

# SEE YOU IN PHILADELPHIA

1998 AAAS ANNUAL MEETING & SCIENCE INNOVATION EXPOSITION  
FEBRUARY 12-17, 1998 • PENNSYLVANIA CONVENTION CENTER • PHILADELPHIA

## PLENARY LECTURES

All information is as of 12/1/97. Changes, additions or deletions received after that date will be included in the next printing of the program.

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John Holdren/Credit:  
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### THURSDAY, FEBRUARY 12

5:30PM-6:30PM

#### Opening Convocation

#### 150th Anniversary Student Science Displays

6:30PM-8:00PM

#### Keynote Address

Dudley Herschbach, Harvard Univ  
*Benjamin Franklin's Scientific Amusements*

### FRIDAY, FEBRUARY 13

6:30PM-7:30PM

David Satcher\*, US Ctrs for Disease Control and Prevention

### SATURDAY, FEBRUARY 14

6:30PM-7:30PM

#### AAAS President's Lecture

Mildred S. Dresselhaus, MIT

### SUNDAY, FEBRUARY 15

6:30PM-8:00PM

#### Plenary Panel: Views of the Future

Moderators/Discussants: Alvin Toffler and Heidi Toffler

#### SPEAKERS

David E. Liddle\*, Interval Resch Corp

John P. Holdren, Harvard Univ

Peter J. Liacouras, Temple Univ

### LEADERSHIP DAY

8:00AM-10:00AM

#### Special Morning Lecture

Bill Clinton\*, US President

10:00AM-11:00AM

#### AAAS 150th Anniversary Birthday Party

11:00AM-1:20PM

#### Science Meets Society

Gro Harlem Brundtland, Norwegian Parliament  
*Environmental Challenges in a Shrinking World*

Esther Dyson, Edventure Holding

Stephen Breyer\*, US Supreme Court

1:30PM-3:00PM

#### Science and Technology for Tomorrow

Moderator: Mildred S. Dresselhaus, MIT

#### SPEAKERS

Bruce M. Alberts, Natl Acad of Scis

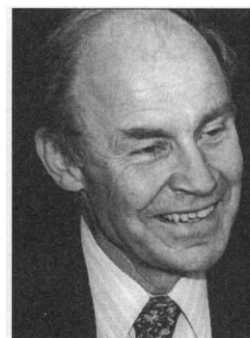
Kenneth I. Shine, Inst of Med

William A. Wulf, Natl Acad of Eng

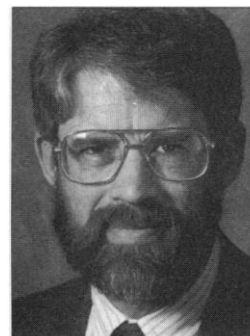
6:30PM-8:00PM

#### AAAS Awards Ceremony

(\* = Invited, not yet confirmed)



Dudley Herschbach



John Holdren



Gro Harlem Brundtland



Mildred S. Dresselhaus

# TOPICAL LECTURES

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Alvin Toffler/Credit:  
Robert Basile; Ellen  
Heber-Katz/Credit:  
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## FRIDAY, FEBRUARY 13

8:00AM-8:45AM



John N. Bahcall,  
Inst for Adv Study  
*The Mystery of the  
Missing Neutrinos*

Robert T. Watson, World Bank  
*Climate Change*

1:00PM-1:45PM

Patricia J. Beattie, General  
Motors Corp  
*Redesign for Chemical Risk  
Reduction in Automobile  
Manufacture*

J. T. Childs, Jr., IBM, Inc  
*Affirmative Action and Diversity  
in the Workplace*

Tony D. DeRose, Pixar  
Animation Studios  
*How Geometry is Changing  
Hollywood*

## SATURDAY, FEBRUARY 14

8:00AM-8:45AM

Richard N. L. Andrews, Univ of  
North Carolina-Chapel Hill  
*Science and Environmental Policy:  
150 Years of Debate*



Leslie A. Riseberg,  
GTE Corp  
*The Telecommuni-  
cations Revolution:  
A View from  
the Front*

2:00PM-2:45PM



Eugene Garfield,  
*The Scientist  
Mapping the World  
of Science*

## 1998 George Sarton Award Lecture in the History and Philosophy of Science



Garland E. Allen,  
Washington Univ  
*Genetics,  
Eugenics, and the  
Medicalization of  
Social Behavior:  
Lessons from the  
Past*

## 1998 John P. McGovern Award Lecture in the Behavioral Sciences



Michael I. Posner,  
Univ of Oregon  
*Educating the  
Human Brain: A  
View from Inside*

## SUNDAY, FEBRUARY 15

8:00AM-8:45AM



Ellen H.  
Goldberg, Santa  
Fe Inst  
*Complexity*



Barbara Boyle  
Torrey, Natl Resch  
Council-Natl  
Acad of Scis  
*Population  
Tectonics: Becoming  
an Urban World*

1:00PM-1:50PM



C. Everett Koop  
*The Tobacco  
Agreements*

2:00PM-2:45PM

Peggy M. Foegeding, North  
Carolina State Univ  
*Food Safety: The Dose Makes the  
Poison*



Eloy Rodriguez,  
Cornell Univ  
*Natural Medicines  
of the Amazonas:  
Evolution of Drug  
Selection by  
Indigenous Tribes  
and Wild Primates*



Alvin Toffler and  
Heidi Toffler

## MONDAY, FEBRUARY 16

2:00PM-2:45PM



Michael Novacek,  
Amer Museum of  
Natural History  
*Exploring the Web  
and the Tree of Life*

## SCIENCE INNOVATION TOPICAL LECTURES

## FRIDAY, THURSDAY 13

8:00AM-8:45AM



Harold Varmus,  
NIH  
*New Directions in  
Biology and  
Medicine*

1:00PM-1:45PM



Monica Riley,  
Marine Bio Lab  
*Genomics of  
Microorganisms*

## SATURDAY, FEBRUARY 14

8:00AM-8:45AM



Frances H.  
Arnold, California  
Inst of Tech  
*Directing the  
Evolution of  
Enzymes: Catalysts  
for the Future*

2:00PM-2:45PM



Ellen S. Heber-  
Katz, The Wistar  
Inst  
*The Genetics of  
Tissue Repair and  
Regeneration in Mice*

## SUNDAY, FEBRUARY 15

8:00AM-8:45AM



C. Thomas  
Caskey, Merck &  
Co, Inc  
*Functional  
Genetics: The Next  
Genome Wave*

2:00PM-2:45PM

Georgia M. Dunston\*, Howard  
Univ-College of Med

## MONDAY, FEBRUARY 16

2:00PM-2:45PM



Baruch S.  
Blumberg, Fox  
Chase Cancer Ctr  
*Cancer Prevention  
with a Vaccine:  
Hepatitis B and  
Liver Cancer*

(\* = Invited, not yet confirmed)



# DAILY TIME TABLE

February 12-17, 1998 • Pennsylvania Convention Center • Philadelphia Marriott Hotel

\* = invited, not yet confirmed

	THURSDAY, 12th	FRIDAY, 13th	SATURDAY, 14th	SUNDAY, 15th	MONDAY, 16th	TUESDAY, 17th
Morning	<b>Meeting Registration</b> 2:00pm-7:00pm Convention Center	<b>Meeting Registration</b> 7:00am-7:00pm Convention Center  <b>SI Topical Lecture</b> 8:00am-8:45am Convention Center  <b>Topical Lectures</b> 8:00am-8:45am Convention Center Marriott Hotel  <b>AJAS Oral Presentations</b> 8:00am-1:00pm Marriott Hotel  <b>Concurrent Sessions</b> 9:00am-12:00noon Convention Center Marriott Hotel  <b>Student Poster Competition</b> 9:30am-1:30pm Convention Center	<b>Meeting Registration</b> 7:30am-5:00pm Convention Center  <b>SI Topical Lecture</b> 8:00am-8:45am Convention Center  <b>Topical Lectures</b> 8:00am-8:45am Convention Center Marriott Hotel  <b>Genome Seminar</b> 9:00am-6:00pm Convention Center  <b>Concurrent Sessions</b> 9:00am-12:00noon Convention Center Marriott Hotel  <b>Career Workshops</b> 9:00am-6:00pm Convention Center  <b>Poster Session</b> 10:00am-2:00pm Convention Center  <b>Exhibition</b> 10:00am-3:00pm Convention Center Grand Ballroom	<b>Meeting Registration</b> 7:30am-5:00pm Convention Center  <b>SI Topical Lecture</b> 8:00am-8:45am Convention Center  <b>Topical Lectures</b> 8:00am-8:45am Convention Center Marriott Hotel  <b>Genome Seminar</b> 9:00am-6:00pm Convention Center  <b>Concurrent Sessions</b> 9:00am-12:00noon Convention Center Marriott Hotel  <b>Career Workshops</b> 9:00am-6:00pm Convention Center  <b>Exhibition</b> 10:00am-3:00pm Convention Center Grand Ballroom	<b>Meeting Registration</b> 7:30am-5:00pm Convention Center  <b>Special Morning Lecture</b> 8:00am-10:00am US President William J. Clinton* Marriott Hotel  <b>Exhibition</b> 9:00am-2:00pm Convention Center  <b>AAAS Birthday Celebration</b> 10:00am-11:00am Convention Center  <b>Leadership Forum</b> 8:00am-3:00pm (see program for details) Marriott Hotel	<b>Meeting Registration</b> 7:30am-12:30pm Convention Center  <b>Concurrent Sessions</b> 8:00am-11:00am Convention Center Marriott Hotel  <b>The Forum For School Science</b> 8:00am-3:30pm Convention Center Marriott Hotel  <b>Career Workshops</b> 8:00am-3:30pm Convention Center  <b>Science Career Fair</b> 11:00am-4:00pm Convention Center
		<b>SI Topical Lecture</b> 1:00pm-1:45pm Convention Center  <b>Topical Lectures</b> 1:00pm-1:45pm Convention Center Marriott Hotel  <b>Concurrent Sessions</b> 2:00pm-5:00pm Convention Center Marriott Hotel  <b>AJAS Posters</b> 3:00pm-5:00pm Convention Center  <b>Exhibition Opening Night Reception</b> 4:30pm-6:30pm Convention Center  <b>Plenary Lecture</b> 6:30pm-7:30pm Convention Center Marriott Hotel	<b>Exhibitor Workshops</b> 11:30am-2:30pm Marriott Hotel  <b>SI Topical Lecture</b> 2:00pm-2:45pm Convention Center  <b>Topical Lectures</b> 2:00pm-2:45pm Convention Center Marriott Hotel  <b>Concurrent Sessions</b> 3:00pm-6:00pm Convention Center Marriott Hotel  <b>President's Lecture</b> 6:30pm-7:30pm Marriott Hotel  <b>President's Reception</b> 7:30pm-8:30pm Marriott Hotel	<b>Exhibitor Workshops</b> 11:30am-2:30pm Marriott Hotel  <b>Topical Lectures</b> 1:00pm-2:45pm Convention Center  <b>SI Topical Lecture</b> 2:00pm-2:45pm Convention Center  <b>Concurrent Sessions</b> 3:00pm-6:00pm Convention Center Marriott Hotel  <b>Plenary Lecture</b> 6:30pm-8:00pm Marriott Hotel	<b>The Forum For School Science</b> 1:00pm-6:00pm Convention Center Marriott Hotel  <b>SI Topical Lecture</b> 2:00pm-2:45pm Convention Center  <b>Topical Lectures</b> 2:00pm-2:45pm Convention Center  <b>Career Workshops</b> 3:00pm-6:00pm Convention Center  <b>Concurrent Sessions</b> 3:00pm-6:00pm Convention Center Marriott Hotel  <b>Poster Session</b> 4:00pm-6:30pm Convention Center  <b>AAAS Awards Ceremony</b> 6:30pm-8:00pm Marriott Hotel	<b>Concurrent Sessions</b> 12:30pm-3:30pm Convention Center
Evening	<b>Opening Convocation and Keynote Address</b> 5:30pm-8:00pm Marriott Hotel					

# FRIDAY

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## DAY-AT-A-GLANCE

### Computers and Information



Data Selection: Good Research or Fudging the Data?  
2:00PM - 5:00PM  
Who Owns the Internet?: A Roundtable Discussion  
2:00PM - 5:00PM

### Education and Public Outreach



How Scientists Really Think: Beyond the Myths of Discovery  
9:00AM - NOON  
The Science of Chocolate  
9:00AM - NOON  
Changing the Teaching of Undergraduate Science and Mathematics  
2:00PM - 5:00PM

### Environment and Life Sciences



The Changing Science of Environmental Science  
9:00AM - NOON  
Global Shrimp Farming, Mangroves, and People: Finding a Sustainable Path  
9:00AM - NOON  
The International Biodiversity Observation Year  
9:00AM - NOON  
Dredging Harbors: What to Do with Toxic Waste  
2:00PM - 5:00PM  
Frontiers in Plankton Dynamics  
2:00PM - 5:00PM

### History



AAAS at 150: The Past as Prologue?  
2:00PM - 5:00PM

### Industry and Engineering



Fundamental Research and Innovation: Health of the Industrial Enterprise  
9:00AM - NOON; 2:00PM - 5:00PM  
What Should Be the Priorities for US Energy Research and Development  
9:00AM - NOON

### Medicine and Biotechnology



Insights to Pain and Its Management  
9:00AM - NOON  
Obesity Update: Molecular Biology of Energy Regulation and Implications for Treatment and Public Policy  
9:00AM - NOON  
The Rights and Wrongs of Cloning Humans  
9:00AM - NOON; 2:00PM - 5:00PM  
Gene Movement: Introgression, Genome Analysis, Biotechnology  
2:00PM - 5:00PM

Radiation and Breast Cancer: Current Views and Implications for Exposed Populations in the Former Soviet Union  
2:00PM - 5:00PM  
Should Organic Chemistry Be Eliminated as a Requirement for Medical School Admission?  
2:00PM - 5:00PM

### Physical Sciences and Mathematics



Excitement in Space: New Studies of the Solar System  
9:00AM - NOON  
Exploring New Frontiers in Geometry: In the World Around Us and in Our Classrooms: Part I - Geometry Is Alive! Part II - Long Live Geometry!  
9:00AM - NOON; 2:00PM - 5:00PM  
Galaxies in Collision

2:00PM - 5:00PM

### Policy and Economics

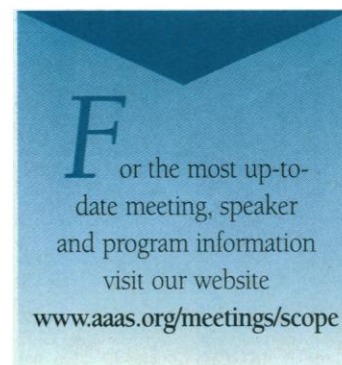


ENTRY POINT!: Science and Technology Internships for Students with Disabilities  
2:00PM - 5:00PM  
Impact of Deregulation of the Utilities Industry on Research and Development  
2:00PM - 5:00PM  
Misconduct in Science: A Decade of Progress or Merely Years of Controversy?  
2:00PM - 5:00PM  
Toward Public Accountability of Federally Funded Research and Development  
2:00PM - 5:00PM

### Science Innovation



Gene Therapy  
9:00AM - NOON; 2:00PM - 5:00PM  
Manipulating and Probing Single Molecules  
9:00AM - NOON  
How Mechanical Forces are Sensed, Generated, and Used by Cells  
2:00PM - 5:00PM





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## DAY-AT-A-GLANCE

### Computers and Information



From Print to Electronic: The Transformation of Scientific Communication  
9:00AM - NOON  
Government, Academia, and Industry in the History of Computing in the Sciences  
9:00AM - NOON

### Education and Public Outreach



Educational Technology, Contemporary Theories of Learning, and Some Applications  
9:00AM - NOON  
More Effective Learning Outcomes from Inquiry-Based Science  
Laboratory Instruction  
3:00PM - 6:00PM  
Science for the Public on Demand, Online?  
3:00PM - 6:00PM

### Environment and Life Sciences



Human Dimensions of Global Change: Where Do We Go From Here?  
9:00AM - NOON  
Science and the Unpleasant: Risk Assessment and Urban Sewage Sludge  
9:00AM - NOON  
Fossil Fuel Consumption: Aggregated Costs and Options for Alternatives  
3:00PM - 6:00PM  
Preparing for a New Century of Pest Management with Genes  
3:00PM - 6:00PM  
Systematic Biology for the New Millennium  
3:00PM - 6:00PM

### Genome Seminar

Countdown to 2000—Medicine  
8:00AM - 6:00PM

### Industry and Engineering



Green Technology and Public Policy  
9:00AM - NOON  
New Frontiers in Electrochemical and Solid-State Science and Technology  
9:00AM - NOON  
Petroleum: The Past, Present, and Future of a Needed Resource  
9:00AM - NOON  
Trends and Impact of Global Research Partnerships: Universities, Industry and Government  
9:00AM - NOON  
The University-Industry Research Connection: Recent Research Results  
3:00PM - 6:00PM

### Medicine and Biotechnology



IDisorder in the Court: Silicone Gel Breast Implants and Other Scientific Litigation  
9:00AM - NOON  
Gene-Diet Interactions in Coronary Heart Disease  
9:00AM - NOON  
Attention and Attention Deficit  
3:00PM - 6:00PM  
Divided Loyalties? Health Care Professionals in the Old and New South Africa  
3:00PM - 6:00PM

### Physical Sciences and Mathematics



Frontiers of the Physical Sciences  
9:00AM - NOON; 3:00PM - 6:00PM  
New Frontiers in the Sun-Earth Connection  
9:00AM - NOON  
Paradigms for the Sciences: Past, Present, and Future  
9:00AM - NOON; 3:00PM - 6:00PM  
Exploring the Frontiers of Microscopy: Scanning Technologies  
3:00PM - 6:00PM

### Policy and Economics



Women in Science  
9:00AM - NOON; 3:00PM - 6:00PM  
Evolving Expectations for Scholarship and Accountability in University Programs  
3:00PM - 6:00PM  
Manipulation of Science by Vested Interests: Money and Power versus Public Health  
3:00PM - 6:00PM

### Science Innovation



Novel Therapies for the 21st Century  
9:00AM - NOON  
Tolerance, Chimerism, and Disease Resistance in Xenotransplantation  
3:00PM - 6:00PM

### Social Science



Divergence in Linguistic Evolution: Ebonics and Other 20th Century Developments  
9:00AM - NOON  
Darwinian Perspectives on the Origin of Language  
3:00PM - 6:00PM  
It's Written in Stone: Using Geologic Records to Understand the Impact of Human Activity  
3:00PM - 6:00PM  
The Evolutionary Base of the Human Family, 3:00PM - 6:00PM

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## DAY-AT-A-GLANCE

### Computers and Information



The Computer Will See You Now:  
Computers in Clinical Medicine  
9:00AM - NOON  
Digital Library Research and Development:  
Recent Advances and Next Steps  
3:00PM - 6:00PM  
The Role of Models: From Cultural  
Anthropology to Particle Physics  
3:00PM - 6:00PM

### Education and Public Outreach



Kill All the Mosquitoes or Cure Malaria?:  
Communicating Controversy to Citizens  
9:00AM - NOON  
Science Education Reform: The  
Philadelphia Story  
9:00AM - NOON  
Science Is Fun!  
9:00AM - NOON  
Understanding US Math and Science  
Education in a Global Context  
9:00AM - NOON  
Advocating Scientific Literacy: A History of  
the Future  
3:00PM - 6:00PM  
Educating Scientists, Engineers, and  
Technicians for the 21st Century Global  
Workforce  
3:00PM - 6:00PM  
Science for the Naked Eye or the Physics of  
Everyday Experience, XXIV  
3:00PM - 6:00PM  
Using Research to Advance Science  
Education Reform  
3:00PM - 6:00PM

### Environment and Life Sciences



Ocean Sciences: Advances, Challenges,  
and Marine Policy Management Implications:  
(AM) Advances and Challenges in Ocean  
Sciences, (PM) Marine Science, Policy and  
Societal Benefits  
9:00AM - NOON; 3:00PM - 6:00PM  
Science and Sustainable Development:  
Who Needs It?  
9:00AM - NOON  
The Global Positioning System: A  
Powerful Tool for Global Change Research  
into the 21st Century  
3:00PM - 6:00PM  
Planning for Mars Sample Return Missions:  
Scientific, Technical, and Social Challenges  
3:00PM - 6:00PM  
Population and Carrying Capacity: Beyond  
Malthus After Two Centuries  
3:00PM - 6:00PM

### Genome Seminar

Countdown to 2000—Medicine  
8:00AM - 6:00PM

### Industry and Engineering



The Future of Fusion Energy  
9:00AM - NOON  
Priorities, Opinion, Policy: How  
National Assessment/Foresight Informs  
Priority Setting  
9:00AM - NOON  
Future Research Needs and Partnerships in  
the Process Industries  
3:00PM - 6:00PM

### Medicine and Biotechnology



The Epigenetic Approach to Language  
Development  
9:00AM - NOON  
Engineering a Future for Biology  
and Medicine  
3:00PM - 6:00PM

### Physical Sciences and Mathematics



Challenges for the Chemical Sciences in the  
21st Century  
9:00AM - NOON; 3:00PM - 6:00PM  
How Astronomy Expanded into  
Astrophysics  
9:00AM - NOON

### Policy and Economics



Ethical, Legal, and Social Implications of  
the Human Genome Diversity Project  
9:00AM - NOON  
Challenges and Evolving Responses in an  
Era of International Cooperation in Science  
and Technology  
3:00PM - 6:00PM

### Science Innovation



HIV/AIDS  
9:00AM - NOON; 3:00PM - 6:00PM  
Defense Mechanisms Across Biological  
Systems  
3:00PM - 6:00PM

### Social Science



America's Urban Underclass: Developing  
Remedies  
9:00AM - NOON  
Ethics in Science: Special Problems in  
Anthropology and Archaeology  
9:00AM - NOON  
Race and Human Evolution  
9:00AM - NOON  
Understanding Population Change  
9:00AM - NOON  
The Biological Basis for Language  
Acquisition in Human Infants  
3:00PM - 6:00PM  
One Hundred and Fifty Years of Racial  
Thinking in American Science  
3:00PM - 6:00PM

# MONDAY

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## DAY-AT-A-GLANCE

### Computers and Information



Access to Biological Diversity Information: Transnational Initiatives  
3:00PM - 6:00PM  
Anonymous and Pseudonymous Communications on the Internet  
3:00PM - 6:00PM

