering Company, dedicated to improving global poultry production economics through novel in-the-egg delivery systems and products, is seeking an individual to manage its hatchery and bird facilities in Raleigh, N.C. In this position, the successful candidate will be responsible for developing validated in vivo models of bird disease and performance, running the day-to-day operations of the facilities, and defining a long-term strategy for facilities needs and use compatible with company requirements. A post graduate degree and/or Doctor of Veterinary Medicine or equivalent level of experience in developing statistically sound animal models of disease, strong leadership and team skills, entrepreneurship, a willingness to work hands-on, and a high energy level are required. Experience in coccidiosis is highly desirable. This senior level position is supported by three full-time employees and three temporary part-time employees.

Please respond to:

Embrex, Inc.
P.O. Box 13989
RTP, NC 27709

Embrex is an Affirmative Action/Equal Opportunity Employer.

SCIENTISTS

Ceregen, a unit of Monsanto Company, is a recognized leader in innovative agricultural research. The Plant Protection Group is looking for two scientists to join a multidisciplinary team working on the discovery of novel agrochemicals.

One position requires experience in protein purification, assay development and molecular techniques. Knowledge of plant biochemistry and metabolism and experience in methods to characterize protein-DNA interactions is a plus. The second position requires a strong background in plant physiology/biochemistry with experience in molecular biology. Knowledge of plant-pathogen interactions is a plus.

We seek innovative scientists with strong research backgrounds. Candidates must demonstrate the ability to be creative in the approach to new and diverse problems. Strong collaborative and communication skills are essential. A Ph.D. or equivalent experience is required.

Both positions are located in St. Louis, MO. Applicants should send their resumes (no phone calls), with the names of three references, to: **Monsanto Company; Attn: D. DuMont-C; Mail Code U3F; 800 N. Lindbergh Blvd., St. Louis, MO 63167.** Equal Opportunity Employer M/F/D/V.

Monsanto

S C I E N T I S T S

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From molecules to medicines. At Schering-Plough, scientists are discovering and developing the novel therapeutics that challenge mankind's most debilitating diseases. To continue this important work, we seek talented scientists with knowledge and dedication.

ASSOCIATE SCIENTIST

Immunology

As a member of a professional research team, you will contribute to major immunologic programs by assisting with *in vivo* and *ex vivo* experimentation in addition to operating a dual laser flow cytometer. To qualify, you will need to be an independent self-starter with a BS in Biology or related field and 4-7 years of experience or an MS and 2-4 years of experience. Previous research conducting *in vivo* experiments with various disease models plus experience in the field of flow

cytometry including hands-on operation of a FACS cell sorter are musts. Excellent written and verbal communication skills are essential.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume with salary requirements to: Human Resources-BG, Dept. DD 95-41, Schering-Plough Research Institute, MS #1255, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



**Schering-Plough
Research Institute**

U s i n g S c i e n c e F o r H u m a n A d v a n t a g e


FRAMINGHAM STATE COLLEGE

Framingham State College, a state-supported, undergraduate liberal arts college with a commitment to excellence in teaching, seeks applicants for the following teaching position.

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Applications for this position should be sent to the **Department Chair, Framingham State College, 100 State Street, Framingham, MA 01701.**

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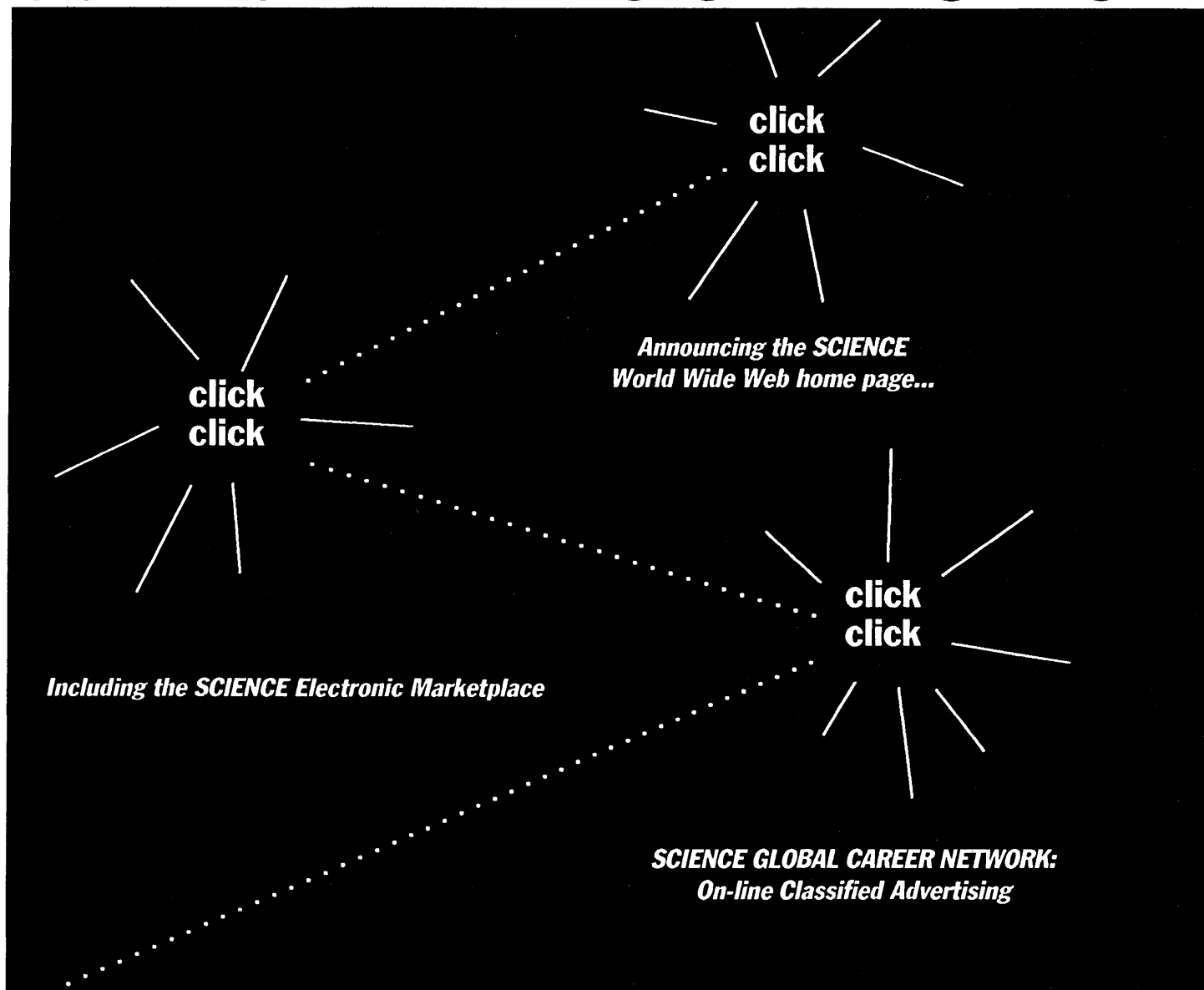
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