### Education and Public Outreach



Cultural and Social Foundations of School Achievement  
3:00PM - 6:00PM

### Environment and Life Sciences



Environmental Chemicals as Endocrine Disrupters: Scientific Evidence and Public Policy  
3:00PM - 6:00PM

### Forum for School Science Seminar

The Impact of Technology on Student Learning: Are We Making Progress  
1:00PM - 6:00PM

### Medicine and Biotechnology



Integrative Biomedicine: An Analysis of Common Mechanisms in Major Chronic Debilitating Diseases of Man  
3:00PM - 6:00PM

### Physical Sciences and Mathematics



Astrostatistics  
3:00PM - 6:00PM  
From Riemann to Strings: The Ongoing Romance between Geometry and Physics  
3:00PM - 6:00PM  
Thermodynamics and Information Theory in Biology  
3:00PM - 6:00PM

### Policy and Economics



Fueling the "Light of Science": Private Philanthropy in American Science  
3:00PM - 6:00PM  
How "Chaos" Causes Some Mysteries in Economics and Political Science  
3:00PM - 6:00PM  
Human Gene Patents: Who Owns Them? Who Deserves Them?  
3:00PM - 6:00PM  
Promoting Scientific Freedom and Responsibility: If Not Tenure, Then What?  
3:00PM - 6:00PM

### Science Innovation



Biotechnology and Evolutionary Biology  
3:00PM - 6:00PM  
Controlling Cell Death  
3:00PM - 6:00PM

### Social Science



Bound to Speak: Universal Grammar in First Language Acquisition  
3:00PM - 6:00PM  
The First American: A New Perspective  
3:00PM - 6:00PM



# TUESDAY

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## DAY-AT-A-GLANCE

### Computers and Information



Communicating Online: Where Are the Ethical and Practical Landmines?  
12:30PM - 3:30PM

### Education and Public Outreach



Institutionalizing and Sustaining Educational Change: What Happens When the Grant Runs Out?  
8:00AM - 11:00AM  
Reaching Out: The History and Future of Public Outreach of Science  
12:30PM - 3:30PM  
Strategies for Enhancing 21st Century Education  
12:30PM - 3:30PM

### Environment and Life Sciences



Development in a Volatile World: How Embryos Cope with Environmental Stress  
8:00AM-11:00AM  
Ecological Consequences of Land-Use History in Eastern North America  
8:00AM - 11:00AM  
Emerging Water Management Issues in Africa  
8:00AM - 11:00AM  
Climate Change in the Susquehanna River Basin  
12:30PM - 3:30PM  
Environmental Remote Sensing: New Developments and Applications  
12:30PM - 3:30PM

### Forum for School Science Seminar

The Impact of Technology on Student Learning: Are We Making Progress  
9:00AM - 5:00PM

### Medicine and Biotechnology



International Perspectives on Biotechnology and the Public  
8:00AM - 11:00AM  
New Standards for the Design of Clinical Trials  
8:00AM - 11:00AM  
Patients, Payers, and Protocols: Heart Replacement Devices Entering Clinical Practice  
8:00AM - 11:00AM  
Properties of Mind  
8:00AM - 11:00AM  
Alternate Mechanisms for Motor and Visuospatial Cognition: Stone-Age to Present  
12:30PM - 3:30PM  
Sunscreen and Skin Cancer: What's Happening  
12:30PM - 3:30PM

### Physical Sciences and Mathematics



Comparing Apples and Oranges: Scientific Issues in Making Comparisons  
8:00AM - 11:00AM  
Elementary Methods in Number Theory  
8:00AM - 11:00AM  
Wavelets: The Latest Big Splash in Science, Engineering, Imaging, and Graphics  
8:00AM - 11:00AM  
Atmospheric Electricity: The Legacy of Benjamin Franklin  
12:30PM - 3:30PM

### Policy and Economics



The Economic Consequences of Climate Change Impacts on Forests  
8:00AM - 11:00AM  
Postdocs: Defining Our Role, Shaping Our Future  
8:00AM - 11:00AM  
Social Security in NAFTA Countries: What if People Stop Dying?  
8:00AM - 11:00AM  
The Future of Forensic DNA Testing: A Multidisciplinary Examination  
8:00AM - 11:00AM  
Results of Professional Society Surveys of Employment of Recent Doctorates  
12:30PM - 3:30PM



# EXHIBITORS

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Exhibit Space & Sponsorship Opportunities still available! Please call Ryan Strowger at (202) 326-6736 for more details.

**EXHIBITION HOURS –**  
**Friday, February 13**  
 4:00-6:30 PM  
 Opening Reception  
 5:00-6:30 PM

**Saturday, February 14**  
 10:00AM-3:00PM

**Sunday, February 15**  
 10:00AM-3:00PM

**Monday, February 16**  
 9:00AM-2:00PM

- Academia Book Exhibits (502)
- A.K. Peters, Ltd. (623)
- American Anti-Vivisection Society (116)
- American Chemical Society (506)
- Association for Assessment and Accreditation of Laboratory Animal Care (319)
- Association of American University Presses (410)
- Battelle (201)
- BIOMOL Research Laboratories, Inc. (511)
- Chemical Heritage Foundation (115)
- IBAH (621)
- Cold Spring Harbor Laboratory Press (215)
- Data Description, Inc. (520)
- Department of Defense SBIR/STTR Programs (217)
- Dorling Kindersley Family Learning (416)
- Dover Publications, Inc. (415)
- Ecumenical Roundtable on Science, Technology and the Church (519)
- Environmental and Occupational Health Sciences Institute (317)
- France Edition (106)
- Garland Publishing (418)
- Gordon and Breach/Harwood Academic (420)
- Harbor Branch Oceanographic (218)
- Harvard University Press (508)
- Heldref Publications (605)
- Howard Hughes Medical Institute (401)
- Hubble Space Telescope Project (324)
- IBAH (621)
- Idaho National Engineering & Environmental Laboratory (124)
- Industrial Test Systems, Inc. (322)
- Institute for Scientific Information (422)
- International Space Station (407)
- IOP Publishing Inc. (118)
- Island Press (601)
- John Templeton Foundation (515)
- Metric Program/National Institute of Standards and Technology (509)
- NASA - Headquarters (501)
- NASA - EOSDIS (102)
- NASA - Neurolab Mission (318)
- NASA - Advanced Space Transportation Program (120)
- National Collegiate Inventors & Innovators Alliance (113)
- National Institute of Dental Research (216)
- National Library of Medicine, Division of Specialized Information Services (512)
- National Science & Technology Medals Foundation (212)
- National Science Foundation (516)
- National Sea Grant College Program (311)
- National Oceanic and Atmospheric Administration (321)
- Office of Naval Research (209)
- OK Research Competitiveness (607)
- Oxford University Press (615)
- PHI Enterprises, Inc. (421)
- The Planetary Society (603)
- Plenum Publishing Corporation (316)
- The Scientist* (424)
- Sigma Delta Epsilon (207)
- Society of Environmental Toxicology and Chemistry (423)
- \*Subaru of America, Inc. (301)
- University Corporation for Atmospheric Research (221)
- Veterans Affairs Office of Research & Development (211)
- VoiceNet (112)
- W.H. Freeman & Company (609)
- Yale University Press (205)

*Other Exhibitors*  
 American Geophysical Union  
 American Physiological Society  
 American Speech-Language-Hearing Association  
 Brock Optical, Inc.  
 MBNA America Bank, N.A.  
 National Center for Biotechnology Information  
 National Center for Health Statistics  
 Society for Industrial and Applied Mathematics  
 US Department of Energy/Office of Science & Technology  
 US Geological Survey  
 Wolfram Research, Inc.

## AAAS Science CAREER FAIR

11:00am-4:00pm  
 Tuesday, February 17, 1998  
 Pennsylvania Convention Center

The AAAS Science Career Fair is FREE to all

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Tel: 215-448-2000  
Fax: 215-448-2864

Doubletree Philadelphia  
Broad Street at Locust  
Philadelphia, PA 19107  
Tel: 215-893-1600  
Fax: 215-893-1663

The Warwick  
1701 Locust Street  
Philadelphia, PA 19103  
Tel: 215-735-6000  
Fax: 215-790-7766

# CAREER DEVELOPMENT WORKSHOPS

All information is as of 12/1/97. Changes, additions or deletions received after that date will be included in the next printing of the program.

## SATURDAY, FEBRUARY 14

### Managing Your Career: Seven Factors to Mastering Your Work Life

9:00AM-10:30AM

Org by Dave Jensen, Search Masters Intl, Inc

Are you in control of your career or are you subject to fate and to the whim of others? This workshop will address the six stages of the science career, the possibility for crisis situations to occur in each one of these, and strategies for handling such situations. Examples of how other individuals have used these experiences as a foundation to better opportunities will be examined.

### Five Paths to the Science Job Market

3:00PM-4:30PM

Org by Dave Jensen, Search Masters Intl, Inc

How will you as a scientist develop a marketing strategy and a concise job search that will assist you in moving ahead constructively in this complicated and confusing employment market? These two concepts are answered in this workshop by highlighting the five methods that scientists have used successfully to locate new positions. These five areas are: 1) Answering ads, 2) Job Fairs, 3) Recruiters 4) Personal Networking, and 5) the Internet. The emphasis will be to describe in detail how each of these "paths" to the job market operates; what makes them unique to the scientist and technical professional, their "modus operandi" and the best ways to optimize each of them for the attendee's personal situation.

## SUNDAY, FEBRUARY 15

### Managing Your Career: Seven Factors to Mastering Your Work Life

9:00AM-10:30AM

Org by Dave Jensen, Search Masters Intl, Inc

(See 2/14 for description.)

### Next Wave Career Development: Managing Your Advisor

3:00PM-5:00PM

Org by Wendy Yee, AAAS; Nicole Ruediger, AAAS

If you're a grad student experiencing any one for the "Four Phases of

Graduate School" (the Honeymoon, the Realization, the Slump, or the Ascent), then you've probably realized that the quality of the communication you have with your faculty has a very large impact on the quality of your training. Several experts - including current grad students and a faculty mentor who advises students - will discuss management tools that can be used for increasing communication with you advisor. We'll also talk about scenarios where basic negotiation skills and understanding different styles of communication are critical.

### Transitions to New Directions in Scientific Careers

3:00PM-6:00PM

Org by Victoria McGovern, Burroughs-Wellcome Fund  
The changing face of scientific employment leads many to suggest that scientists take on "alternative careers." But what are these careers? How do scientists bridge the gap between benchwork and the far different kinds of employment people outside of the laboratory depend on? This workshop will provide the opportunity to talk to scientists who have successfully moved into other intellectually stimulating, satisfying, and challenging fields. You'll learn the many transferable skills that scientific training develops, how to obtain alternative career information, and strategies that have been successful for others in making the transition to an alternative career in science.

## MONDAY, FEBRUARY 16

### Next Wave Career Development: Managing Your Advisor

3:00PM-5:00PM

Org by Wendy Yee, AAAS; Nicole Ruediger, AAAS

(See 2/15 for description.)

## TUESDAY, FEBRUARY 17

### Alternative Career Paths: AAAS Fellowship Programs in Science Policy and the Mass Media

8:00AM-11:00AM

Org by Claudia J. Sturges, AAAS; Amie E. King, AAAS

Learn how the AAAS Science Policy Fellowship Program places Fellows in Congress and other

federal offices; and how the Mass Media Program places Fellows in journalism positions at newspapers, magazines, radio and television stations. A panel of former Science Policy Fellows will share their experiences and explain the benefits of the program. Mass Media Fellows will discuss the many opportunities that the Mass Media Program has to offer students.

### Next Wave Career Development: What Life Is Really Like in Industry

8:00AM-10:00AM

Org by Nicole Ruediger, AAAS; Wendy Yee, AAAS

What is the culture of science in industry like? Is the approach to research different? What does the career ladder look like? Whoever you ask, anecdotes about industry tend to vary. Here's your chance to simultaneously listen to several biomedical scientists who are currently working in industry. Some are new to industry, while others have years of experience. And since the type of work hierarchy also makes a difference, perspectives from both small start-up companies and large pharmaceutical powerhouses will be represented.

### Resume Writing and Interview Skills

10:30am-12:30pm; 1:30pm-3:30pm

Organized by Alison French and Greg Stokes, AAAS

If you are looking for a job, don't miss this workshop! You'll learn how to write a resume that will open doors for your perfect career opportunity and you'll gain the skills and techniques to impress your prospective employer during the interview. This workshop will help you use these two fundamental components of a job search to catch an employer's eye and land your perfect job!

### Transitions to New Directions in Scientific Careers

12:30PM-3:30PM

Org by Victoria McGovern, Burroughs-Wellcome Fund  
(See 2/15 for description.)

(\* = Invited, not yet confirmed)





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### PRODUCTS

simulates the release, transport, and fate of contaminants within complex engineered and natural environmental systems. RIP can be applied to commonly encountered environmental problems such as contaminant release from landfills or hazardous waste sites and contaminant fate and transport in wetlands, lakes, and other complex ecosystems. The software can also be used to simulate complex transport processes within biological systems, such as physiologically based pharmacokinetic modeling. **Golder Associates.** For information call 770-496-1893 or circle 142 on the Reader Service Card.

## System Captures TEM Images from Film

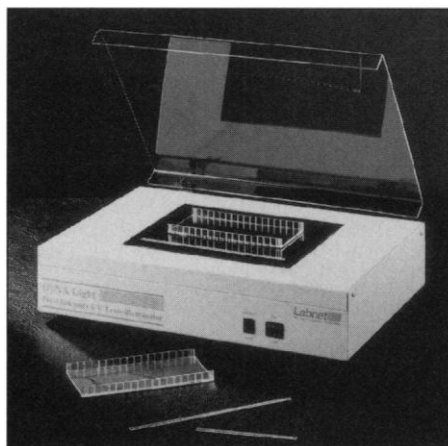
TEMSCAN is a high-resolution digital scanning system for capturing digital transmission electron microscope (TEM) images from film. The device is priced as an affordable alternative to expensive digital TEM interfaces. It combines a high-frequency light box with the optical resolving power of the MicroLumina digital camera to provide a simple means of transferring analog film to digital media. It connects to either an IBM-compatible or Macintosh computer and can convert old negatives to digital files. **Electron Microscopy Sciences.** For information call 215-646-1566 or circle 143 on the Reader Service Card.

## cDNA Quality Checking Kit

The Gene Checker Kit is designed for quick and easy polymerase chain reaction (PCR) analysis of single-stranded cDNA or a completed cDNA library to ensure that it is full-length and representative. The kit includes PCR reagents (except Taq) and five pairs of PCR primers designed to amplify specific regions in the housekeeping genes *actin*, *clathrin*, and *GAPDH*. It allows the user to identify poorly represented or low-quality cDNA before investing time and effort in cloning, probing, and screening. **Invitrogen.** For information call 800-955-6288 or circle 144 on the Reader Service Card.

## Transilluminator

The DyNA Light UV Transilluminator, an economically priced unit, has a 21 cm by 26 cm viewing surface. This allows even large



gels to be viewed and photographed in their entirety. The ultraviolet (UV) source emits light at a wavelength of 302 nm to provide the best level of fluorescence for stained gels and the lowest level of damage to precious samples. The intensity of the light can be changed at the flip of a switch from normal or full intensity to low intensity. A filter guard protects the fragile UV filter. A transparent cover of UV-blocking acrylic protects the user from exposure to harmful UV radiation. **National Labnet.** For information call 888-LABNET1 or circle 145 on the Reader Service Card.

## Radioactivity Decontaminant

Lift-Away is a concentrated decontaminant designed to remove radioactive contamination. The biodegradable material is non-ionic, nonalkaline, and noncorrosive with a neutral pH. It is safe to use on all surfaces, including skin, clothing, paint, plastic, and metal. It works via a two-step process. First, contaminated ions are sequestered, then contaminated particles are lifted up and firmly suspended. This allows the contamination to be rinsed away using regular tap water. **Research Products International.** For information call 847-635-7330 or circle 146 on the Reader Service Card.

## High Speed Solution Exchange System

The need to rapidly change the solution surrounding a cell or patch of membrane on a microelectrode is an important technique in cellular physiology, and the HSSE-2 High Speed Solution Exchange System can perform solution exchange in the 200- $\mu$ s range. Unlike piezo-crystal driven systems, there are no moving parts at the liquid application points. The pipette is a few hundred micrometers from the output tubes, which face each other at 90° in the same plane. Due to

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## Apoptosis Antibodies

Five new apoptosis antibodies are available. Bax, Bcl-X, and Mcl-1 have been optimized for staining in formalin-fixed, paraffin-embedded tissues using the DAKO CSA (catalyzed signal amplification) detection system. Anti-human CPP32 (caspase-3) and c-kit (CD117) work in formalin-fixed, paraffin-embedded tissues using traditional detection systems. **DAKO.** For information call 800-424-0021 or circle 148 on the Reader Service Card.

## Detection System

The ExpressDetector System provides a simple, direct method for detecting nanogram levels of recombinant histidine-tagged fusion proteins through use of nickel-labeled horseradish peroxidase. This highly specific reagent eliminates the need for primary and secondary antibodies, combining both functions in a single molecule. **Kirkegaard & Perry Laboratories.** For information call 800-638-3167 or circle 149 on the Reader Service Card.

## Literature

*Performance by Design: DX-500 HPLC Systems* is a 12-page brochure on a modular high-performance liquid chromatography system with colorful graphics, chromatograms, and network diagrams that illustrate the system's fundamental principles and flexible capabilities. Highlights include high-performance pumps, versatile chromatography modules, and interchangeable ultraviolet/visible, electrochemical, and conductivity detectors. **Dionex.** For information call 408-481-4274 or circle 150 on the Reader Service Card.

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Memorial University invites applications and nominations for the position of Director, Ocean Sciences Centre (OSC), Faculty of Science. The Director will hold a tenured faculty position at the OSC. The appointment, which will be effective September 1, 1998, or the earliest date thereafter, is initially for a term of three years and is renewable.

The OSC is a research and graduate teaching unit, with a wide range of programmes addressing questions relevant to the cold ocean environment. These include aquaculture; physiology, biochemistry, and behavioral studies of marine organisms; and biological and chemical oceanography. The OSC attracts significant levels of external funding from government and from the private sector. The OSC is situated 10 kilometers north of the university's main campus in St. John's, and provides excellent facilities for laboratory and field studies. Further information can be obtained at website: <http://www.mun.ca/osc/>.

Applicants should have administrative abilities, and be established scientists with a commitment to research and graduate training. The successful candidate will be expected to maintain an active research programme. All applications will be treated in confidence.

An application, including a résumé and the names of at least three referees, should be submitted by February 27, 1998, to:

**Dr. Alan Whittick**  
Chair OSC Search Committee  
c/o Office of the Dean of Science  
Memorial University of Newfoundland  
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E-mail: [alanw@morgan.ucs.mun.ca](mailto:alanw@morgan.ucs.mun.ca)

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### BIOPHYSICS/COMPUTATIONAL BIOLOGY NEW JERSEY INSTITUTE OF TECHNOLOGY RUTGERS UNIVERSITY-NEWARK

Applications are invited for a tenure-track faculty position in biophysics/computational biology in the newly formed Federated Department of Biological Sciences, a joint entity of the New Jersey Institute of Technology (NJIT) and Rutgers University. Preference will be given to individuals with research interests involving cell signaling and optical methods. Candidates are expected to have a Ph.D. in an appropriate biological discipline, and a strong record of research and publication. In addition, the successful candidate will have an opportunity to complement existing strengths in cell biology, mathematical biology, neuroscience, and optical applications in biophysics. Applications will be reviewed beginning February 15, 1998. Send curriculum vitae, a description of research and teaching interests, and three letters of recommendation to: **Dr. Edward G. Kirby, Chairman, Federated Department of Biological Sciences, Personnel Box BIO, New Jersey Institute of Technology, Newark, NJ 07102-1982.** Website: <http://silv.rutgers.edu/>. *New Jersey Institute of Technology and Rutgers University are Equal Opportunity Employers.*

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*The University of Kentucky is an Equal Opportunity/Affirmative Action Institution.*

## POSITIONS OPEN

### CHAIR AND PROFESSOR OF BIOLOGY UNIVERSITY OF MARYLAND

The College of Life Sciences at the University of Maryland, College Park, invites applications for the position of Professor and Chair of the new Department of Biology. This Department consists of 35 tenure-track faculty (formerly from the Departments of Zoology and Plant Biology) and four full-time instructors with research and teaching interests in behavior, cell biology, developmental biology, ecology, evolution, genetics, neurobiology, and physiology. The Department is a key participant in the undergraduate Biological Sciences Program with 2,000 majors. We seek an individual to provide academic and administrative leadership of the teaching and research programs in this vibrant new department. The successful candidate will also be expected to continue his/her research program in their area of expertise. Candidates must have an earned doctorate in an appropriate area of biology and have internationally recognized academic accomplishments. Candidates should send a letter of application accompanied by a curriculum vitae to the address below. For best consideration, completed applications should be received by February 1, 1998. The earliest anticipated starting date for this position is July 1, 1998. Applications or nominations should be sent to: **Biology Chair Search Committee, College of Life Sciences, Room 1118 Symons Hall, University of Maryland, College Park, MD 20742-5815.** Website: <http://www.life.umd.edu/biology>.

*The University of Maryland is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.*

### CHAIR DEPARTMENT OF PSYCHIATRY UNIVERSITY OF FLORIDA College of Medicine

The University of Florida College of Medicine seeks a distinguished individual to serve as Professor and Chair of the Department of Psychiatry. Applicants should have an M.D. degree and demonstrated accomplishments in research, education, clinical service, and administration. The Chair is responsible for leadership and management of the department, including faculty recruitment and development, undergraduate and graduate medical education, fiscal affairs, clinical programs, and research. The Chair will also assure an effective interface between the department and the University of Florida Brain Institute, a major university-wide initiative. The successful candidate will provide overall leadership of psychiatric programs in Gainesville including the VAMC and in Jacksonville and is expected to work in concert with other behavioral health professionals to provide an integrated approach to the provision of mental health services. The position offers a competitive salary. Qualified individuals should send their curriculum vitae and three letters of recommendation to: **Chair, Psychiatry Search Committee, Department of Pharmacology, Box 100267, University of Florida, College of Medicine, Gainesville, FL 32610-0267.** Application deadline is March 6, 1998, with a start date on or after June 1, 1998. *The University of Florida is an Equal Opportunity Employer, and minorities and women are encouraged to apply.*

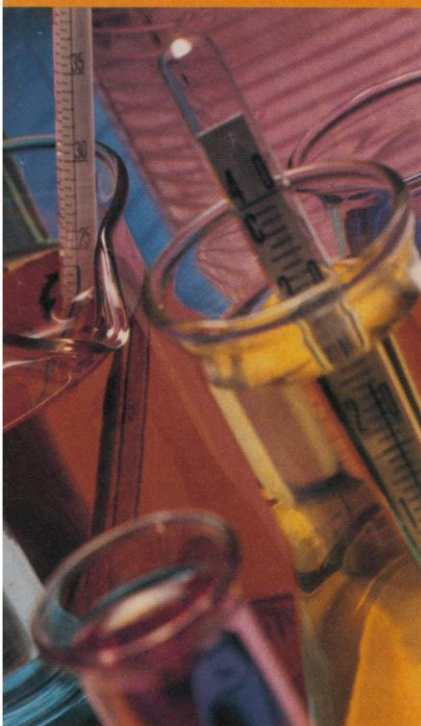
### MEDICAL COLLEGE OF WISCONSIN FACULTY POSITION

The Bone Marrow Transplant Program in the Department of Medicine of the Medical College of Wisconsin, and the Blood Research Institute of the Blood Center of Southeastern Wisconsin, are jointly seeking a highly motivated individual with a background in immunology and molecular biology to expand research strengths in basic and tumor immunology. A close association with the marrow transplant program and affiliation with the Cancer Center and Genetics Initiative Program is envisioned. Participation in ongoing programs in gene therapy and genetic alterations of T cells for immunotherapy is expected. Candidates should have an M.D. or Ph.D. degree and a well-developed research project. Faculty appointment will be commensurate with qualifications.

Candidates are invited to send their curriculum vitae with a letter describing their current research interests, expertise, and current funding before February 28, 1998, to: **Dr. William Burns, Professor of Medicine and Microbiology, BMT Program, 9200 West Wisconsin Avenue, Froedtert East, Milwaukee, WI 53226.** *The Medical College of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*



Scientists



Discover the extraordinary benefits of living in one of the nations' most vibrant metro areas. See for yourself why the Triangle was ranked the 5th best city in the country by Fortune magazine for working and raising a family. And why Novartis is number one in the world for careers in the life sciences.



# Scientific careers come full circle in the Triangle

As the world's leading life sciences company, Novartis has become the natural habitat of some of the world's brightest scientific professionals. Located in the heart of North Carolina's Research Triangle Park, our diverse scientific teams have access to a wealth of resources, enabling them to apply tomorrow's technology toward addressing today's critical research issues. Currently, we are seeking talented professionals to build an exceptional research team and lead our latest genomics initiative within the dynamic environment of our Agribusiness Biotechnology Center.

## **Senior Scientist-Invertebrate Genomics Job #9753**

As you endeavor to discover novel treatments for control of invertebrate parasites, you will have the opportunity to develop and utilize progressive genetic, genomic and functional genomic technology. To this end, we'll provide you with a range of resources and capabilities, including a collaborative atmosphere comprised of related project teams and high-throughput DNA sequencing, arraying and bioinformatics support. Specific responsibilities will entail hiring and evaluating team members, setting objectives, and communicating extensively with third party research groups and ongoing R&D efforts within Novartis Animal Health. A Ph.D. in molecular biology, genetics, or

related discipline and 2 or more years of post-doctoral experience is required.

## **Senior Scientist- Insect Control Genomics Job #9754**

Joining our multi-disciplinary team in the genomics and bioinformatics area, within Novartis Crop Protection, you will develop valid targets for high throughput screening by using model organisms to bridge the gap between gene sequence and function. The candidate we seek will have a Ph.D. in biological science or a master's degree with 2 years of related experience. A demonstrated record of scientific achievement, particularly related to biochemistry, molecular biology or cell biology, is essential. An extensive background involving genetic and molecular techniques as used for analyzing genes and pathways in *Drosophila* or *C. elegans* is highly desirable.

When you take your career to Novartis, you'll have the advantage of joining an industry leader. For consideration, please send resume, indicating appropriate Job #, to: **Novartis Biotechnology, Human Resources, Attn: D. S., Job #\_\_\_, 3054 Cornwallis Road, Research Triangle Park, NC 27709-2257.** For more information, visit our website at [www.novartis.com](http://www.novartis.com). Principals only. We are an equal opportunity employer m/f/d/v.



**DIRECTOR**  
**UC DAVIS CENTER FOR VECTOR-BORNE DISEASE RESEARCH**  
College of Agricultural and Environmental Sciences  
and School of Veterinary Medicine  
University of California, Davis

Applications and nominations invited for position of Director, UC Davis Center for Vector-Borne Disease Research, new joint venture of the School of Veterinary Medicine and the College of Agricultural and Environmental Sciences of the University of California, Davis. The Director will hold a joint administrative and professorial appointment in an appropriate department. Salary and level commensurate with qualifications.

The objective of the Center is to foster collaboration among approximately 20 faculty in different institutional units on the Davis Campus in order to advance the detailed understanding of vector-borne pathogens and to use that knowledge to prevent disease. Responsibilities of the professorial appointment will include developing a successful research program, teaching undergraduate and graduate courses, involvement in curricular development and supervision of graduate students. The Director will be responsible for management of the Center and for developing and presenting the vision of this unique partnership between the School of Veterinary Medicine and the College of Agricultural and Environmental Sciences focused on vector-borne diseases.

Candidates must have Ph.D., D.S.c., D.V.M., or M.D. degree and an active and distinguished record in the area of vector-borne diseases. Criteria for selection include: (1) a broad understanding of biological sciences; (2) demonstrated administrative/leadership skills; (3) excellent communication skills, the willingness to work closely with faculty, and the ability to facilitate multidisciplinary research; (4) demonstrated excellence in teaching; (5) a nationally recognized reputation for career achievement and leadership; (6) experience in the acquisition of extramural funding and a commitment to work in securing additional funding for the programs of the Center and (7) potential for integration with State of California vector-borne management programs. The Director is expected to qualify for and be appointed to a senior professorial position in an appropriate department in the School of Veterinary Medicine or the College of Agricultural and Environmental Sciences.

Submit a letter of interest, a brief statement of vision for the Center, a statement on teaching and research, a curriculum vitae, and the names and addresses of three professional references to: **Jean A. Kevern, Personnel Officer, School of Veterinary Medicine, University of California, Davis, CA 95618-8734. (Telephone: 916-752-1384; fax: 916-754-9337).** Nominations should be sent to the same address. Applications will be accepted through February 2, 1998, or until a candidate is identified. *Affirmative Action/ Equal Opportunity Employer.*



**MAYO CLINIC**  
**Postdoctoral Immunologist**

The Department of Immunology, Mayo Clinic, is seeking applications for a Postdoctoral Immunologist with ample experience in cellular immunology, specifically in the area of T-lymphocytes and basic molecular biology techniques, to lead a research project for the development of novel immunotherapies for cancer.

The laboratory is headed by **Dr. Esteban Celis** in the Department of Immunology who is devoted to the identification of tumor-associated antigens, T-cell epitopes (cytotoxic and helper), and to the development of immunization strategies that overcome immune tolerance in the cancer setting. We are also developing adoptive cellular therapies for common types of cancer (breast, colon, and prostate) based on dendritic cell vaccination and T-cell therapy.

Applicants please forward curriculum vitae and direct inquiries to:

**Esteban Celis, M.D., Ph.D.**

**Mayo Clinic**

**Department of Immunology**

**200 First Street SW**

**Rochester, MN 55905**

*Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

**The Department of Biology and Environmental Science at Lynchburg College in Virginia invites applications for three faculty positions, which will begin Fall 1998.**

**ECOLOGIST – Ph.D.,** Assistant/Associate Professor, tenure-track. Duties: the successful candidate is expected to teach in a broad range of courses including freshman biology, general ecology, and related courses. Preferred characteristics: familiarity with Eastern USA biomes, specialization primarily with zoological emphasis, ability to conduct field work with students, ability to continue the College's program in marine biology in the Bahama Field Station in San Salvador Island, Bahamas, and willingness to participate in the College's Center for Environmental Education (an interdisciplinary education scheme).

**ENVIRONMENTAL SCIENTIST – Ph.D.,** Assistant/Associate Professor, tenure-track. Duties: the successful candidate is expected to teach in a wide variety of courses including modular mini-course group in hydrology, geology, environmental law and policy, etc., which are designed particularly for undergraduate ES majors and to participate in a 2-semester freshman-level environmental science course. Ability to teach and use computer applications common to ES, particularly GIS, are important. Preferred characteristics: experience with and continuing involvement in private consulting is considered a plus when it helps to establish a relationship of students and the College with the professional community. Ability to conduct field and lab activities with students in problem-solving skills and willingness to participate in the College's Center for Environmental Education (an interdisciplinary education scheme) is expected.

**CELL/MOLECULAR BIOLOGIST – Ph.D.,** Assistant/Associate Professor, 3-year contract with possible conversion to a tenure-track. Duties: the successful candidate is expected to teach a variety of courses including molecular genetics, cellular biology, and to participate in the freshman biology sequence. Preferred characteristics: development of an ongoing research project in some phase of cell/ molecular biology and experience with recent and traditional cell/molecular biology techniques is expected.

Lynchburg College emphasizes superior teaching along with scholarship and service. In addition to the information below, all potential applicants are invited to contact <http://www.lyncburg.edu/biol-envsi/positions/> for additional information about the positions. Lynchburg College and its location, the department, and physical facilities. In addition to the requirements below, all applicants are expected to: a) use pedagogy emphasizing inquiry-based learning experience, b) engage in an active collaborative research program with students, c) be willing to participate in distance education, d) use information technology, and e) be willing to participate in interdepartmental collaboration. Teaching and/or postdoctoral experience is preferred.

To apply, send cover letter and supporting materials including statement of teaching, philosophy, areas of specialization and competence, professional development activities, names, telephone numbers, and e-mail addresses of at least three references, curriculum vitae, and transcripts to **James E. Carico, Chair, Department of Biology and Environmental Science, Lynchburg College, 1501 Lakeside Drive, Lynchburg, VA 24501** by February 16, 1998. *Lynchburg College is an Equal Opportunity Employer.*



The USDA, Agricultural Research Service, Beltsville Agricultural Research Center, Plant Sciences Institute, Horticultural Crops Quality Laboratory, in Beltsville, Maryland is seeking a Microbiologist/Research Food Technologist, GS-403/1382-12/13. Salary is commensurate with experience (GS-12: \$45,939-\$59,725 per year, GS-13: \$54,629-\$71,017 per year). *Candidates must be U.S. citizens.* The position conducts high priority basic and applied food technology and postharvest biology research on food safety and quality of fresh and fresh-cut fruits and vegetables. In addition to the basic education requirements, applicants must demonstrate: 1) knowledge of the principles, techniques, and procedures of microbiology, food technology, and plant physiology, 2) ability to design, plan, conduct multidisciplinary research, and analyze and publish results, 3) knowledge of plant postharvest biology and technology, and 4) skill in the application of techniques and procedures used in the study of human pathogenic bacteria. For information on the research program, contact **Dr. Ken Gross** on (301) 504-6128. This position has specific education and experience requirements, and factors that must be addressed. In order to ensure submission of a complete application, applicants must request a copy of the vacancy announcement by calling (301) 344-4638 or by printing it from the Internet at <http://www.ars.usda.gov>. The vacancy announcement number for this position is ARS-D8B-058/B-8-02. The vacancy announcement closes 2/2/98. *USDA/ARS is an Equal Opportunity Employer.*

# Hoechst-ARIAD Genomics Center, LLC

The Hoechst-ARIAD Genomics Center, a joint venture between ARIAD and Hoechst Marion Roussel located at ARIAD's corporate headquarters in Cambridge, MA, employs advanced technologies to analyze gene function with the goal of identifying novel drug targets and therapeutic proteins. The Center combines the resources of one of the largest global pharmaceutical companies with the entrepreneurial environment of a leading discovery research organization to create a preeminent position in the field of functional genomics.



## MOLECULAR BIOLOGY AND TECHNOLOGY

### SENIOR SCIENTISTS

Candidates for the following senior scientific positions should have a Ph.D. in a related field with at least 2-4 years of postdoctoral research. Expertise in mammalian genetics, genomics and disease models is highly desirable.

**Molecular Biologists/Gene Expression** — Candidates with expertise in gene expression analysis technologies. Candidates will lead efforts for comparing gene expression patterns in normal and disease states using methods involving high density arrays and DNA sequence analysis. Involves establishing/evaluating state-of-the-art technologies in high-throughput formats. Requires ability to solve problems creatively in close collaboration with bioinformatic and bioengineer researchers. **Job Code: MBGE**

**Molecular Biologists/cDNA** — Candidates with expertise in construction of normalized, subtracted and full-length cDNA libraries and large-insert genomic libraries; physical and comparative mapping; exon trapping and cDNA selection methods for isolating transcribed sequences; and/or gene cloning with interaction traps. Requires ability to develop/implement high-throughput methods and experience with DNA sequence analysis programs. **Job Code: MBTI**

**DNA Sequencing** — Lead a group responsible for DNA sequencing/oligonucleotide synthesis. At least 2 years' experience in automated, state-of-the-art sequencing technologies and DNA sequence analysis programs. Ability to establish a high-throughput facility, to evaluate and implement new sequencing chemistries, methods and technologies and to direct research associates. **Job Code: ADS**

**Proteomics** — Candidates to develop technologies for high-throughput evaluation of protein function and protein-protein interactions. Expertise in protein biochemistry, mass spectrometry of protein complexes, sequencing by mass spectrometry, two-dimensional gel electrophoresis, analysis of protein modification, in vitro transcription/translation, mammalian cell culture, or immunoprecipitation of protein complexes is desired. **Job Code: MBP**



## CELL BIOLOGY AND GENETICS

**Director, Cell Biology & Genetics** — Lead a group responsible for the discovery and validation of genes in cellular and mouse systems. Ph.D. in relevant biological field. Expertise in one or more of the following technologies: cellular differentiation, signal transduction pathways, cell death, gene trap technology in ES cells, cellular models of disease. Demonstrated ability to hire and direct a large team focusing on cell biology and genetics. Senior level position, requires at least 7 years' industrial or academic experience. **Job Code: DCB**

### SENIOR SCIENTISTS

**Cell Biologists/Disease Models** — Candidates to develop cell-based disease models to identify and analyze novel gene function. Expertise in genetic screens using cDNA libraries, antisense technology, signal transduction, specific disease models, and/or differentiation of cells in culture is desired. Candidates should have Ph.D. in Biology or relevant field and 2-4 years' post-doctoral experience in cell biology. Prior industry experience is desirable. **Job Code: CBDM**

**Yeast Cell Biologist/Two-Hybrid System** — Candidates to develop high-throughput, two-hybrid system to identify and characterize novel protein-protein interactions. Prior experience in setup and implementation of yeast two-hybrid system is required. Expertise in mammalian cell biology is desirable. Candidates should have Ph.D. in Biology or relevant field and 2-4 years' post-doctoral experience. **Job Code: CBY**



## BIOENGINEERING

**Robotics Specialists** — Candidates to develop and implement robotic instrumentation for high-throughput molecular biology including DNA sequencing, cDNA cloning, gene expression analysis, bacterial clone picking, and automated PCR. Expertise with stand-alone systems such as TECAN, Flexys, Biomek, as well as integrated systems is desired. Requires ability to solve problems creatively in close collaboration with molecular biologists and bioinformatic researchers. B.S./M.S. degree and experience in automation of biological assays. **Job Code: RBS**

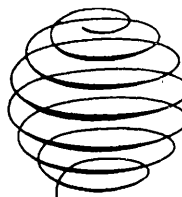


## BIOINFORMATICS

**Bioinformatics Scientist** — As a member of our bioinformatics team you will be responsible for the advanced analysis of gene expression, proteomics and other molecular biological data, including the development of novel algorithms and software for this purpose. Your background should be a Ph.D. in Life Sciences, complemented by significant hands-on experience in scientific computing. Ideally, you can demonstrate expertise in the analysis of expression data generated by technologies such as EST sequencing, DNA chips or filter-based hybridization. Good programming skills (C, Java, Perl, SQL) are highly desirable, self-motivation, excellent communication skills and the ability to work in a team are a prerequisite. **Job Code: BSI**

**Bioinformatics Scientist** — Your major, but not exclusive, contribution to our research efforts will be in the area of sophisticated nucleotide and protein sequence analysis, including the integration of existing software and the development of novel methods. To be successful you must be very familiar with the latest approaches in this field. Ideally, you will have significant experience with the analysis of large volumes of data and will have demonstrated your ability to independently develop computational solutions for biological problems. A strong informatics background (C, Java, Perl, SQL) should complement a Ph.D. in Life Sciences. As a member of a cross-functional project team, you will also need excellent inter-personal and communication skills. **Job Code: BS2**

**Bioinformatics Software Developers** — Your contributions will help to guarantee that our systems development efforts are of highest professional quality. You will be responsible for integrating existing software as well as for the design and development of novel solutions. What you will bring to the team is substantial experience in software development in C, Java and Perl, preferably in a component-oriented way. Additional expertise with web-based solutions, CORBA, or relational databases would be a significant plus. An M.S. or B.S. degree in Computer Science or Life Sciences is required. Team spirit and self-motivation are also essential. **Job Code: BSD**



# ARIAD

ARIAD offers a highly competitive salary and benefits package, including incentive stock participation. Interested individuals should send a curriculum vitae, referencing the appropriate job code to: ARIAD Pharmaceuticals, Inc., Job Code \_\_,

26 Landsdowne Street, Cambridge, MA 02139. ARIAD is an equal opportunity employer.

# Imagine The Possibilities

At Berlex, we've built our reputation on FDA-approved product successes and a proven track record in the pharmaceutical industry. Currently, we are seeking a Postdoctoral Fellow to join our Cardiovascular Research team in the beautiful San Francisco Bay Area.

## Postdoctoral Fellow Cardiovascular Research

The successful candidate for this 2-year postdoctoral position will study apoptosis in cardiovascular diseases. Applicants should hold a PhD and/or MD and have a strong background in molecular biology, preferably to include experience with mutagenesis, *in vitro* and *in vivo* gene expression studies, and techniques in apoptosis. Prior experience in vascular biology or growth factors would be an advantage.

To apply, send your *curriculum vitae*, a statement of research interests and the names of 3 references to the attention of Dr. Gang Deng, Berlex Biosciences, 15049 San Pablo Ave., Richmond, CA 94804-0099. Principals only, please. EOE.

**BERLEX**

THE BEST IS YET TO COME

## FACULTY POSITION IN CANCER GENETICS

The H. Lee Moffitt Cancer Center & Research Institute and the College of Medicine at the University of South Florida are seeking applications for a Program Leader and Member at the Associate or Full Professor level to participate in the Cancer Center Research Programs under a stimulating academic environment that includes excellent laboratory and clinical facilities. Applicants must have a demonstrated track record in cancer genetics research. This appointment requires at least five years of active and sustained participation as an Assistant Professor.

Successful individuals must hold an M.D. or Ph.D. degree with a minimum of 5 years independent research experience. Individuals at the rank of Associate Professor must have a demonstrated potential for extramural funding and vigorous publication activity. Individuals for Full Professor must have a proven track record of independent research, leadership ability and training experience as evidenced by publications and extramural funding. Academic rank and salary will be commensurate with experience and qualifications. This position will be assigned to a specific, mutually agreed upon department within the College of Medicine with the possibility of tenure. Members of the Cancer Genetics Program will interact with investigators in the established Cancer Control, Molecular Oncology, Immunology, Drug Discovery, and Clinical Investigations Programs.

In addition, individuals for Member or Program Leader are expected to establish a vigorous, funded research program in any or several of the following areas:

- Inherited genetic alterations that predispose to cancer
- Development of genetic therapies against cancer
- Molecular mechanisms of action of cancer genes
- Early detection and molecular markers

Send current *curriculum vitae* and a brief statement of major academic interests to W. J. Pledger, Ph.D., Associate Center Director for Basic Research, H. Lee Moffitt Cancer Center and Research Institute, 12902 Magnolia Drive, Tampa, Florida 33612. Applications must be postmarked by the deadline of **March 15, 1998**.

The H. Lee Moffitt Cancer Center and Research Institute is a free-standing, newly designated NCI Cancer Center located adjacent to the Health Sciences Center on the Tampa campus of the University of South Florida. In addition to a 162-bed full service cancer treatment facility, the Center has research laboratory space in four buildings including over 50,000 square feet of dedicated laboratory and support space in a new Cancer Research Center.



**H. LEE MOFFITT CANCER CENTER  
& RESEARCH INSTITUTE**  
University of South Florida College of Medicine

Moffitt Cancer Center is an Equal Opportunity Employer.  
The University of South Florida is an Equal Opportunity Equal Access Affirmative Action Employer.  
For disability accommodations please contact Rebecca Koransky at (813) 979-3887,  
a minimum of five working days in advance. TDD# 813-974-2218

## FACULTY POSITIONS IN PHARMACOLOGY & PHYSIOLOGY

The University of Medicine and Dentistry of New Jersey-New Jersey Medical School, Department of Pharmacology and Physiology is currently undergoing a substantial expansion. In the initial phase of this process, **THREE TENURE TRACK** positions are available at the Assistant or Associate Professor level, with the possibility of appointment as Full Professor for an outstanding candidate.

Applicants should have achieved national or international recognition for their research accomplishments and have a demonstrated ability to maintain extramural funding. The successful candidates will be expected to maintain strong independent research programs, and to contribute to the collaborative research environment of the department. In addition, a commitment to excellence in medical and graduate teaching is required. We are particularly interested in building on existing strengths in cardiovascular research and cell signaling, but candidates with research interests in all areas of pharmacology and physiology are encouraged to apply. A strong research infrastructure and competitive salary and startup packages are available.

The New Jersey Medical School is located close to New York City and is in a region with a rich diversity of academic and pharmaceutical research activity. Review of applications will begin in February 1998 and continue until the positions are filled. Applicants should send a curriculum vitae, a short description of research interest and future plans, and arrange for three letters of reference to be sent to: **Professor Andrew P. Thomas**,

Chairman of Pharmacology and Physiology, MSB H609, New Jersey Medical School of UMDNJ, 185 South Orange Avenue, University Heights, Newark, NJ 07103.



UMDNJ is an Affirmative Action Equal Opportunity Employer M/F/H/V and is a member of the University Health System of New Jersey.

## MANAGER, SCIENCE INFORMATION SERVICES

Antarctic Support Associates (ASA) is the principal research support contractor to the National Science Foundation (NSF) Office of Polar Programs (OPP), which funds research in Antarctica under the auspices of the United States Antarctic Program (USAP). The ASA Information Systems Division is currently seeking a manager to provide computing/communications support to the USAP scientific community.

The Manager leads a diverse, technically-skilled team of up to 15 professionals in providing expert customer service to more than 100 Antarctic research projects annually, and in developing and implementing new innovations within the group to best serve the needs of researchers in Antarctica.

Qualifications and experience must include the following:

- Proven abilities in leadership, administration, project management.
- B.A./B.S. (or higher) in Computer Science, Communications Engineering, MIS, an applied science or related field. Six or more years of management experience in these fields may be substituted for a degree.
- Eight years of direct experience with progressively increasing responsibility supporting IS for research and field study environments.

Experience in conducting or supporting polar research is desirable. While the successful candidate will possess the above qualifications, she or he will also demonstrate a working knowledge of communications systems and experience with satellite ground stations, remote sensing, and data telemetry as well as various network OS, network management S/W, supporting H/W, TCP/IP, e-mail and the Internet.

Proof of U.S. citizenship is required. The ability to pass stringent physical and dental exams prior to traveling to Antarctica is a contractual precondition of employment. This is a full-time position involving approximately 4-5 months of travel per year.

We offer a competitive salary/benefits package.  
For consideration, please fax/mail your resume by  
1 February 1998 to:

**Antarctic Support Associates**  
Response Code OV/DGN  
61 Inverness Drive East, Suite 300  
Englewood, CO 80112  
Fax: 303/790-9130

EOE



**REACH A NEW LEVEL**



**OF RESEARCH FREEDOM AT**



**PARKE-DAVIS**

At Parke-Davis Pharmaceutical Research Division of Warner-Lambert Company, inspired science and a strategy of innovation has made us a leader in the pharmaceutical industry. Currently, we are seeking two Postdoctoral Fellows to join our Molecular Biology Department and one Postdoctoral fellow to join our Toxicology department in Ann Arbor, MI.

## POSTDOCTORAL RESEARCH FELLOWSHIP

**Characterization of apoptosis-associated gene/Gene knockout & Transgenic mice**

Our interest in a gene associated with apoptosis has created a strong post-doctoral position to characterize gene function through gene knockout. Receive excellent training while you work in a stimulating research environment. The successful candidate will possess a Ph.D. in Molecular Biology/Biochemistry or related field, with a strong molecular biology background. Experience with gene knockout/transgenic mice is preferred, but is not required. **JOB CODE: CJM-974155**

## POSTDOCTORAL RESEARCH FELLOWSHIP

**cAMP metabolism in immune response**

We have a post-doctoral position for a Molecular Biologist/Biochemist to investigate the role of cAMP-dependent phosphodiesterases in the immune system. The suc-

cessful candidate will have a Ph.D. in Molecular Biology, Biochemistry or related field, and experience in cloning, transient and stable eukaryotic transfection, yeast two hybrid screening and general hybridization techniques. Expertise in intracellular signaling mechanisms and protein-interaction analysis is preferred, but is not required. **JOB CODE: CJM-974154**

## POSTDOCTORAL POSITION

As part of our research team, you'll investigate the effects of a novel test substance on sperm motility and morphology, and epididymal function in male rats. Techniques such as gel electrophoresis, intraluminal flow/pressure, primary epididymal cell cultures, molecular biology and biochemical assays will be applied to various species. A Ph.D. in Toxicology, Pharmacology or related science is required. Experience with the above techniques and familiarity with male reproductive toxicology or physiology are preferred. **JOB CODE: RJB-974144**

If you're highly motivated in scientific research, mail, fax or e-mail your CV\*, a brief summary of your research accomplishments and 3 references, indicating the Job Code of interest, to: **Parke-Davis Pharmaceutical Research, Human Resources Department, 2800 Plymouth Road, Ann Arbor, MI 48105. Fax: (313) 998-3394. E-mail: resume@aa.wl.com**

\*Submit CV on laser-quality white paper, with legible 10 point or larger type, and avoid bold-face, italics, borders, etc.

Equal opportunity in action. Smoke-free work environment.



## Post Doctoral Fellowships Available in HIV Research

A DECADE OF RESEARCH EXCELLENCE AND COMMITMENT

**The Henry M. Jackson Foundation for the Advancement of Military Medicine**

and  
**The Walter Reed Army Institute of Research**

offer opportunities to join our leaders in the battle against HIV

Multiple Post-Doctoral Positions are available with the U.S. Military HIV Research Program, a cooperative agreement between the Walter Reed Army Institute of Research and the Jackson Foundation for the Advancement of Military Medicine, at its laboratory facilities in Rockville, MD. This cutting-edge program conducts basic and applied HIV research with a strong emphasis on vaccine research and development, transmission, and pathogenesis.

Fellowship positions are available in the following areas of HIV research: 1) Animal Models; 2) Viral Immunology; 3) Cellular Immunology; 4) Molecular Biology; and 5) Virology. Successful candidates will work under the direction of world-class principal scientists and will have the opportunity to design, conduct, interpret, and evaluate experiments; prepare and present data at scientific meetings; and will participate in multi-institutional and international collaborations within the global scientific community.

Successful candidates must hold a Ph.D. or a M.D. with several years of laboratory experience, preferably with a strong emphasis on HIV-1 immunology and a strong interest in HIV vaccine development and research. Interested applicants should submit a CV with three letters of reference to:

**Human Resources Department**

- Animal Models - Attn: PL4970446
- Viral Immunology - Attn: PL4970453
- Cellular Immunology - Attn: PL4970234
- Molecular Biology - Attn: PL4970152
- Virology Position Attn: PL4970451



**The Henry M. Jackson Foundation**  
for the Advancement of Military Medicine

1401 Rockville Pike • Suite 600 • Rockville, Maryland 20852 • E-mail: hr@mail.hjf.org

## Autonomic Neuroscientist

The University of Calgary Neuroscience Research Group and the Department of Physiology & Biophysics invite applications for a full-time academic position as an Autonomic Neuroscientist to complete existing strengths within the group. This is an excellent opportunity to develop a vigorous independent research program within a multidisciplinary research environment and to participate in graduate student education.

Qualifications include a PhD or equivalent, at least two years of postdoctoral training and a demonstrated record of research excellence. Scientists interested in central autonomic control, neuroimmunology and enteric neurobiology are particularly encouraged to apply. The selected candidate must compete successfully for salary and operating support from the Alberta Heritage Foundation for Medical Research and/or the Medical Research Council of Canada, and will have 75% of time protected for research.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary is committed to Employment Equity.

Please submit a curriculum vitae, a summary of research interests, and reprints of two recent publications, and also arrange to have three letters of reference sent directly, by February 28, 1998, to:

Dr. K. Sharkey, Chair  
Neuroscience Research Group  
Faculty of Medicine  
The University of Calgary  
3330 Hospital Drive N.W.  
Calgary, Alberta, Canada T2N 4N1



**THE UNIVERSITY OF CALGARY**

[www.ucalgary.ca](http://www.ucalgary.ca)





**DIRECTOR**  
**Center for Diagnostics and Drug Development**  
**University of Central Florida**

The University of Central Florida (UCF) seeks candidates to direct and develop the newly created Center for Diagnostics and Drug Development. The Director will report to the Vice President for Research and Graduate Studies. The successful candidate will provide academic leadership, vision, direction, and coordination of multidisciplinary research programs in establishing the Center as a national leader in research and graduate education. The Director is expected to maintain strong collaboration with on-campus academic units, including appropriate deans and chairs. The Director is also expected to develop a sound funding base from public and private industry. Faculty appointment as commensurate with credentials.

The successful candidate should possess an appropriate advanced degree in Chemical and/or Biomedical Sciences with a sustained record of scholarly accomplishments in academia and/or industrial settings. Preference will be given to candidates demonstrating: excellent communications and interpersonal skills; strong planning and decision-making capabilities; an excellent track record of research funding; an ability to lead a multi-investigator research program; knowledge of patent and licensing issues.

UCF currently enrolls over 28,000 students and is among the fastest growing universities in the nation. The main campus is located in Orlando, one of the nation's most dynamic metropolitan areas and fastest growing centers for technology-based industries.

Nominations or applications should include the curriculum vitae of the candidate. Review of candidates will begin March 1, 1998, and will continue until a successful candidate is identified. Please address all applications and nominations to:

**Dr. Michael Sweeney**  
**Chair of the Center for Diagnostics and Drug Development Search Committee**  
**University of Central Florida**  
**College of Health and Public Affairs**  
**P.O. Box 162200**  
**Orlando, FL 32816-2200**

*UCF is an Equal Opportunity Employer/Affirmative Action Employer. As an agency of the State of Florida, UCF makes all application materials, including transcripts used in final screening, available to the public upon request.*



**MAYO CLINIC**  
**POSTDOCTORAL POSITION**

Postdoctoral position is available immediately with an active group investigating the T cell response to peptides encoded by Theiler's virus. The central focus of this research effort is the identification of virally encoded peptides that are recognized by cytolytic T lymphocytes and the roles played by these peptides in inducing resistance to demyelination in a mouse model of multiple sclerosis. A Ph.D., M.D., or D.V.M. degree is required and experience in *in vitro* assays of cellular immunology and basic methods of molecular biology is preferable. Send a curriculum vitae, description of research experience, and the names and addresses of three references to:

**Dr. Peter J. Wettstein**  
**(wettstein@mayo.edu)**

or

**Dr. Moses Rodriguez**  
**(redriguez@mayo.edu)**  
**Department of Immunology**  
**Mayo Clinic**  
**200 First St. SW**  
**Rochester, MN 55905**

*Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.*

**POSTDOCTORAL POSITIONS IN**  
**MOLECULAR CANCER BIOLOGY**

Laboratory of Biological Chemistry, NIA  
 National Institutes of Health

Several postdoctoral positions are available in the Laboratory of Biological Chemistry at the National Institute on Aging for individuals interested in joining a program devoted to studying the expression and function of genes involved in human cancer, cell cycle regulation and the stress response. Specific research topics include:

**$\beta$ -catenin and the Wnt pathway.** The projects will include molecular and cellular studies aimed at elucidating the importance of the Wnt pathway in human cancer (P.J. Morin).

**Molecular genetics of ovarian cancer.** This project includes use of SAGE analysis (see Science 270: 484) and other state-of-the-art molecular techniques to identify tumor markers and gain a greater understanding of the molecular pathways involved in ovarian tumorigenesis (P.J. Morin).

**Cell Cycle Regulation.** Alterations in cell cycle distribution in mammalian cells following exposure to stress and implications for cell survival (M. Gorospe).

**Post-transcriptional Regulation of Gene Expression during stress,** focusing on understanding mechanisms controlling the expression of cell cycle regulators and stress proteins. (M. Gorospe).

Highly motivated and enthusiastic candidates with background in Molecular Biology and/or Cell Biology are encouraged to apply. Please indicate your area of interest and send a CV and the names of three references to:

**PATRICE J. MORIN OR MYRIAM GOROSPE**

**Box 12, LABORATORY OF BIOLOGICAL CHEMISTRY, GERONTOLOGY RESEARCH CENTER, 5600 NATHAN SHOCK DRIVE, NATIONAL INSTITUTE ON AGING, NIH, BALTIMORE, MD 21224-6823; Fax: 410-558-8335; myriam-gorospe@nih.gov; morinp@grc.nia.nih.gov**

NIH is an Equal Opportunity Employer



**U.S. Department of Agriculture (USDA)**  
**Agricultural Research Service (ARS)**  
**LABORATORY DIRECTOR**  
**GS-14/15**

The USDA, Agricultural Research Service (ARS), is seeking a highly motivated and articulate research scientist to serve as Laboratory Director, and provide vision and leadership, to the ARS Appalachian Fruit Research Station, Kearneysville, WV. The mission of the Station is to identify and solve critical problems of temperate fruit production, protection, harvesting, and sorting needed to maximize productivity, cost efficiency, and fruit quality, while minimizing adverse environmental effects. This position will require the experience and willingness to interact closely with other scientists, and a demonstrated ability to conduct research. The successful candidate must have demonstrated supervisory skills, and the ability to work in a collaborative environment. Strong interpersonal and communication skills are a must. The incumbent will have the responsibility to shape, manage, and participate in research programs involving 17 senior scientists, a modern, well-equipped research laboratory and greenhouse facility, and a 550-acre research orchard. Professional experience is required in Horticulture, Entomology, Plant Physiology, Plant Pathology, and/or Agricultural Engineering. Competitive salary and benefits package. Ph.D. is desirable. *Candidate must be a U.S. citizen.* For further information on research programs contact **Wilda H. Martinez** at **215-233-6593**. For application information and forms contact **Janie E. Carr** at **301-344-4569**. Applications must be post-marked by January 30, 1998. *USDA/ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*



**St. Jude Children's  
Research Hospital**

ALSAC • Danny Thomas, Founder

## POSTDOCTORAL POSITION IN BIOCHEMISTRY

A postdoctoral position is available in the laboratory of Dr. Paul Ney to investigate erythroid differentiation. Areas of research include transcriptional regulation of globin gene expression and signaling pathways in Friend virus-induced erythroblastosis. Emphasis will be placed on murine models of erythropoiesis, including gene targeting experiments. The department of Biochemistry, under the direction of Dr. James Ihle, provides an exceptional environment for scientific achievement and career development. Applicants should have a recent Ph.D. degree and a strong background in cell and molecular biology. Please send curriculum vitae, a brief statement of research interests, and three letters of recommendation to: **Dr. Paul Ney, Department of Biochemistry, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105. E-mail: paul.ney@stjude.org**

### Dean, College of Liberal Arts and Sciences University of Illinois at Chicago

Nominations and applications are invited for the position of Dean of the College of Liberal Arts and Sciences at the University of Illinois at Chicago (UIC).

UIC, a Research I University, is the largest university in the metropolitan Chicago area. Through its Great Cities Program, UIC has taken a leading role in redefining the mission of urban land-grant universities to address the pressing social issues faced by modern cities. Located just west of downtown Chicago, UIC serves as a significant contributor in the revitalization of the central city. The campus includes 15 colleges and schools, serving one of the nation's most diverse student populations with a total size of approximately 25,000, and a faculty and staff of 11,000. A guaranteed professional admissions program attracts many of the state's most gifted undergraduate students.

Liberal Arts and Sciences (LAS) plays the central role in providing the general education curriculum for all of the 16,000 undergraduate students and shares a close relationship with the Honors College. The largest college on campus, containing 22 departments and a faculty of over 450, LAS is a major research unit, providing graduate training through Master's programs in 23 fields, and Ph.D. programs in 15 fields. Federal research grant expenditures total about \$13 million. LAS vigorously supports interdisciplinary research both in and between colleges.

The position requires the capacity to conceptualize a vision of the College's future that will motivate the faculty and inspire others. Equally important is the ability to articulate this vision in terms of concrete goals and to enlist the support of essential constituencies. In addition, candidates for the position must have the following qualifications: an outstanding record of scholarly and educational achievement commensurate with an appointment as full professor in one of the departments or programs of the College; interpersonal skills necessary to manage a complex college, interact with the university community, and represent the college to the external environment including alumni and potential donors; the capacity to manage budgets and human resources; a commitment to and experience with shared governance; and a history of major administrative experience.

Applications and nominations will be accepted immediately and the search will continue until the position is filled. Please send to:

**Dr. Gerald S. Moss, Chairperson  
Search Committee for the Dean of the College of Liberal Arts and Sciences  
Office of Academic Affairs (m/c 105)  
University of Illinois at Chicago  
601 South Morgan Street  
Chicago, Illinois 60607-7128  
<http://www.uic.edu/depts/oaas/search/las-dean.html>**

*The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer. Women, minorities, and people with disability are strongly encouraged to apply.*



### Faculty Position in Physical Oceanography Scripps Institution of Oceanography University of California, San Diego

Scripps Institution of Oceanography invites applications for a faculty position in areas of large-scale physical oceanography. The position may be filled at the level of Assistant, Associate, or Full Professor (tenure-track or tenured) depending on experience, but preference will be given to applicants at the Assistant or Associate level. Successful candidates will be expected to contribute to the graduate teaching program of the Physical Oceanography Curricular Group and to develop a strong extramurally funded research program that will complement existing efforts in large-scale observations, theory, and climate dynamics. Preference will be given to candidates with strong credentials in reconciling models and observations, data assimilating modeling, ocean climate prediction, and general circulation modeling.

Rank and salary will be commensurate with qualifications and experience based on the UC pay scale. Candidates must have a Ph.D. or equivalent degree. The position will involve teaching and the supervision and support of graduate students, and the development of research programs supported by extramural funds. Associate and Full Professorial candidates must show evidence of a strong research record; Assistant-level candidates will be expected to show evidence of their potential through a publication record appropriate to their experience. Closing date for applications: March 1, 1998. Send letter of application including description of research interests, list of publications, résumé of teaching experience, and names/addresses of five referees to: **Chair, Physical Oceanography Search Committee, SIO Graduate Department, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0208.**

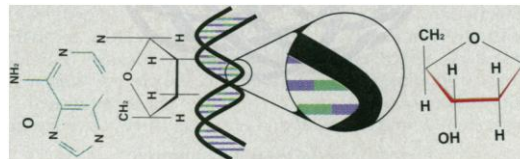
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### • Sequana Therapeutics, Inc. •

Sequana Therapeutics, Inc. is a leading genomics company that uses industrial-scale gene discovery and functional genomics technologies to develop products aimed at diagnosing and treating common human diseases. Sequana has strategic alliances with Glaxo Wellcome, Boehringer Ingelheim, Boehringer Mannheim and Parke-Davis, among other pharmaceutical and biotechnology companies. We continue to invest heavily in the acquisition and development of new technologies and are seeking candidates for the following position.

### Senior Scientist

You will be responsible for developing methods for gene expression measurement and for mutation detection and typing. These methods will be developed for use on our high density DNA micro-array system, robotic systems, and other automated analysis and sample handling systems. You will be working closely with scientists and engineers at Sequana and will also be responsible for managing external collaborations. You will have considerable experience in the development of protocols using nucleic acids, ideally with fluorescent assays, solid phase methods, and oligonucleotide synthesis. A PhD and a minimum of 2 years experience or a MS and 6 years experience are required.



*As a publicly held corporation, Sequana is proud to offer a stimulating scientific setting along with a highly competitive salary and benefits package, including stock options and relocation assistance. Please mail or fax your CV to: Sequana Therapeutics, Inc., Attn: HR/Sci97-84, 11099 N. Torrey Pines Rd., #160, La Jolla, CA 92037. Fax: (619) 452-6653. [www.sequana.com](http://www.sequana.com). EOE.*

## LAWRENCE POSTDOCTORAL FELLOWSHIPS

Learning about some of science's most awe-inspiring achievements can be an amazing experience. Now imagine being part of them. As a member of **Ernest Orlando Lawrence Berkeley National Laboratory's** Lawrence Postdoctoral Fellowship Program, you will have the opportunity to enhance your professional development as an integral member of a laboratory research team in your field of expertise and work with professionals from the international community. If you'd like to enter a new arena of intellectual discovery, walk through our doors. We are currently seeking candidates in the following multidisciplinary areas:

- Energy Sciences
- Biosciences
- Computing Sciences
- General Sciences

Major activities for this research include National Energy Research Scientific Computing Center (NERSC), Advanced Light Source (ALS), Human Genome Center, New Energy Technologies and Center for Advanced Materials.

For more information about these opportunities and other research areas, or to request a fellowship application package, please e-mail us at [lawrence-postdoc@lbl.gov](mailto:lawrence-postdoc@lbl.gov), fill out an application on our web site at [www.lbl.gov/Workplace/WFDO](http://www.lbl.gov/Workplace/WFDO), or send resume to **Ernest Orlando Lawrence Berkeley National Laboratory, Lawrence Postdoctoral Program, Box# SCI-LPF, One Cyclotron Road, MS 938A, Berkeley, CA 94720. FAX (510) 486-7099**. The deadline for our Spring appointments is February 15 and the deadline for our Summer/Fall appointments is May 30.

Berkeley Lab is proud to be an equal opportunity employer dedicated to the development of a diverse workforce. We particularly invite and encourage professionals of all ethnic backgrounds to consider making individual contributions to our multidisciplinary research environment.



Berkeley Lab's primary mission is to perform basic research, develop research relationships with American industry and educate and teach future scientists and engineers.

## CELLULAR & MOLECULAR CANCER RESEARCH

The College of Medicine and the H. Lee Moffitt Cancer Center & Research Institute at the University of South Florida are seeking applications for Assistant, Associate and Full Professor Level individuals to participate in the Cancer Center Research Programs under a stimulating academic environment that includes excellent laboratory and clinical facilities. Applicants must have a demonstrated track record in cancer research preferably related to one or more of the Cancer Center's established programs. Research programs include:

- Immunology
- Cancer Genetics
- Molecular Oncology
- Cancer Cell Biology

Successful individuals must hold a M.D. or Ph.D. degree with a minimum of 2 years post-doctoral training. Individuals at the rank of Associate Professor must have a demonstrated potential of extramural funding and at least 5 years of active and sustained participation as an Assistant Professor. Individuals for Full Professor must have a proven track record of independent research, leadership ability and training experience as evidenced by publications and extramural funding as well as 5 years of active and sustained participation as an Associate Professor. Academic rank and salary will be commensurate with experience and qualifications. These positions will be assigned to specific, mutually agreed upon departments within the College of Medicine with the possibility of tenure.

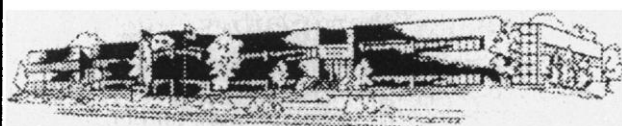
Send current curriculum vitae and a brief statement of major academic interest to W. J. Pledger, Ph.D., Associate Center Director for Basic Research, H. Lee Moffitt Cancer Center and Research Institute, 12902 Magnolia Drive, Tampa, Florida 33612. Applications must be postmarked by the deadline of **March 15, 1998**.

The H. Lee Moffitt Cancer Center & Research Institute is a free-standing, newly designated NCI Cancer Center located adjacent to the Health Sciences Center on the Tampa campus of the University of South Florida. In addition to a 162-bed full service cancer treatment facility, the Center has a research laboratory space in four buildings including over 50,000 square feet of dedicated laboratory and support space in a new Cancer Research Center.



**H. LEE MOFFITT CANCER CENTER  
& RESEARCH INSTITUTE**  
University of South Florida College of Medicine

The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action Employer. For disability accommodations please contact Jody Swanson at (813) 975-7894, a minimum of five working days in advance. TDD# 813-974-2218



## HOLLAND LABORATORY DEPARTMENT HEAD HEMATOPOIESIS RESEARCH PROGRAM

A new basic research department is being formed at the Jerome H. Holland Laboratory of the American Red Cross. We are currently seeking a department head to direct and develop a strong grant-supported laboratory research program in hematopoiesis and to recruit outstanding, interactive scientists.

Candidates should possess: a Ph.D., M.D., or M.D./Ph.D. degree; a strong history of independent grant support; an established publication record in hematopoiesis; and an interest in developing collaborative projects. Currently, the Holland Laboratory has strong basic programs in biochemistry, coagulation proteins, experimental pathology, immunology, platelet biology and vascular biology, as well as developmental research in therapeutic proteins, transplantation and transfusion medicine.

The Holland Laboratory, which is the Biomedical Research and Development division of the American Red Cross, is located ten miles north of the NIH in Rockville, MD (Washington, DC metropolitan area) and offers an excellent start-up and benefits package. Individuals are eligible for appointments to the faculty of the George Washington University School of Medicine and Health Sciences. Interested individuals should send their CV and names of three references to:

**Hematopoiesis Search Committee  
Holland Laboratory  
15601 Crabbs Branch Way  
Rockville, MD 20855**

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## HOLLAND LABORATORY SCIENTIST I

We are currently accepting applications for a **Scientist I** (Assistant Prof. equivalent) in the newly established Department of Tissue Biology. The successful candidate will be expected to: 1) Establish an independent research program related to existing department programs in basic and applied bone biology. These include studies of the performance of demineralized bone matrix, studies to develop more potent anabolics for bone and the function of growth factors in the treatment of osteoporosis 2) Contribute to the development of new areas of research in Tissue Biology and 3) Participate in a team approach to the achievement of these goals.

Opportunities for participation in graduate education through a program with nearby George Washington University exist.

Applicants should send a curriculum vitae, a brief statement of research interests and three letters of reference to:

**Tissue Biology Search Committee  
Holland Laboratory  
American Red Cross  
15601 Crabbs Branch Way  
Rockville, MD 20855**

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**St. Jude Children's  
Research Hospital**

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## **POSTDOCTORAL POSITIONS IN CELL CYCLE/CELL DEATH**

Postdoctoral positions are now available for NIH funded research programs investigating novel alterations of cell cycle and apoptotic signaling pathways in human tumors as well as determining the role of CDK-related protein kinases in cell death [Lahti et al. *Mol Cell Biol* 15:1-11, 1995; Beyaert et al. *J Biol Chem* 272:11694-11697, 1997]. Specific defects in the FasR-mediated cell death and cyclin D/CDK/INK pathways in neuroblastoma are being investigated in one project, while the role of phosphorylation/caspase processing of PITSRE protein kinases during Fas-mediated apoptosis is being investigated in the second project. Candidates should have training and experience in molecular and cellular techniques, and familiarity with cell cycle/cell death is an advantage. Send a curriculum vitae and three letters of reference to:

**Dr. Vincent Kidd  
Department of Tumor Cell Biology  
St. Jude Children's Research Hospital  
332 N. Lauderdale  
Memphis, TN 38105**

## **POSTDOCTORAL FELLOW THE HENRY HOOD M.D. RESEARCH PROGRAM COLLEGE OF MEDICINE**

A Postdoctoral Fellow position is available in the laboratory of Dr. Lawrence I. Rothblum. The Postdoctoral Fellow will study the mechanisms of transcription by RNA polymerase I as well as the signaling pathways involved in the regulation of ribosomal DNA transcription (see *Mol. Cell Biol* 16:557-563, 1996; *Nature* 374:177-180, 1995). The successful candidate will have experience in one or more of the following areas: in vitro transcription, enzyme/protein purification, recombinant DNA/protein expression, cell culture, and protein-protein or protein-nucleic acid interactions. The Henry Hood Research program is housed in the Weis Center for Research in Danville, PA. Danville is in a semi-rural area with convenient access to the major metropolitan areas of New York and Baltimore. The Center provides modern, fully equipped research facilities for 89 faculty and research personnel. Interested individuals should send their curriculum vitae and the names of three references to: **Mrs. Barbara A. Brown, Administrative Assistant, Henry Hood Research Program (LIR), Sigfried and Janet Weis Center for Research, 100 North Academy Avenue, Danville, PA 17822-2601. Application Deadline: January 19, 1998. An Affirmative Action/Equal Opportunity Employer. Women and Minorities Encouraged to Apply.**

## **Chairperson Mechanical Engineering**

The Department of Mechanical Engineering and Applied Mechanics (MEAM) in the College of Engineering at the University of Michigan in Ann Arbor is conducting a search for a chairperson. Candidates should have the vision and intellectual breadth to lead a large and diverse department, and a commitment to excellence in engineering education and research. In addition, candidates should have an earned doctorate in a research area related to Mechanical Engineering and Applied Mechanics, and be able to manage a large staff and budget.

The Department is highly regarded nationally, with approximately 53 full-time tenured or tenure-track faculty, 560 undergraduate and 400 graduate students. Its modern physical facilities and support infrastructure include a large, dedicated instructional and research building; a 21st century College of Engineering library; and a model information technology and computing organization. The Department has diverse educational and research programs with strong interdisciplinary collaborations. Its research programs range over many areas and are backed by annual funding of over \$14M. More information can be obtained from the Department's home page at <http://www.engin.umich.edu/dept/meam/>.

It is hoped that the position will be filled by July, 1998. Interested persons should send a letter of application by April 1, 1998, along with a detailed curriculum vitae and the names and addresses of three potential references to: **Administrator, MEAM Chair Search Committee, 2434 Lurie Engineering Center, University of Michigan, College of Engineering, Ann Arbor, MI 48109-2116.** Letters nominating likely candidates are also encouraged. *The University of Michigan is an Equal Opportunity Affirmative Action Employer. Women and minority candidates are especially encouraged to apply.*

## **National Institutes of Health National Institute on Alcohol Abuse and Alcoholism Laboratory of Clinical Studies**

The Laboratory of Clinical Studies, NIAAA, seeks a Ph.D. To establish an independent program in cognitive neuroscience research related to alcoholism and associated disorders. Current areas of research in the Laboratory of Clinical Studies include attention, memory, and impulsivity as they relate to brain structure and function. However, the individual will be free to pursue any area of cognitive research related to alcoholism. Extensive support for both functional and structural brain imaging is available within the Laboratory, including fMRI and PET. Applications must be submitted by March 31, 1998. Submit applications to **Dr. Leslie Ungerleider, Chair, Cognitive Neuroscience Search Committee, NIMH, NIH, Building 10, Room 4C104, Bethesda, MD 20892-1366.**

## **NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE ON ALCOHOL ABUSE & ALCOHOLISM**

**Tenure-Track Position  
(Assistant Professor Equivalent)  
Functional Genomics**

NIAAA is searching for a tenure-track investigator within the Laboratory of Neurogenetics. The Tenure-Track investigator will conduct and coordinate an interactive research program on the genetic basis of alcoholism. The program of research shall have as its primary focus the molecular biological analysis of mammalian genes involved in neurotransmitter metabolism and function and the relation of events at the gene level to the behavior of the organism. Expertise and innovativeness in the development and utilization of animal models, the detection and analysis of genetic variation, and the cloning, transfection, and expression of genes involved in behavior are of particular interest.

Candidates should have a doctoral degree with a record of scientific accomplishments, including both excellent in lab research and qualifications that demonstrate competence in scientific organization and leadership. Interested applicants should send a curriculum vitae and a detailed statement of research interests and have three letters of recommendation sent to: **Kathleen Hanratty, NIAAA, NIH, Bldg. 31, Room 1B58 MSC 2088, 31 Center Drive, Bethesda, MD 20892-2088. Deadline for application is February 20, 1998.**



# GORDON RESEARCH CONFERENCES

The 1998 Summer and International GRC Programs will  
appear in the February 27, 1998 Issue of *SCIENCE*

For further information visit

THE GRC WEB SITE

<http://www.grc.uri.edu>

or request information by Fax at 401-783-7644

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**GO TO A GORDON CONFERENCE**

## POSITIONS OPEN

### FACULTY POSITION IN MOLECULAR MICROBIOLOGY WASHINGTON UNIVERSITY IN ST. LOUIS

The Department of Molecular Microbiology at the Washington University School of Medicine solicits applications for a tenure-track appointment as **ASSISTANT PROFESSOR**, beginning in the fall of 1998. Our program has a strong emphasis on microbial pathogenesis, in viral, prokaryotic, and eukaryotic systems (information can be found at [website: www.microbiology.wustl.edu](http://www.microbiology.wustl.edu)). We are seeking interactive individuals with a commitment to establishing a vigorous independent research program and teaching. Applicants should send a detailed curriculum vitae, selected reprints, description of current and planned research interests, and arrange to have three letters of reference sent by February 1, 1998, to: **Dr. Stephen M. Beverley, Chairman of Molecular Microbiology, Attn: Faculty Search Committee, Washington University School of Medicine, Campus Box 8230, 660 South Euclid Avenue, St. Louis, MO 63110.**

*Washington University School of Medicine is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.*

**ASSISTANT/ASSOCIATE PROFESSOR** of biology, full-time, tenure-track position beginning July 1998. Qualifications: Ph.D. in microbiology with broad training, student-oriented teacher with commitment to teaching thinking skills/content. Minimum of one year of college/university teaching experience. Experience as a teaching assistant is acceptable. Responsibilities: teach undergraduate/graduate courses (introductory and cell/molecular biology, general and environmental microbiology, immunology, senior readings) including one or more courses in specialty; advise undergraduate/graduate students. To apply send a letter describing research and teaching interests, a curriculum vitae, official transcripts, and names, addresses, and telephone numbers of four references to: **Dr. Malcolm McEwen, Delta State University, Box 3262, Cleveland, MS 38733. Telephone: 601-846-4248; e-mail: mmcewen@dsu.deltast.edu.** Application deadline is February 6, 1998. *Equal Opportunity Employer/Minorities/Females.*

## POSITIONS OPEN

### RESEARCH FACULTY POSITION IN CARDIOVASCULAR DEVELOPMENT

The Department of Medical Physiology at Texas A&M University Health Science Center invites applications for a non-tenure-track **RESEARCH ASSISTANT PROFESSOR** or **RESEARCH ASSOCIATE PROFESSOR**. The position is funded by NIH grants and requires demonstrated expertise in molecular and cellular biology. Candidates with an interest in vertebrate heart development and myocardial differentiation are particularly encouraged to apply. The successful candidate will serve as the Laboratory Director in conjunction with the Principal Investigator. The candidate would be invited to serve as a co-investigator on two currently active NIH grants as well as apply for additional grants related to the cardiovascular development theme. The position provides a competitive salary plus excellent fringe benefits.

Interested individuals should send a curriculum vitae, the names, addresses, and telephone numbers of three references, and sample reprints/preprints to: **Dr. Larry Lemanski, Associate Vice President for Research and Professor of Medical Physiology, 312 Administration Building, Texas A&M University, College Station, TX 77843-1112.**

*Texas A&M University is an Affirmative Action/Equal Opportunity Employer committed to diversity.*

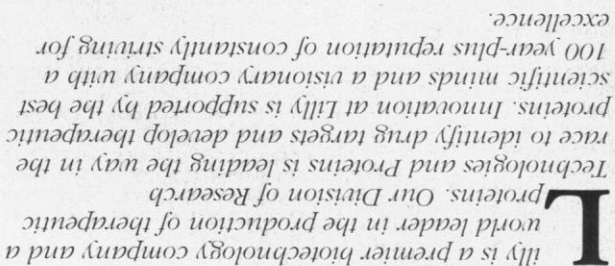
The Department of Biology at Northeastern State University invites applications for an **ASSISTANT PROFESSOR** to teach human anatomy, general zoology, and senior seminar with histology a plus. Position will join a ten-member Biology Department at four-year undergraduate institution starting fall 1998. Ph.D. required. Send letter of application, résumé, unofficial transcripts, and three letters of recommendation to: **Personnel Office (EOMB), Northeastern State University, Tahlequah, OK 74464.** Completed application review begins February 16, 1998. *An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### FACULTY POSITION

The Boston Biomedical Research Institute, an independent, nonprofit, research institute located in the heart of Boston (see [website: http://www.bbri.harvard.edu](http://www.bbri.harvard.edu)), invites applications for a **JUNIOR** or **SENIOR RESEARCH FACULTY** position from scientists with postdoctoral experience and significant research accomplishments in the cell biology, biochemistry, and/or molecular biology of non-muscle cell motility. Those whose interests interface the cytoskeleton and signal transduction are especially encouraged to apply. The successful candidate will complement the research of several investigators at the Institute with interests in different aspects of contractility, signal transduction, and regulation of cell growth and will establish an independent, externally funded research program. A generous start-up package is available. Applicants should submit by mail a curriculum vitae, a brief statement of research plans, and arrange to have letters from three references sent to: **Dr. Lynne M. Coluccio, Chair, Search Committee, Boston Biomedical Research Institute, 20 Staniford Street, Boston, MA 02114.** Screening of applications will begin on February 1, 1998, and will continue until the position is filled.

The Gertrude H. Sergievsky Center of Columbia University, a research center devoted to epidemiologic investigation of neurodevelopmental disorders throughout the life span, seeks applications for a **MOLECULAR BIOLOGIST** at the **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** level. A doctorate (Ph.D./Dr.PH./D.Sc.) in molecular biology, molecular genetics, or the equivalent, or an M.D. with equivalent postgraduate training is required. The successful applicant must have demonstrated evidence of high productivity, ability to obtain independent research funding, and enthusiasm for collaborating with an active group in basic and applied research on the molecular bases of neurodevelopmental and neurodegenerative disorders. Send letter of interest and curriculum vitae with the names of three references to: **Dr. Ruth Ottman, Sergievsky Center, Columbia University, 630 West 168th Street, New York, NY 10032.** *Columbia University is an Equal Opportunity Employer and encourages applications from qualified women and minorities.*



As part of our bioinformatics group you will be expected to participate, develop, and implement procedures and methods for identification of novel proteins, and gene targets using state-of-the-art computational tools and algorithms. You will specifically contribute in one or more of the following areas:

- development of novel algorithms for gene function prediction
- integration of existing bioinformatics tools and related databases
- develop novel methods for examining genomic and protein sequences
- develop systems and/or strategies for helping biologists/scientists to aid in target and protein identification
- skills in statistical analysis of differential gene expression
- knowledge management
- user training and coaching

The positions will also be responsible for the conception, design, and performance of *in silico* bioinformatics experiments to assist in the discovery of new therapeutic targets and proteins.

Qualifications: An advanced degree in computer science and/or molecular biology coupled with a successful track-record in bioinformatics. Thorough experience in UNIX, C, PERL, SQL, and biological databases. Excellent communication skills and team work is required.

For confidential consideration, please send your resume and cover letter indicating the position of interest to: **EH Lilly and Company, Bioinformatics Group, DC1818, Lilly Corporate Center, Indianapolis, IN 46285**. We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace. For other opportunities at Eli Lilly and Company, visit our job Bank at <http://www.lilly.com>.

**St Jude Children's  
Research Hospital**  
ALSAC • Danny Thomas, Founder



**POSTDOCTORAL  
POSITION IN  
DEVELOPMENTAL  
NEUROBIOLOGY  
(MOUSE GENOMICS)**

A postdoctoral position is available immediately to study the function and degeneration of hair cells in the mouse inner ear. Two independent approaches are being taken: BAC modification/transgenic techniques for labeling hair cells *in vivo*; positional cloning for identifying several mutant genes involved in the hair cell degeneration (Zuo, et al., *Nature* 388: 769-773). The ideal candidate should have experience in mouse genetics and genomics. Knowledge in neurobiology is a plus.

St. Jude Children's Research Hospital provides a state-of-the-art scientific facility with a highly interactive environment containing core facilities in molecular biology, peptide and protein chemistry, genomics and transgenic/knockout mouse production.

Visit our web site at [www.stjude.org/](http://www.stjude.org/) developmentally interested candidates should send a curriculum vitae and three letters of recommendation to:

**Jian Zuo, Ph.D.**  
Department of Development  
Neurobiology  
St. Jude Children's Research Hospital  
332 N. Lauderdale  
Memphis, TN 38105-2794

**jian.zuo@onzo.org**

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

## POSITIONS OPEN

### PHARMACOLOGY FACULTY POSITION

The Division of Pharmacology, University of Missouri-Kansas City (UMKC) School of Pharmacy invites applications for tenure-track positions at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The successful candidate should have a Ph.D. degree, preferably in pharmacology or toxicology, at least two years of postdoctoral experience, and will be expected to develop or continue an independent/fundable research program and contribute to the teaching of professional and graduate students. Priority will be given to areas of autonomic, cardiovascular, neuropharmacology, and toxicology. Applications should be received by January 30, 1998. Review of applications will begin on February 2, 1998, and continue until the positions are filled. These positions will be available beginning July 1998. Faculty rank and salary will be commensurate with prior experience. Please send applications along with a curriculum vitae, a statement of research and teaching objectives, the names and addresses of three references to: **Dr. Yuen-Sum Lau, Chairman, Division of Pharmacology, UMKC School of Pharmacy, 2411 Holmes Street, M3-111, Kansas City, MO 64108. Telephone: 816-235-1798; e-mail: yslau@pop.umkc.edu. University of Missouri-Kansas City is an Affirmative Action/Equal Opportunity Employer.**

### INVERTEBRATE EVOLUTIONARY BIOLOGIST

Biology Department, Indiana University Southeast seeks broadly trained Evolutionary Biologist with a strong background in invertebrate zoology for a tenure-track, **ASSISTANT PROFESSORSHIP** to begin fall, 1998. Candidate must have Ph.D., strong commitment to teaching at undergraduate level, and ability to develop active research program using modern methods. Successful candidate will teach upper-level courses in evolutionary biology and invertebrate zoology or entomology, introductory zoology, and may develop courses in a related specialty. Research space, small animal facilities, and start-up funds will be available. Postdoctoral research preferred. Send curriculum vitae, unofficial copies of graduate and undergraduate transcripts, statement of teaching philosophy and professional goals, and names, addresses, including e-mail, of three references. For consideration, submit application by January 26, 1998, to: **Dr. Gretchen Kirchner, c/o Human Resources, Box 97-38, Indiana University Southeast, 4201 Grant Line Road, New Albany, IN 47150. Indiana University Southeast is an Affirmative Action/Equal Opportunity Employer.**

### POPULATION ECOLOGIST

Tenure-track **ASSISTANT PROFESSOR**. Ph.D. completed by 24 August 1998. Broadly trained Population Ecologist with a strong commitment to teaching. A strong background in applications of quantitative methods to population dynamics and research experience with invertebrate groups, other than insects, required. Broad background in biology, prior teaching at the college level, and experience working with diverse groups are desirable. Duties: teaching general and population/community ecology and introductory biology courses; developing new courses; advising; supervising undergraduate and graduate research; serving on committees; and engaging in scholarly activities. Submit curriculum vitae, all transcripts, names and telephone numbers of three references, a statement of scholarly interests, and arrange to have three letters of recommendation sent to: **Laurel Heffernan, Chair, Biological Sciences, California State University, Sacramento, CA 95819-6077. Website: http://www.csus.edu/bios/. Application deadline: February 27, 1998. Affirmative Action/Equal Employment Opportunity.**

### FACULTY POSITION MOLECULAR CARDIOLOGY PROGRAM

The Molecular Cardiology Program at the University of Chicago invites applications for a tenure-track position at the **ASSISTANT or ASSOCIATE PROFESSOR** level. The successful candidate will have an M.D. and/or Ph.D. with research experience in the areas of molecular and cellular biology, developmental biology, and/or human and mouse genetics. Applicants should submit a curriculum vitae, summary of research accomplishments, and three letters of recommendation to: **Jeffrey M. Leiden, M.D., Ph.D., Molecular Cardiology Search Committee, The University of Chicago, 5841 South Maryland, MC 6080, Room B608, Chicago, IL 60637. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

### UofL Health Sciences Center

#### ASSISTANT PROFESSOR PHARMACOLOGY AND TOXICOLOGY

The Department is seeking to fill two Assistant Professor positions that are tenurable. The selected candidates will have a Ph.D. in pharmacology, toxicology, or related discipline, and be expected to transfer or develop a nationally recognized and independently funded research program that incorporates molecular approaches to pharmacology and/or toxicology research. The University of Louisville Health Sciences Center has established interdisciplinary research centers of excellence in genetics and molecular medicine, oncology, molecular neurobiology, and environmental health. Applicants with research interests in one or more of these areas are particularly encouraged to apply. The primary responsibilities will be in research and research training.

New research laboratories and competitive research start-up packages are available. Applicants should send a letter outlining career research goals, curriculum vitae, and the names of three individuals who can be contacted for letters of reference to: **David W. Hein, Peter K. Knoefel, Professor and Chair, Department of Pharmacology and Toxicology, University of Louisville School of Medicine, Louisville, KY 40292.**

Applications should be received by February 15 for full consideration, but the application process will continue until the positions are filled. For further information please visit **website: http://www.louisville.edu**. The University of Louisville is an Affirmative Action/Equal Opportunity Employer. Women and minorities are particularly encouraged to apply.

#### SOIL/ENVIRONMENTAL GEOSCIENTIST STANFORD UNIVERSITY

The Department of Geological and Environmental Sciences at Stanford University invites applications for a tenure-track **ASSISTANT PROFESSORSHIP** in soil/environmental geosciences. This new position is intended to complement our growing research and teaching programs, at both the graduate and undergraduate levels, in environmental geoscience. Research specialties may include but are not limited to geochemical and biogeochemical studies of soils, both modern and ancient, aqueous/groundwater geochemistry, mineral/soil-water interactions, and geochemical cycling and modeling.

Priority will be given to those applications received by March 16, 1998. Applicants must have a Ph.D. degree at the time of appointment. This appointment must be made at the Assistant Professor level. Please send a letter of interest, a statement of teaching and research objectives and accomplishments, a curriculum vitae, a publication list, and the names and addresses of three potential recommenders to:

**Professor Gordon E. Brown, Jr.  
Department of Geological and  
Environmental Sciences  
Stanford University  
Stanford, CA 94305-2115**

*Stanford University has a strong institutional commitment to the principle of diversity. In that spirit, we particularly encourage applications from women, members of ethnic minorities, and individuals with disability.*

#### ASSISTANT PROFESSOR, WILDLIFE

Ph.D. in wildlife with emphasis in wetland ecology. Experience with agricultural systems, GIS, or wildlife diseases desirable. Record of excellence in undergraduate teaching and ability to work with students in field applications and applied research preferred. Work experience with a wildlife agency desirable. This tenure-track position includes teaching up to 12 credits per semester and three to six weeks during the summer, advising undergraduates, and directing graduate research in specialty. Appointment begins August 1998 or January 1999. Salary commensurate with qualifications and experience. For full consideration send letter of application, curriculum vitae, copy of academic transcripts, at least three letters of reference, and examples of scholarly work by 1 March 1998 to: **Dr. J. W. Hardin, College of Natural Resources, University of Wisconsin-Stevens Point, Stevens Point, WI 54481. E-mail: jhardin@uwsp.edu. University of Wisconsin-Stevens Point is an Equal Opportunity Employer.**

## POSITIONS OPEN

### TWO BIOTECHNOLOGY POSITIONS TENURE-TRACK California State Polytechnic University

The first of 23 California State University campuses to offer a B.S. degree in biotechnology invites applications for two **ASSISTANT PROFESSORS** to work in a new biotechnology building. Both positions require a Ph.D., demonstrated excellence in teaching, and a strong record of research. Successful candidates will be expected to develop externally funded research programs and teach undergraduate and graduate courses. Positions are available September, 1998.

**Biotechnology, industrial microbiology:** Ph.D. in microbiology or related areas with some industrial experience to teach food and applied microbiology, industrial microbiology, toxicology, introductory courses, and develop new courses for biotechnology such as compliance and regulatory affairs.

**Biotechnology, cell and molecular biology:** to teach courses in cellular and molecular biology with emphasis on eukaryotic gene expression, signal transduction, cell communication, developmental biology, and develop new courses for biotechnology such as molecular informatics. The 33 biology faculty offer five B.S. degrees and one M.S. to 980 students. See **website: http://www.intranet.csupomona.edu/~biology/** for more information. Applicants should send a letter of intent, curriculum vitae, three letters of reference, and telephone numbers of two additional referees to: **Dr. Len Troncale, Biological Sciences Department, California State Polytechnic University, Pomona, CA 91768-4032.** Initial reviews begin March 15 and continue until position is filled. *An Equal Opportunity/Affirmative Action Employer.*

### TEACHING POSITIONS CELL BIOLOGY AND PARASITOLOGY WESTERN MARYLAND COLLEGE

Western Maryland College seeks applications for two (2) tenure-track **ASSISTANT PROFESSOR** positions in biology, to begin August, 1998. Ph.D. expected.

(1) Successful applicant will teach undergraduate classes in cell biology, (with lab), freshman course for majors, and upper-division courses in an area of specialization; also advise students and mentor student research. Prefer candidates whose research and interests are biologically based.

(2) Successful applicant will teach undergraduate classes in biology; freshman-level courses for majors and non-majors, in the environmental field and incorporating computer technology; upper-division courses in the area of specialization, preferably parasitology or parasite ecology; also advise students and mentor student research. Preference given to candidates whose research and interests involve and complement the needs of majors. Candidates interested in either position should send letter of application, curriculum vitae, statement of teaching philosophy, transcripts, research interests, and three letters of reference to: **Dr. Louise A. Paquin, Department of Biology, Western Maryland College, Westminster, MD 21157** by February 20, 1998. Western Maryland College is a selective, private liberal arts institution located in central Maryland, close to Baltimore and Washington, D.C. *Western Maryland College is an Affirmative Action/Equal Employment Opportunity and ADA Employer and specifically invites and encourages applications from women and minorities. Americans with disability only may Telephone: 410-857-2504.*

### POSITION ANNOUNCEMENT

**ASSISTANT PROFESSOR OF BIOLOGICAL SCIENCES.** Applications are invited for a tenure-track position in the College of Liberal Arts at Florida Atlantic University's Davie Campus. Candidates must have a Ph.D. in biological science and be willing to teach courses in biochemistry and either plant biotechnology or cell biology. The ideal candidate will have research interests in studying environmental stresses utilizing molecular techniques and an active interest in involving undergraduates in research. The position starts August 8, 1998. Submit a curriculum vitae, three letters of reference, representative reprints, and a letter of application stating teaching and research interests by February 10, 1998, to: **John C. Volin, Chair, Biology Search Committee, College of Liberal Arts, Florida Atlantic University, 2912 College Avenue, Davie, FL 33314.** Inquires regarding position may be addressed to e-mail: **jvolin@fau.edu**. *Florida Atlantic University is an Equal Employment Opportunity/Affirmative Action Institution.*



## Faculty Positions in Developmental Neurobiology

As part of a long-range commitment to neurobiological research at **St. Jude Children's Research Hospital (SJCRH)**, the Department of Neurobiology is seeking to expand through the recruitment of junior faculty. Preference will be given to applicants with research programs that complement the department's existing strength in mammalian neurodevelopment. In particular, investigators using contemporary approaches to elucidate the molecular basis of lineage determination in the mouse nervous system are encouraged to apply. It is anticipated that successful applicants will have graduated within the past five years and have already achieved recognition through high profile publications.

SJCRH has made substantial investment in Developmental Neurobiology in terms of space and resources, thereby making it possible to offer very competitive packages for incoming junior faculty. This includes: salaries for the investigator and their personnel; new laboratory space; as well as start-up and continuing support for equipment and consumables. In addition, appointees have access to a range of institutional core facilities for protein and nucleic acid chemistry and transgenics. The department is already well equipped for most aspects of cell and molecular biology, transgenics, electrophysiology and anatomical analysis.

There are presently six faculty members in Developmental Neurobiology with research interests in the functional and anatomical organization of the developing nervous system, the control of neural death and regeneration, neural plasticity, molecular oncogenesis and the regulation of gene transcription. Those interested in joining this multidisciplinary department should arrange to have their CV, a brief research proposal and three letters of recommendation sent to the Developmental Neurobiology Search Committee, Attention: **Ms. Sharon Sisk, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105.**

*SJCRH is an equal opportunity employer/  
affirmative action employer.*



*National Center for Genome Resources*

*Due to our rapid growth in the fields of bioinformatics and agricultural genomics, NCGR in **Santa Fe, New Mexico**, is seeking the following individuals:*

### Agricultural Genomics Group Leader

Highly motivated agricultural scientist needed to assist in developing and managing a team focused on a major national and international effort in agricultural genomics. Will work with experienced database and software development staff in implementing NCGR's growing agricultural genomics program. Required: Ph.D. and relevant post-doctoral experience. Desirable: first-hand experience in managing genomic projects or genomic data; experience with agribusiness.

### Biological Interface Technologist

GUI expert needed to assist in developing our major effort in agricultural genomics. Will develop interfaces for biologists to access varied types of data in an integrated manner. Required: 3-5 years experience in visualization technologies. Desirable: experience in developing tools for genomic or biological projects, and ability to rapidly integrate with the team and deliver specified products.

### Senior Scientist

Will build and manage a diverse team of biologists and biochemists to interact with experienced database and software development groups and be a key contributor to strategy and bioinformatics design in agricultural genomics systems. Required: Ph.D. in molecular biology, genetics or related field; broad understanding of and experience in gene expression; molecular diagnostics or biochemistry; demonstrated successes in management and team development; laboratory experience. Desirable: experience with relational database curation and user support.

### Computational Biologists

Will design, develop and implement algorithms and software systems for translating and integrating genomic data into information useful to bench biologists, chemists and others. Required: Ph.D. in related field or demonstrated skills in algorithm development; broad understanding of, and experience in, bioinformatics (acquisition, storage, and analysis of biological data); comprehensive knowledge of genomics, including DNA sequencing; experience with database curation and user support; knowledge of SQL; excellent communication skills.

### Scientists

Will analyze data from agricultural genomic projects. Required: Ph.D. (or equivalent work experience) in a life science-related discipline, with an emphasis in genetics and/or molecular biology, especially in agricultural systems; experience with relational databases; ability to conceptualize algorithmic solutions to database-related problems and to design laboratory experiments in genomics. Desirable: ability to use sequence analysis tools and ability to write small program scripts.

To find out more about NCGR, you may access our home page at [www.ncgr.org](http://www.ncgr.org).

E-mail to: [hr@ncgr.org](mailto:hr@ncgr.org)  
(in ascii or postscript format)  
via fax to: 1-505-995-4461  
via mail to: NCGR  
1800-A Old Pecos Trail  
Santa Fe, NM 87505 EOE.



## POSITIONS OPEN

The Atmospheric Sciences Center located in Reno, Nevada, one of five centers within the Desert Research Institute, a division of the University and Community College System of Nevada, is currently accepting application packets for the following positions:

### ASSISTANT/ASSOCIATE RESEARCH PROFESSOR (TWO POSITIONS)

(1) Develop, pursue, and obtain funding for original research in the atmospheric sciences. The successful candidate should have demonstrated skills in working with high resolution numerical models, which parameterize cloud processes on different spatial scales. (2) Develop, pursue, and obtain funding for original research in the atmospheric sciences. The successful candidate should have demonstrated skills in aerosol and cloud physics. Education/experience: Both positions require a Ph.D. in atmospheric sciences or a related discipline and (1) at least one year of experience with high resolution numerical models or (2) working knowledge of modeling precipitation processes.

For complete job description please visit our website: [www.dri.edu](http://www.dri.edu).

Salary and benefits: Salary for both positions is very competitive and commensurate with qualifications. The Desert Research Institute offers an excellent benefits package.

The Desert Research Institute is an Affirmative Action/Equal Opportunity Employer. We hire only U.S. citizens and those authorized to work in the United States.

### ASSISTANT PROFESSOR OF BIOLOGY CONCORDIA COLLEGE, MOORHEAD, MINNESOTA

Two Assistant Professor positions are available August 27, 1998. Both are expected to be three-year appointments with the possibility of renewal and/or conversion to tenure-eligibility depending upon the future needs of the college. Ph.D. required. Active involvement with undergraduates in ongoing research is expected. Sympathy with the mission of the college is required. (1) Invertebrate zoology: teaching responsibilities include courses in invertebrate zoology, entomology, and general biology. (2) Anatomy/physiology: teaching responsibilities include courses in anatomy/physiology and general biology. Submit letter of application, curriculum vitae, copies of all transcripts, a statement of teaching philosophy, and three letters of recommendation to: **Dr. Gerald Van-Amburg, Department of Biology, Concordia College, Moorhead, MN 56562.** Applications will be received until February 1, 1998, or until position is filled. *Concordia College is an Equal Opportunity Employer.*

### TRUSTEE PROFESSORSHIP IN BIOLOGY NORTHEASTERN UNIVERSITY

The Department of Biology invites applications for a Endowed Trustee Professorship. The University seeks nationally distinguished applicants whose research has a practical significance in a technological, social, or economic context. Applicants should have the potential to provide leadership to an interdisciplinary research team. The Biology Department is particularly seeking individuals with proven achievement in biomechanics, who can form a bridge with the College of Engineering. The individual will be expected to complement an existing group interested in the mechanics and neural control of movement.

Applicants should send a curriculum vitae, a personal statement of interest and qualifications, and the names of three individuals who can provide letters of reference to: **Biology Trustee Professorship Search Committee, 414 Mugar Building, Northeastern University, Boston, MA 02115.** Review of applications will begin in January 1998. *Northeastern is an Equal Opportunity/Affirmative Action/Title IX Employer.*

### CHEMISTRY INSTRUCTORS

Spokane Falls Community College (approximately three hours from Seattle, Washington) invites applicants for two full-time **TENURE-TRACK POSITIONS.** Minimally have M.A. degree in chemistry. Teaching experience desirable. \$35,000 per year. Application deadline: February 1, 1998. Must request official application and additional information by contacting: **Human Resources Office, Community College of Spokane, 2000 North Greene Street, Spokane, WA 99207. Telephone: 509-533-7429; TDD: 509-533-7466; website: <http://ccs.spokane.cc.wa.us>.** *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### STANFORD UNIVERSITY

The Department of Pathology seeks an outstanding scientist for a tenure-track appointment as **ASSISTANT** or **ASSOCIATE PROFESSOR.** The successful candidate is expected to develop a high quality, independent research program in an area of molecular and cellular mechanisms of disease. Of particular interest are candidates focusing on basic research related to disease processes. Applicants with Ph.D., M.D., or combined degrees will be considered. There are also possibilities for qualified applicants to participate in clinical activities. Applicants should submit a curriculum vitae, a brief description of research accomplishments, and a concise statement of plans for future research. These, with the names of three references, should be sent to: **Klaus Bensch, M.D., Professor and Chairman, Department of Pathology, Stanford University School of Medicine, Stanford, CA 94305.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

### MOLECULAR BIOLOGIST

A position is available for an **ASSISTANT RESEARCH SCIENTIST** who will provide hands-on direction of the new BioXpress Laboratory at the University of Georgia. BioXpress is a service and training facility dedicated to the overexpression and purification of proteins for structural and functional studies. Responsibilities include cloning and expression of recombinant proteins in collaborations with academic or industrial researchers. Applicants must be able to work on several projects simultaneously, provide a broad range of conceptual and technical support to facility users, and supervise laboratory personnel. This position requires a Ph.D. in chemistry, biochemistry, or a related discipline. It also requires expertise in cutting-edge molecular biology, protein purification and characterization methods, and laboratory instrumentation. Several years of laboratory research experience are required, as supported by a significant record of publications. Applications received by February 9, 1998, are assured of consideration. Please send a letter briefly describing your research interests, curriculum vitae, and the names of three references to: **Ms. Cindy Fouché, Department of Biochemistry and Molecular Biology, The University of Georgia, Life Sciences Building, Athens, GA 30602-7229.** *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*

**TENURE-TRACK POSITION.** The Intramural Research Program of the National Institute on Drug Abuse, NIH, is looking for a qualified candidate for a tenure-track position in the area of the mechanisms of relapse to drug-seeking. The successful candidate should have a strong publication record in the field of rodent intravenous drug self-administration, with significant experience involving "relapse" or "reinstatement" paradigms. An interest in questions of mechanism and experience with some of the techniques of behavioral neuroscience are desirable. Interested candidates should submit a curriculum vitae with bibliography, three letters of recommendation, and statement of current and future research plans to: **Morgan DuBrow, Personnel Management Specialist, Intramural Research Program, National Institute on Drug Abuse, P.O. Box 5180, Building C, Room 252, Baltimore, MD 21224.** Applications must be received by close of business on February 28, 1998. Competitive salary and full Federal benefits package are included. *Applications from women and minorities are encouraged. NIDA is an Equal Opportunity Employer.*

Eastern College, an innovative Christian College of the arts and sciences, is seeking a **TENURE-TRACK** biology position to begin August, 1998. For more information and a full position description of position and requirements visit Eastern College at website: <http://www.eastern.edu>.

Interested and qualified candidates should forward a résumé and cover letter to:

**Eastern College  
Director of Human Resources  
Attn: Biology Search  
1300 Eagle Road  
St. Davids, PA 19087-3696**

*Eastern College is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR

The Department of Biological Sciences at the University of Alabama in Huntsville (UAH) invites applications for a tenure-track Assistant Professorship in molecular biology beginning in August 1998. The successful candidate is expected to participate in teaching at the undergraduate and graduate levels while maintaining an active, funded research program. We are particularly interested in outstanding candidates capable of identifying, cloning, and overexpressing targets for structural-based drug design. The successful candidate is expected to work closely with UAH's crystallography group in the Laboratory for Structural Biology as well as with UAH's Natural Products Group. A Ph.D. with appropriate training and expertise in molecular biology to support these thrust areas is required. Postdoctoral experience is highly desirable. Salary is competitive. Send letter of application, curriculum vitae, statement of teaching philosophy and research interests, and have four letters of reference forwarded to: **Molecular Biology Search Committee, Department of Biological Sciences, Wilson Hall, The University of Alabama in Huntsville, Huntsville, AL 35899.** Applications will be accepted for review until a suitable candidate is identified, but screening of applicants will start soon after publication of this announcement. For further information about the university and the department, visit our website: [www.uah.edu](http://www.uah.edu). Additional information about the position can be requested by e-mail: [campbellp@email.uah.edu](mailto:campbellp@email.uah.edu). *UAH is an Affirmative Action/Equal Opportunity Institution.*

### ASSISTANT PROFESSOR SCIENCE EDUCATION DEPARTMENT OF BIOLOGICAL SCIENCES Illinois State University

We seek a colleague holding a Ph.D. in any area of biological sciences with an interest in science education. Our department has a strong commitment to teacher education. Primary responsibilities are for biology teacher education majors, including a course in teaching methods, conducting workshops for supervisors of student teachers, developing a program providing research experiences, and advisement. If interested, the person will have opportunities to teach in their area of specialization and/or develop a research program. We expect scholarly productivity and the active pursuit of funding for educational programs.

Applications should include a curriculum vitae; a statement of teaching philosophy and research interests; reprints of up to three publications and/or other relevant teaching materials; names, addresses, telephone numbers, and e-mail addresses of three references. Address applications to: **Dr. Wayne Riddle, Search Committee Chair, Department of Biological Sciences, Illinois State University, Normal, IL 61790-4120.** To insure full consideration, applications should be received by 15 February 1998. Direct inquiries to: **Dr. Riddle, e-mail: [wariddl@ilstu.edu](mailto:wariddl@ilstu.edu).** *Minorities and women are encouraged to apply. Illinois State University is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR DEPARTMENT OF BIOLOGY BALL STATE UNIVERSITY Muncie, Indiana

Tenure-track position available August 21, 1998, in ornithology/vertebrate ecology. Responsibilities include: commitment to excellence in teaching; teaching courses in introductory non-majors/majors biology and upper-division courses in zoology and ecology, including ornithology; competency in current approaches used in the study of vertebrates with a special emphasis on ornithology; establishing an active research program; conducting research in specialty area and promoting student involvement; acting as curator for a small collection of birds; being an active member of the academic community. Minimum qualifications: earned doctorate in a biological science; effective written and oral communication skills. Preferred qualifications: demonstrated teaching ability; publications and/or evidence of other scholarly activity. Send letter of application, curriculum vitae, documentation of scholarly activity, transcripts, and three letters of reference to: **Chair, Ornithology/Vertebrate Ecology Search Committee, Department of Biology, Ball State University, Muncie, IN 47306.** Deadline for applications is February 3, 1998.

*Ball State University is an Equal Opportunity/Affirmative Action Employer and is strongly and actively committed to diversity within its community.*

## HEALTH SCIENTIST ADMINISTRATOR

National Institute of Environmental Health Sciences

National Institutes of Health ■ Research Triangle Park, North Carolina

The National Institute of Environmental Health Sciences (NIEHS), located in central North Carolina, is accepting applications for the position of Chief, Program Analysis Branch, Office of Program Development, Division of Extramural Research and Training (DERT). NIEHS, home of the National Toxicology Program, is located near several universities, including Duke University, the University of North Carolina - Chapel Hill, North Carolina Central University, and North Carolina State University.

The dynamic management team at NIEHS has a vision for the future and is committed to outstanding research in a collegial and intellectually rich atmosphere. At NIEHS, outstanding research scientists with diverse but complimentary expertise share a common interest in environmental health sciences. The incumbent of this position, responsible for coordinating and overseeing the development and monitoring of research projects, center grants, Small Business Innovation Research contracts, and interagency agreements of interest to NIEHS/DERT, will use intense science-based analysis to recognize innovative science and to pursue and implement analytical results in a way that influences extramural policy development and improves the quality of the Institute's extramural programs. The incumbent's portfolio analyses will provide a basis for priority setting, decision making, and strategic planning. The incumbent may have a laboratory as an adjunct investigator or principal investigator with the Institute's Division of Intramural Research with approval of the NIH Central Committee.

This is a permanent Civil Service position that will be filled at the GS-14 or GS-15 level. Salary range is approximately \$64,998 - \$84,495 for GS-14 and \$76,456 - \$99,397 for GS-15. A recruitment bonus of up to 25% of base pay may be available to a non-Federal candidate selected for this position. 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. (Alternatively, applicants may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.)

Candidates for both the GS-14 and GS-15 levels must have completed all requirements for a Ph. D. in a health or health-related field or have a combination of education and experience equivalent to that acquired in meeting requirements for a Ph. D. In addition, candidates for the GS-14 level must have at least 1 year of experience (equivalent to the GS-13 level) such as the following: experience that demonstrates extensive scientific expertise incorporating research experience with varied responsibilities for providing leadership in a scientific area, or experience functioning as a leader for a variety of efforts, such as directing research and coordinating committee and teaching activities, and organizing and chairing sessions at national scientific meetings. Candidates for the GS-15 level must have at least 1 year of experience (equivalent to the GS-14 level) that demonstrates the management of large and diverse research programs having national or international collaborations, scope, and impact. Managerial experience in organizational and program development includes having responsibility for the development of plans for the resolution of major organizational and operational problems and issues, and allocating funds among competing programs. Candidates for the GS-15 level should also be recognized as distinguished scientists with major research experience and accomplishments, be members of prestigious national professional organizations or societies, and have published extensively in refereed journals.

Further information about the position may be obtained by calling Dr. William A. Suk, 919-541-0797. Please obtain an application packet, which includes ranking criteria, by calling 919-541-0218 or by writing the NIEHS Human Resource Management Branch, (HNV97-30) MD EC-11, P.O. Box 12233, Research Triangle Park, NC 27709. APPLICATIONS MUST BE POSTMARKED BY FEBRUARY 18, 1998.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, sexual orientation, national origin, politics, marital status, physical or mental disability, age, or membership or non-membership in an employee organization. NIH is an Equal Opportunity Employer.



### Faculty Position Department of Pathology Program in Developmental Biology Baylor College of Medicine

The Department of Pathology and the Program in Developmental Biology invites applications for a tenure-track faculty position at the **Assistant or Associate Professor** level. The candidate is expected to maintain an independent, nationally funded research program in developmental biology that complements the broad scientific interests within the Department of Pathology. Current areas of investigation within the Department include cardiovascular development, *Drosophila* and mouse development, human genetic disease, protein trafficking, and developmental regulation of RNA splicing. Candidates should hold a Ph.D., M.D., or both and have postdoctoral experience. Generous start-up funds are available to the successful applicant. Additional information may be found at the web-sites for the Department of Pathology ([www.bcm.tmc.edu/pathology/db/](http://www.bcm.tmc.edu/pathology/db/)) and the Program in Developmental Biology ([www.bcm.tmc.edu/db/](http://www.bcm.tmc.edu/db/)).

A letter of application with curriculum vitae, statement of research objectives, reprints of two or three publications, and contact information for three referees should be sent to:

**Chairman of Faculty Search Committee**

**Department of Pathology  
Baylor College of Medicine  
Houston, TX 77030**

*Baylor College of Medicine is an Equal Opportunity/  
Affirmative Action/Equal Access Employer.*

### POSTDOCTORAL POSITIONS IN MOLECULAR CANCER BIOLOGY

Laboratory of Biological Chemistry, NIA  
National Institutes of Health

Several postdoctoral positions are available in the Laboratory of Biological Chemistry at the National Institute on Aging for individuals interested in joining a program devoted to studying the expression and function of genes involved in human cancer, cell cycle regulation and the stress response. Specific research topics include:

**$\beta$ -catenin and the Wnt pathway.** The projects will include molecular and cellular studies aimed at elucidating the importance of the Wnt pathway in human cancer (P.J. Morin).

**Molecular genetics of ovarian cancer.** This project includes use of SAGE analysis (see Science 270: 484) and other state-of-the-art molecular techniques to identify tumor markers and gain a greater understanding of the molecular pathways involved in ovarian tumorigenesis (P.J. Morin).

**Cell Cycle Regulation.** Alterations in cell cycle distribution in mammalian cells following exposure to stress and implications for cell survival (M. Gorospe).

**Post-transcriptional Regulation of Gene Expression during stress,** focusing on understanding mechanisms controlling the expression of cell cycle regulators and stress proteins. (M. Gorospe).

Highly motivated and enthusiastic candidates with background in Molecular Biology and/or Cell Biology are encouraged to apply. Please indicate your area of interest and send a CV and the names of three references to:

**PATRICE J. MORIN OR MYRIAM GOROSPE**

**BOX 12, LABORATORY OF BIOLOGICAL CHEMISTRY, GERONTOLOGY RESEARCH CENTER, 5600 NATHAN SHOCK DRIVE, NATIONAL INSTITUTE ON AGING, NIH, BALTIMORE, MD 21224-6823; Fax: 410-558-8335; myriam-gorospe@nih.gov; morinp@grc.nia.nih.gov**

NIH is an Equal Opportunity Employer

## POSITIONS OPEN

### SENIOR PROFESSOR THOMAS JEFFERSON UNIVERSITY

Jefferson Medical College of Thomas Jefferson University, Philadelphia is recruiting for a Senior Investigator at the rank of Professor in the Department of Pathology, Anatomy, and Cell Biology. The successful candidate will be expected to carry out an independent research program and will be provided with appropriate laboratory space, equipment, and several junior faculty and postdoctoral positions.

In recent years Jefferson Medical College has greatly expanded its research programs and continues to enlarge the space and resources devoted to basic investigation. The Department of Pathology, Anatomy, and Cell Biology has a large faculty, with a wide range of research projects supported by extramural grants. Major areas of interest currently include alcohol and addiction studies (funded by NIAAA Alcohol Research Center), with emphasis on membrane biology, signal transduction mechanisms, and ion channel function; cell injury and apoptosis; neuroscience; developmental biology; molecular genetics of cancer; mitochondrial function; liver disease; extracellular matrix. As part of the Graduate School of Thomas Jefferson University, the department offers Ph.D. programs in experimental pathology, cell biology, and developmental biology, all of which are supported by training grants from the NIH.

Candidates should possess an M.D. or Ph.D. degree, have demonstrated excellence and productivity in research, and have a proven capacity to attract extramural funding. Interested parties should send their applications to: Emanuel Rubin, M.D., Chairman, Department of Pathology, Anatomy, and Cell Biology, Jefferson Medical College, 1020 Locust Street, Philadelphia, PA 19107. Equal Opportunity Employer.

### EVOLUTIONARY ECOLOGIST

Tenure-track position beginning fall, 1998, at the ASSISTANT PROFESSOR level. We seek an individual investigating evolutionary patterns and processes at the population/species level. The appointee will be expected to develop and maintain a strong research program, seek extramural funding, and participate in undergraduate and graduate teaching. Teaching requirements include undergraduate courses in evolution and introductory biology, with the possibility of graduate courses in the individual's area of specialty. Individuals who can bridge departmental strengths in aquatic ecology, systematic biology, and reproductive physiology are particularly encouraged to apply. The Department offers Ph.D. and M.S. degrees and includes excellent facilities for organismal, cellular, and molecular research; significant start-up funds are available. Applicants should have the Ph.D. or equivalent degree and postdoctoral research experience. Applications including a curriculum vitae, statement of research interests, and three letters of recommendation must be received by 16 February 1998 and should be directed to: Dr. Shirley Graham, Evolutionary Ecologist Search Committee Chair, Department of Biological Sciences, Kent State University, Kent, OH 44242. FAX: 330-672-3713. Kent State University is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT/ASSOCIATE PROFESSOR OF PHARMACOLOGY NEUROSCIENCE/CARDIOVASCULAR

A tenure-track position as Assistant or Associate Professor in the Department of Pharmacology and Toxicology is open at the Medical College of Georgia. The successful candidate must hold a doctoral degree and will be expected to establish an independent, extramurally funded research program utilizing molecular and/or cellular approaches. We desire applicants with outstanding accomplishments in either neuroscience or cardiovascular pharmacology who will add to the existing strengths of the department and other disciplines. Excellent core resource facilities exist including those for DNA sequencing, analytical chemistry, transgenic mice, and aged primates. Teaching responsibilities will be in medical and graduate courses. Competitive salary, laboratory space, and start-up funds are available. Please send a curriculum vitae, a letter describing research plans, and the names of three referees to: Dr. R. W. Caldwell, Department of Pharmacology and Toxicology, Medical College of Georgia, Augusta, GA 30912-2300. Application deadline is March 15, 1998. The Medical College of Georgia is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### MOLECULAR PHARMACOLOGY

The Department of Pharmacology, University of Kentucky College of Medicine at Lexington is expanding its programs in molecular pharmacology. Excellent facilities and new resources are available to support this expansion. Tenure-track positions are available immediately at the ASSISTANT or ASSOCIATE PROFESSOR levels. We encourage applications from candidates whose research involves the use of modern molecular methods in the study of the structure and function of voltage-gated or ligand-gated ion channels, signaling cascades, or regulation of steroid- or cancer-related genes. Expertise in molecular medicine is also of interest. Potential relevance to neurodegenerative, cardiovascular, carcinogenic, or other related disease conditions is desirable but not essential. Candidates should have a Ph.D. or M.D., with several years of postdoctoral experience, and should have extramural support or clear evidence of the ability to develop an independent, externally funded research program. The successful candidate should also be interested in possible collaborative projects with other faculty. Participation in departmental training of medical and graduate students is an important aspect of this position. Interested candidates should send curriculum vitae and the names, addresses, and telephone numbers of three references to:

Faculty Search Committee  
Department of Pharmacology  
University of Kentucky  
College of Medicine  
MS-305 Medical Center  
Lexington, KY 40536-0084

The University of Kentucky is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

### DEVELOPMENTAL BIOLOGIST STETSON UNIVERSITY

Applications are invited for a tenure-track, ASSISTANT PROFESSOR of biology position. Stetson University is a selective, independent, private university with 2,000 undergraduates. The successful candidate will offer upper-level courses in developmental biology and another area of interest. We will also expect the candidate to teach an introductory, freshman-level course. The department is seeking a Developmental Biologist using molecular or genetic techniques in their research. A person able to successfully guide undergraduate research and contribute to a marine biology program would be considered strongly. Please send a curriculum vitae, a letter of application that addresses your teaching and research philosophies at a primarily undergraduate institution, and three letters of recommendation to: Dr. Terry Farrell, Chair, Biology Department, Stetson University, DeLand, FL 32720. E-mail: [tfarrell@stetson.edu](mailto:tfarrell@stetson.edu). We will start considering applicants on February 10, 1998, though applications arriving after that date may be considered. Starting date is August 22, 1998. Stetson University is an Equal Opportunity Employer and committed to increasing the diversity of its faculty. We strongly encourage women and minorities to apply.

TEMPORARY ASSISTANT RESEARCH SCIENTIST position available to study the parasitic ciliate *Ikhtophthirius multifiliis*, a pathogen of freshwater fishes. Research will focus on the characterization and expression of genes encoding protective antigens and the host immune response (see *Parasitology Today* 13:477-480, 1997). A creative individual who can work at the molecular, cellular, and the whole organism level is sought. Qualifications include a Ph.D. with experience in recombinant DNA techniques, cellular biology, and immunology. Candidates should forward a letter of application, curriculum vitae, and the names of three references by January 15, 1998, to: Dr. Harry Dickerson, Department of Medical Microbiology and Parasitology, College of Veterinary Medicine, University of Georgia, Athens, GA 30602-7371. E-mail: [hwd@calc.vet.uga.edu](mailto:hwd@calc.vet.uga.edu). Affirmative Action/Equal Opportunity Employer.

Division of Cardiology seeks PHYSIOLOGIST for a faculty position at the INSTRUCTOR or ASSISTANT PROFESSOR level to work on myocardial ischemia. The successful candidate will have demonstrated expertise in integrated cardiac physiology (whole animal physiology). The focus of the research program will be on myocardial ischemic preconditioning, stunning, and hibernation. Send curriculum vitae and statement of research interest to: Roberto Bolli, M.D., Division of Cardiology, University of Louisville, Louisville, KY 40292. PCN 09275. Equal Employment Opportunity/Affirmative Action.

## POSITIONS OPEN

CHIEF EDITOR of *Neuropsychopharmacology*. The American College of Neuropsychopharmacology seeks applicants for the position of Chief Editor of the College's international journal, *Neuropsychopharmacology*. Chief Editor has responsibility for directing the editorial and publication process and oversight of the activities of Associate Editors and Managing Editor. Candidates must have outstanding professional status and recognition in the field of biological psychiatry and clinical neuroscience; a reputation for personal and professional integrity; superb writing, editorial, and journalistic skills; breadth of scientific interest; depth of scientific expertise, and alertness to social and ethical issues of importance to science; familiarity with the editorial process; knowledge of skilled reviewers; and a firm commitment to and understanding of electronic publishing.

Involvement with the College is desirable. Applicants should submit the following before February 6, 1998: a curriculum vitae; the names of a minimum of three references (excluding College officers); a statement of practicalities (location, institutional support, estimation of time available, and relevant experience); and a letter of commitment and support of time and space from the applicant's chairperson or institution to:

David Kupfer, M.D./Oakley Ray, Ph.D.  
ACNP Search Committee  
320 Centre Building  
2014 Broadway  
Nashville, TN 37203 USA  
Telephone: 1-615-322-2075  
FAX: 1-615-343-0662  
E-mail: [acnp@acnp.org](mailto:acnp@acnp.org)

### EVOLUTIONARY PLANT BIOLOGIST

Tenure-track position at the ASSISTANT PROFESSOR level beginning August 1998 for a broadly trained Evolutionary Biologist with interests in the mechanisms of evolution in plants, and a commitment to teaching and research at an undergraduate institution. Candidates must have a Ph.D., and have the potential to develop a research program involving significant student participation. Major responsibilities include teaching an advanced course in plant biology, an introductory course in evolution and diversity, and academic advising. Applicants should send curriculum vitae, summary of research interests, and names and three letters of reference to: Professor Thomas L. Koppheffer, Chair, Department of Biology, Trinity University, San Antonio, TX 78212. Application deadline is February 6th, 1998. Women and minority candidates are strongly encouraged to apply. Trinity University is an Equal Opportunity/Affirmative Action Employer.

### RESEARCH ASSOCIATE

The Deborah Research Institute has a full-time Research Associate position available in the Department of Molecular Biology. The successful candidate will investigate the molecular mechanisms of vascular proliferative diseases with emphasis on smooth muscle cell signal transduction and gene expression. The successful candidate is expected to collaborate with ongoing programs within the department, as well as establish an independent, externally funded program. Candidates will have a Ph.D. and postdoctoral experience in biochemistry, cell, or molecular biology, and preference will be given to individuals with relevant research experience in cardiovascular biology. Individuals must meet all requirements to work within the United States. Please forward a current curriculum vitae and names and addresses of three references to: Rebecca Stewart, Deborah Research Institute, 20 Pine Mill Road, Browns Mills, NJ 08015.

### STAFF POSITION

The Division of Pathology and Laboratory Medicine of The Cleveland Clinic Foundation is seeking candidates for SECTION HEAD OF CLINICAL MICROBIOLOGY in the Department of Clinical Pathology. The Section Head will serve as Director of the Clinical Microbiology Laboratory. Completion of an accredited fellowship in clinical microbiology is desirable. The candidate may be either a Physician or Ph.D. with appropriate specialty certification.

Send letter and curriculum vitae to:

Raymond R. Tubbs, D.O., Chairman  
Department of Clinical Pathology  
The Cleveland Clinic Foundation  
9500 Euclid Avenue, L11  
Cleveland, OH 44195  
FAX: 216-444-4414  
E-mail: [tubbsr@po.lab.ccf.org](mailto:tubbsr@po.lab.ccf.org)

**UAB** THE UNIVERSITY OF  
ALABAMA AT BIRMINGHAM

## SEARCH REOPENED PROVOST

The University of Alabama at Birmingham seeks nominations and applications for a recognized leader in higher education to serve as provost. The provost, who reports to the president of UAB, is the chief academic officer and second-ranking official of the university. The provost plays a major role in strategic planning for the university. Reporting to the provost are the deans of the schools, the library directors, the vice president for student affairs, and the vice president for institutional studies and services.

UAB is an urban, Carnegie Research I University with a large academic medical center and an emerging integrated health care delivery system. Some 16,000 students are enrolled in 12 schools, as well as a university-wide Graduate School. UAB offers 57 undergraduate majors and a highly regarded Honors Program. At the graduate level, the university offers 45 master's, 31 doctoral, and three first professional programs, many of which are nationally and internationally recognized.

### THE SUCCESSFUL CANDIDATE WILL:

- Demonstrate knowledge of higher education issues and organizations at the national level;
- Demonstrate an understanding of the complexity of leading an institution with dual missions of education in an urban environment and research intensity at the Carnegie I level;
- Possess the vision and experience needed to guide the academic activities of a complex university in a changing environment;
- Lead strategic and operating planning processes and their implementation;
- Develop creative academic initiatives; and
- Possess academic credentials that will qualify the candidate for a tenured professorial appointment to the UAB faculty.

The search committee will begin reviewing applications on February 1, 1998, and will continue until the position is filled.

Jay Goldman, D.Sc., search committee chairman, requests that nominations, applications, and requests for information be directed to:

Ms. Dolly Martinez  
Director of Executive Searches  
The University of Alabama at Birmingham  
875 Administration Building  
701 20th Street South  
Birmingham, AL 35294-0108  
(205) 934-0267; Fax: (205) 934-0269  
E-mail: dolly@uab.edu

UAB is an equal opportunity, affirmative action employer. Women and minority candidates are encouraged to apply.

## THE BAYER FACTS:



### Bayer:

**A premier  
healthcare  
company  
for the  
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Our business is to  
significantly improve  
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People are the heart  
of our company.

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culture inspires  
and commits all  
to do their best.

## The Next Great Scientific Discovery Starts With You.

Research activities are expanding at our 43-acre Berkeley, CA-based Biotechnology Unit, which is responsible for the global research, development and production of biotechnology-derived products. Our research and development program includes activities in new therapeutic protein gene discovery, protein engineering and gene therapy. We seek qualified, highly-motivated Scientists to join our team-oriented, interdisciplinary research environment in the following areas:

### SENIOR SCIENTIST, MOLECULAR BIOLOGY

Identify and characterize novel genes from complex biological systems. Requires Ph.D. with 3+ years of postdoctoral experience. Demonstrated knowledge of gene expression profiling methodologies, such as differential display, SAGE or array-based technologies is essential. Familiarity with in situ hybridization is preferred. **Job Code SW184.**

### SENIOR SCIENTIST, PROTEIN ENGINEERING

We seek an individual with a background in structural biology and protein structure-function relationships to develop innovative approaches for generating therapeutic proteins with novel properties. Requires Ph.D. with 3+ years of postdoctoral experience. Background must include expertise in genetic/combinatorial methodologies for generating molecular diversity and analytical methods for studying protein-protein interactions. **Job Code SW101.**

### SENIOR SCIENTIST, PHARMACOLOGY

Position will focus on the evaluation of experimental protein therapeutics. Requires Ph.D., DVM or MD with 4+ years of experience. Knowledge of preclinical evaluation and development, as well as expertise in pharmacology, physiology or related field is essential. Oncology research experience preferred. **Job Code SW243.**

### RESEARCH ASSOCIATES, MOLECULAR BIOLOGY

Several posts are available for individuals with experience in state-of-the-art molecular biology. Requires BS in a biological science and 2+ years of relevant experience. Background should include experience in one or more of the following methodologies: cDNA cloning, library construction, PCR, expression cloning, in situ hybridization, and Southern and Northern blotting. **Job Code SW231/232/234.**

All positions requires exceptional communication skills and the ability to work in a team environment.

Bayer offers an attractive compensation package... and there's one more fact. If you're ready to join us, there's no better time than now. For immediate consideration, please forward your resume, WHICH MUST INCLUDE JOB CODE, to: **Human Resources, Bayer Corporation, Pharmaceutical Division, P.O. Box 1986, Berkeley, CA 94701.** No agencies or phone calls please. For more information on Bayer, search: <http://www.careermosaic.com/crn/bayer/>

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Pharmaceutical  
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## POSITIONS OPEN

### UNIVERSITY OF NEBRASKA-LINCOLN (UNL) MOLECULAR PLANT SCIENCE INITIATIVE IN PLANT SIGNALING

The University of Nebraska-Lincoln intends to enhance its Molecular Plant Science Program with seven new tenure-track positions in the broad area of plant signaling. These positions, which will be available at all faculty ranks, will be filled over the next four- to five-year period. The initial hires will be at the **SENIOR LEVEL**, and senior investigators interested in building focused research teams are encouraged to apply. The Molecular Plant Science Program will be housed in the newly completed, state-of-the-art Beadle Center with an attached greenhouse/growth chamber complex. Research facilities are excellent and program development will include recurring funds for senior faculty, competitive salaries and start-up funds, postdoctoral and graduate programs, and symposium and seminar funds. Faculty research programs should involve the use of molecular, biochemical, and/or cellular approaches to solve fundamental problems in experimental plant biology. Research should involve some aspect of signaling in plants including but not limited to plant development, plant cell biology, plant metabolism, and plant/pathogen-pest or plant/environment interactions. Candidates will be expected to develop/sustain vigorous, externally funded research programs and assume teaching responsibilities in undergraduate and/or graduate-level courses in the appropriate discipline. The tenure home for candidates can be in several departments including agronomy, biochemistry, biological sciences, chemistry, entomology, horticulture, and plant pathology. Screening will begin April 1, 1998, and continue until qualified candidates are found. Applications, nominations, and requests for program information can be sent to: **Dr. Paul Staswick, University of Nebraska-Lincoln, 352 Keim Hall, Lincoln, NE 68583-0915. E-mail: pstaswick@crcvms.unl.edu; FAX: 402-472-7904.** UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity; is responsive to the needs of dual career couples; and assures reasonable accommodation under the Americans With Disabilities Act. Contact: **Dr. Staswick, Telephone: 402-472-5624** for additional information.

### PART-TIME MICROSCOPE SALES/SCIENTISTS

Manufacturer of a new, high-resolution optical 3-D microscope seeks Microscopists with discretionary time interested in supplementing income through equipment sales and application development. Ideal candidate will continue to perform research in a discipline benefiting from 3-D analysis. Compensation based on ability to develop and publish new applications for technology and to assist in sales of microscopes to other scientists.

Send résumé to:

InGen Corporation  
235 Montgomery Street  
Suite 300  
San Francisco, CA 94104

### RESEARCH ONCOLOGIST

Lombardi Cancer Center and Bone Marrow Transplant Program of Georgetown University (GU) invite applications for faculty position at level of **INSTRUCTOR** in medicine. Must be Board-certified/eligible in medical oncology, with experience in basic ovarian cancer research and stem cell transplant, and is expected to develop a research program of immunotherapy, especially the development of monoclonal antibodies for treating ovarian cancer. Duties include seeing patients on the transplant service. Submit curriculum vitae and description of current research to: **Gary Spitzer, M.D., Director Bone Marrow Transplant Unit, 7 PHC, 3800 Reservoir Road N.W., Washington, DC 20007. Georgetown University is an Equal Opportunity/Affirmative Action Employer.**

An **ASSISTANT SCHOLAR SCIENTIST** (Research Faculty) position is available in the National High Magnetic Field Laboratory (NHMFL). A biochemical NMR Spectroscopist is sought to conduct research both independently and within the research group of **T. A. Cross**, Director of the NHMFL NMR Program. As a faculty member, co-directive status of graduate students is possible as well as the submission of independent research proposals. A Ph.D. and postdoctoral experience is required. Send curriculum vitae, research interests and plans, and three letters of reference to: **Dr. T. A. Cross, National High Magnetic Field Laboratory, 1800 East Paul Dirac Drive, Tallahassee, FL 32306-4005. The State of Florida is an Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

### COORDINATOR PEDIATRIC FELLOWSHIP PROGRAMS

The Department of Pediatrics at Northwestern University Medical School/Children's Memorial Hospital seeks a full-time productive Academic Pediatrician to serve as Coordinator of its pediatric fellowship training programs. With individual Fellowship Directors and Associate Chairs for Education and Research, this physician will develop training goals and objectives and criteria for choosing fellows, help identify funding sources, and oversee the training of departmental fellows, including development of a core curriculum. This position will require a 10 to 20 percent time commitment; the remainder of the Coordinator's time will be spent in other activities. The Coordinator should have an M.D. or equivalent degree, be Board-certified in pediatrics, and have an active research program. Academic rank and compensation will be commensurate with prior experience. The proposed starting date is July 1, 1998, or the earliest available. In order to ensure full consideration, applications must be received by March 15, 1998. Interested individuals should contact: **Robert R. Tanz, M.D., Co-Associate Chair for Education, Department of Pediatrics, Children's Memorial Hospital, 2300 Children's Plaza (#16), Chicago, IL 60614. Telephone: 773-880-3830; e-mail: rtanz@nwu.edu. Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States. Women and minorities are encouraged to apply.**

Pacific Northwest-based health education institution is in need of a **SENIOR RESEARCH ASSOCIATE** to work in Portland, Oregon, on the molecular biology of signal transduction receptors in parasitic protozoa of the genus *Leishmania*. Will be required to design and screen genomic and cDNA libraries; perform analysis of cloned DNAs including restriction mapping, DNA sequencing, Southern and Northern blotting; prepare, purify, and characterize antibodies made from fusion proteins or peptides; utilize various PCR methodologies; perform biochemical assays including radioimmunoassays for cAMP; prepare and draft manuscripts describing results of research. Minimum requirements: Doctor of Philosophy degree in molecular biology; at least one year of experience working in area of molecular biology. (Experience and knowledge may have been gained through employment or education.) Hours are 8:00 a.m. to 5:00 p.m., Monday through Friday. Salary: \$30,200 per year. *Applicants must have legal authority to permanently work in the United States.* Send résumé to: **Employment Department, Attn: Job Order Number 5551538, 875 Union Street N.E., Room 201, Salem, OR 97311. Résumé and/or cover letter must reflect every listed requirement or it will be rejected. An Equal Opportunity Employer.**

**POSTDOCTORAL POSITIONS** available immediately. We will employ a combination of molecular biology and patch-clamp techniques to study the structural basis of ion channel function. Current emphasis is on the molecular mechanism of activation of cyclic nucleotide-gated channels from photoreceptors and olfactory receptors. Strong consideration will be given to applicants with training in molecular biology or electrophysiology. Please send curriculum vitae and three letters of reference to: **Sharon Gordon, Ph.D., Department of Physiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. An Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL POSITION X-RAY CRYSTALLOGRAPHY

Available early spring 1998 to study chaperone-assisted folding and assembly of class I MHC molecules. Project combines molecular biology, biochemistry, and crystallography. Strong background in protein crystallography is required. Please send curriculum vitae, research experience, and names of three references to: **Dr. Marlene Bouvier, Department of Pharmaceutical Sciences, University of Connecticut, 372 Fairfield Road U-92, Storrs, CT 06269.**

### IS THIS YOUR ONCE IN A LIFETIME OPPORTUNITY

Small, established Los Angeles biotech company seeks creative **RESEARCH DIRECTOR** with entrepreneurial flair. Substantial equity position available for individual with marketable ideas. Please FAX curriculum vitae in absolute confidence to: **FAX: 310-657-4222, Attn: Mr. Cole.** All applicants will receive a reply.

## POSITIONS OPEN

### DIRECTOR OF NASA ASTROBIOLOGY INSTITUTE

The National Aeronautics and Space Administration (NASA) is seeking a Director for its new Astrobiology Institute, which will be managed by Ames Research Center, located in Silicon Valley, California. Astrobiology is the study of the living universe, a multidisciplinary field that addresses fundamental questions concerning the origin, evolution, distribution, and future of life. The NASA Astrobiology Institute will represent a partnership between NASA and a number of academic or other research organizations to promote, conduct, and lead integrated interdisciplinary astrobiology research and train young researchers. The Institute will employ modern networks and information technology to bind together institutions and research teams in geographically separated locales. Additional information on astrobiology and the Institute can be found at website: <http://astrobiology.arc.nasa.gov>.

A leader is sought who can help define this new discipline, identify research opportunities, coordinate efforts involving multiple academic organizations, and communicate the excitement of astrobiology. The Director should also have a strong interest in developing revolutionary ways to use modern communications to foster effective collaborations among geographically dispersed scientists. The position will be filled through appointment to the Civil Service or through assignment under the Intergovernmental Personal Act. Applicants should have a record of original research in one or more of the disciplines associated with astrobiology, senior-level experience in academic or government administration, and commitment to develop innovative approaches to astrobiology research and training.

If interested, please send a letter of application by January 30 describing your leadership and research abilities and your ideas for the Astrobiology Institute, together with a curriculum vitae, to: **Dr. Henry McDonald, Director of Ames Research Center, Moffett Field, CA 94035. Female or minority applicants are encouraged to apply.**

### POSTDOCTORAL RESEARCH ASSOCIATE

A Postdoctoral position is available in the Department of Medical Physiology at Texas A&M University System Health Science Center for an individual interested in molecular and cellular biology of vertebrate heart development and myocardial differentiation using the cardiac mutant axolotl system.

Candidates must hold a Ph.D. in biological sciences or related field or M.D. degree. Opportunities for interaction with several investigators in multidisciplinary vascular biology groups are available. Send curriculum vitae, statement of research interests, and names of three references to: **Dr. Larry Lemanski c/o Employment Office, Human Resources Department, Texas A&M University, College Station, TX 77843-1475. Refer to Job #980414.**

*Texas A&M University is an Affirmative Action/Equal Opportunity Employer committed to diversity.*

A **POSTDOCTORAL POSITION** is available immediately to study the effect of lipid mediators on cardiac and vascular smooth muscle ion channels. Applicants must have a Ph.D. in physiology, cell biology, biochemistry, pharmacology, or a closely related field and have specific knowledge related to molecular biology. Desirable qualifications include experience in the areas of electrophysiology, patch clamping, tissue culture, and signal transduction and knowledge of ion channels and membrane transport. Send curriculum vitae, reprints, and names of three references to: **Dr. Hon-Chi Lee, Department of Internal Medicine, Room E318-2, GH, 200 Hawkins Drive, University of Iowa, Iowa City, IA 52242. FAX: 319-353-6343; e-mail: hon-chi-lee@uiowa.edu.**

*The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.*

A **POSTDOCTORAL POSITION** is available immediately to work with **Prof. K. Musier-Forsyth** and **Prof. D. Kallick** on structural determination of tRNA acceptor stems using multinuclear NMR. Two 600 and one 800 Mhz Varian spectrometers are available. Please send a curriculum vitae and two letters of recommendation to: **Prof. Deborah Kallick, Division of Medicinal Chemistry, 308 Harvard Street S.E., University of Minnesota, Minneapolis, MN 55455.**

## COURSES & TRAINING

### Fundamental Issues in Vision Research: Molecular and Cell Biological Approaches

Sponsored by the National Eye Institute, NIH  
August 16 - 29, 1998

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

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

All costs of attending the course, including travel, housing, and meals at the MBL, are generously provided to admitted students by NEI.

**Director:** David S. Papermaster, University of Connecticut Health Center, Farmington.  
**Associate Directors:** Robert Barlow, SUNY, Syracuse; David C. Beebe, Washington University; Joram Piatigorsky, National Eye Institute; and Elio Raviola, Harvard Medical School.

**Application Deadline:** March 13, 1998. Admission is competitive; student selection is determined by review committee.

For application forms contact: **Carol Hamel, Admissions Coordinator,**

**Marine Biological Laboratory, 7 MBL  
Street, Woods Hole, MA 02543-1015;  
Tel: (508) 289-7401;  
E-mail: [admissions@embl.edu](mailto:admissions@embl.edu);  
Web: <http://www.mbl.edu>.**

The MBL is an EEO Affirmative  
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**MARINE  
BIOLOGICAL  
LABORATORY**

## GLOBAL CAREER OPPORTUNITIES



**Australian Resource  
Information and  
Environment Satellite**

**Australian Resource  
Information and  
Environment Satellite**

**Call for Expressions of Interest**

### ARIES-1 Applications Development Program (ADP)

The ARIES-1 Consortium invites expressions of interest from qualified organisations and individuals to conduct collaborative research into applications and user-products derived from the proposed ARIES-1 hyperspectral satellite.

Expressions of interest are solicited by 28 February for applications, algorithm and product development in:

1. Forestry and timber management
2. Agricultural cropping applications
3. Marine, coastal and riverine water
4. Grasslands and rangelands applications
5. Wetlands applications
6. Mineral exploration, mining and the environmental consequences of mining

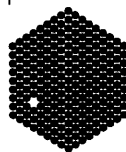
Copies of the full announcement and back-ground information about the ARIES-1 Project and the satellite's imaging spectrometer specifications may be obtained from:

<http://www.syd.dem.csiro.au/research/MMTG/aries>

**The ARIES ADP Manager**

**c/o CSIRO Division of Exploration and Mining  
P. O. Box 136, North Ryde, NSW, 2113, Australia  
Phone: +61 2 9490-8839; Fax +61 2 9490-8960  
Email: [aries.adp@syd.dem.csiro.au](mailto:aries.adp@syd.dem.csiro.au)**

## EUROPEAN CAREER OPPORTUNITIES



**EMBL** **Monterotondo  
Research Programme**

The European Molecular Biology Laboratory (EMBL), an international research organisation with its Headquarters Laboratory in Heidelberg (Germany), Outstations situated in Grenoble (France), Hamburg (Germany) and Hinxton (UK), and a Research Programme at Monterotondo (Italy) has the following vacancies in **Monterotondo**:

### HEAD OF TRANSGENIC FACILITY (ref. 97/100)

An EMBL Research Programme in Mouse Genetics, headed by Prof. Klaus Rajewsky, was established recently in Monterotondo, near Rome, and will begin to operate in January 1998. One focus of the Programme is to generate conditional mouse mutants for studying questions in immunology and cell biology.

The Head of Transgenic Facility should be well trained in all techniques and procedures for generating chimaeric and transgenic mice (ES-cell injection, DNA-injection, embryo transfer, etc.). We are seeking a highly motivated person, capable of organising and running a service which should serve the EMBL research groups both in Monterotondo and in Heidelberg. Two technicians will provide support.

### ADMINISTRATIVE OFFICER (ref. 97/93)

This administrative officer will have managerial, organisational and secretarial responsibilities, including contact with local authorities.

We are seeking someone with administrative and secretarial training and experience. Experience in financial matters is also required. The person appointed should be fluent in Italian and have a good command of written and spoken English. He/she should have excellent word processing skills. Experience of working in Italy will be an advantage.

Closing date for applications: 15.02.1998;  
Commencing date: As soon as possible

For further information contact

Dr. Walter Witke, Tel: +49 6221 387 332;  
email: [witke@embl-heidelberg.de](mailto:witke@embl-heidelberg.de)

and visit these web sites:

[http://www.embl-heidelberg.de/ExternalInfo/  
PhDProgramme/PhD8Monterotondo.html](http://www.embl-heidelberg.de/ExternalInfo/PhDProgramme/PhD8Monterotondo.html)  
and  
<http://emma.rm.cnr.it/>

EMBL is an inclusive, equal opportunity organisation.

To apply please send your CV or write briefly for a standard application form, quoting appropriate ref. no., to:

**The Head of Human Resources, EMBL, Postfach  
10.2209, D-69012 Heidelberg, Germany.**

**Fax: +49 6221 387555**

**email: [jobs@EMBL-Heidelberg.de](mailto:jobs@EMBL-Heidelberg.de)**

## POSITIONS OPEN

### POSTDOCTORAL POSITION IN MOLECULAR ONCOLOGY

The University of Illinois at Chicago, Cancer Center

A Postdoctoral position is available to study mechanisms of DNA repair and homologous recombination and their roles in maintenance of genome stability, tumorigenesis, and cellular sensitivity to antitumor agents. A Ph.D. degree and experience with techniques of molecular biology and protein biochemistry are required. The UIC Cancer Center is located in the new state-of-the-art Molecular Biology Research Building, and equipped with excellent supporting facilities. Salary is commensurate with experience, and a generous benefit package is provided. Send curriculum vitae, brief statement of research experience, and names of three referees to: **Dr. Zhiyuan Shen, University of Illinois at Chicago Cancer Center (MC 569), College of Medicine, 900 South Ashland Avenue, Chicago, IL 60607. E-mail: zshen@uic.edu; FAX: 312-355-0194. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL FELLOWSHIP IN VIRAL PATHOGENESIS

A Postdoctoral position is available July 1, 1998, to join a dynamic and productive group engaged in the study of molecular viral pathogenesis using the mammalian reovirus system. Projects are available in many areas of reovirus biology, including viral attachment and entry, viral gene expression, viral cytopathicity, and virus-host interactions leading to neurologic disease. Proficiency in molecular and cellular biology and protein biochemistry is highly desirable. Send curriculum vitae, a brief description of research experience, and the names of three references to: **Terence S. Dermody, M.D., Department of Microbiology and Immunology, Vanderbilt Medical School, D7235 MCN, Nashville, TN 37232-2581.**

**POSTDOCTORAL RESEARCH ASSOCIATE** available for one year renewable for a second year to study the structure and function of mitochondrial and bacterial cytochrome *c* oxidases using biochemical, molecular biological, and immunological techniques. Ph.D. in life or physical sciences required. Experience in biochemistry/molecular biology preferred. Salary is commensurate with qualifications plus benefits. Send curriculum vitae and the addresses of three references by January 30, 1998, for first consideration to: **Dr. Lawrence J. Prochaska, Department of Biochemistry and Molecular Biology, Wright State University, School of Medicine, Dayton, OH 45435. Applications from those underrepresented in science are encouraged. Wright State University is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available to study the role of irritant receptors and neuropeptide receptors in environmental pollution-induced activation of airway macrophages. The ideal candidate will have experience in various techniques to study gene expression, cytokine gene regulation, measures of oxidant stress, and apoptosis, as well as a good understanding of ion-fluxes in signaling events. The studies will be conducted in collaboration with **Dr. Susanne Becker** and **Dr. Bellina Veronesi** at EPA in Chapel Hill, North Carolina. Please send curriculum vitae and the names of three references to: **Ms. Lealer Haith at the Center for Environmental Medicine and Lung Cell Biology, University of North Carolina, Campus Box #7310, Chapel Hill, NC 27599.**

**POSTDOCTORAL FELLOWSHIP** available to study the molecular immunology of dendritic cell function and differentiation from hematopoietic precursors, with particular attention to defects in these pathways in tumor-bearing animals and humans. At least three years of NIH support is available. Experience in molecular biology or molecular immunology is required. Please send a curriculum vitae and the names of three references to: **Dr. David Carbone, The Vanderbilt Cancer Center, 648 Medical Research Building II, Nashville, TN 37232-6838. FAX: 615-936-3322; e-mail: d.carbone@vanderbilt.edu.**

**POSTDOCTORAL/RESEARCH SCIENTIST** positions available to study the function and development of monocyte-derived macrophages, foam cells, microglia, or osteoclasts. Strong background in cell or molecular biology required. Send curriculum vitae and letters of reference to: **Stephen J. Weiss, M.D., Upjohn Professor of Medicine, University of Michigan Cancer Center, 5301 MSRB III, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0640.**

## POSITIONS OPEN

### RESEARCH ASSOCIATE POSITION POSTDOCTORAL POSITIONS

Positions are available in the laboratory of **Prof. Ronald Wetzel** for studies on the molecular basis of Alzheimer's disease. Studies will focus on the structure and mechanism of formation of amyloid fibrils and the basis of their cytotoxic effects. Candidates for the Research Associate position should have a Master's degree in chemistry or biochemistry or a B.S. in one of these subjects plus four to ten years of work experience and/or training. Candidates should have a working familiarity with polypeptides, including experience with methods of purification and analysis such as HPLC, gel electrophoresis, ELISA, spectroscopy, and/or chemical modification, and should be familiar with computer operating systems and data analysis software. One Postdoctoral position will focus on understanding factors related to peptide assembly in amyloid fibrils. The other Postdoctoral position will focus on studies of amyloid cytotoxicity in cell culture systems; prior experience with mammalian cell culture is essential, additional experience with molecular biology techniques preferred. For description of the research program see **Dr. Wetzel's listing on the website: <http://utk.biogw.bio.utk.edu/bcmbdept.nsf>**. Positions offer competitive salary with outstanding University fringe benefit package. The University of Tennessee Medical Center at Knoxville is located in beautiful East Tennessee at the foothills of the Great Smoky Mountains, offering opportunities for year-round recreation and a blend of metropolitan conveniences and rural charm. Interested candidates may apply to:

**University of Tennessee  
Medical Center  
Department of Human Resources  
1924 Alcoa Highway  
Knoxville, TN 37920**

*University of Tennessee Medical Center at Knoxville is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA/ADEA Employer.*

### TUMOR BIOLOGY

A **POSTDOCTORAL POSITION** is available immediately to study the progression of breast cancer at a molecular level. Ongoing research projects involve molecular analysis of archival surgical tissue, cell culture models developed from fresh tissue, and carcinogen-transformed breast epithelium. Candidates must have a Ph.D. and a strong background in basic techniques of cell and molecular biology. Send curriculum vitae and names of three references to: **Dr. Shanas Dairkee, Geraldine Brush Cancer Research Institute, California Pacific Medical Center, 2330 Clay Street, San Francisco, CA 94115. E-mail: shanas@cooper.cpmc.org.**

**POSTDOCTORAL OR VISITING SCIENTIST** positions are available to study the molecular mechanism of *Pseudomonas aeruginosa* pathogenesis. The projects focus on studies of bacterial gene regulation during host infection (*PNAS* 93:10434-9, 1996; *Mol. Microbiol.* 22:1005-12, 1996). Experience in molecular biology and animal handling is highly preferred. Please submit your curriculum vitae, names and telephone numbers of three references to: **Shouguang Jin, Ph.D., Department of Microbiology, Slot 511, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, AR 72205. E-mail: jinshouguang@exchange.uams.edu; FAX: 501-686-5359.**

The NSF-supported Research Training Program in Plant-Insect Interactions at The University of Arizona invites applications for **POSTDOCTORAL** and **GRADUATE POSITIONS**. A major focus of interest is the model plant *Arabidopsis thaliana*. Further information can be obtained from our website: <http://ag.arizona.edu/pii-rtg>. The application deadline is February 13, 1998, or until positions are filled. Please note, according to the conditions of the grant, applicants must be citizens, nationals, or permanent residents of the United States. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Minority/Women/Disabled/Veterans.

**POSTDOCTORAL POSITION** in neural cell signaling to identify pathways for normal and mutated L1 and NCAM adhesion molecules in axon growth and plasticity. Candidate must have Ph.D. and be U.S. citizen or green card holder. Send website: <http://www.unc.edu/~srclab/>. Send curriculum vitae to: **Patricia Maness, Ph.D., Department of Biochemistry, University of North Carolina School of Medicine, Chapel Hill, NC 27599-7260.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION

Postdoctoral position in molecular biology is available in a basic research program at a midwest medical center which focuses on transplant, trauma, cardiac, and neurosurgery research. Candidate should have special interest in adhesion molecules and signal transduction in the area of ischemia-reperfusion. The successful candidate will have the opportunity to interact with other surgical researchers and to enhance his/her academic curriculum with publications but also must have the ability to work independently. *U.S. citizenship or green card required.* We offer a competitive stipend.

Interested individuals should e-mail or send résumé and three letters of recommendation to:

**The Surgical Research Institute  
Borgess Medical Center  
1521 Gull Road  
Kalamazoo, MI 49001  
E-mail: mtisri@serv.net  
FAX: 616-226-6735**

### POSTDOCTORAL POSITION CELLULAR IMMUNOLOGY

Two Postdoctoral positions to study cytokine regulation during experimental cutaneous leishmaniasis are immediately available at The University of Pennsylvania. Knowledge of immunology and molecular techniques preferred. Send curriculum vitae and names of three references to:

**Jay Farrell, Ph.D.  
Laboratory of Parasitology  
University of Pennsylvania  
3800 Spruce Street  
Philadelphia, PA 19104  
E-mail: farrellj@phl.vet.upenn.edu**

### POSTDOCTORAL SCIENTISTS RESEARCH ASSISTANTS

Positions available to investigate mitochondrial biogenesis and the molecular consequences of mtDNA mutations resulting in human disease using cell and tissue models. Background in molecular biology, protein chemistry, or cell biology required. Great opportunity for independent, motivated scientist. Send curriculum vitae, summary of research experiences, and names of references to: **Michael P. King, Ph.D., Department of Biochemistry, Suite 308, Thomas Jefferson University, 233 South 10th Street, Philadelphia, PA 19107. Equal Opportunity Employer.**

**POSTDOCTORAL/RESEARCHER** position available in exciting multidisciplinary research program to discover new drugs. Applicants should have experience in one of the following areas: protein structure and modeling, computer-aided drug design, peptide and organic chemistry, combinatorial synthesis, immunology, and molecular and cell biology. Competitive salary/benefits. Send résumé with telephone number to: **Dr. Ziwei Huang, 802 BLSB, Kimmel Cancer Institute, Thomas Jefferson University, 233 South 10th Street, Philadelphia, PA 19107. FAX: 215-923-0881; e-mail: zhuang@nana.jci.tju.edu. Please visit our website: <http://nana.jci.tju.edu> for details of research projects. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available immediately at the Karmanos Cancer Institute at Wayne State University to study the role of membrane transport in chemotherapeutic drug response and resistance in pediatric cancers. Candidates should have a Ph.D. with a strong background in DNA cloning techniques, site-directed mutagenesis, and nucleic acid and protein biochemistry. Send curriculum vitae, statement of research accomplishments, and names of three references to: **Dr. Larry H. Matherly, Karmanos Cancer Institute, 110 East Warren Avenue, Wayne State University School of Medicine, Detroit, MI 48201. FAX: 313-832-7294; e-mail: matherly@kci.wayne.edu.**

**POSTDOCTORAL POSITION** available immediately at the Karmanos Cancer Institute at Wayne State University to develop novel DNA and peptide-based breast cancer vaccines. Work with a team of basic scientists and clinicians to generate cancer therapeutics. Background in immunology/molecular/biology/protein chemistry. Send curriculum vitae and three references to: **Dr. Wei-Zen Wei, Karmanos Cancer Institute, 110 East Warren Avenue, Detroit, MI 48201. E-mail: weiw@kci.wayne.edu. Wayne State University School of Medicine, the country's largest single-campus medical school, is an Equal Opportunity/Affirmative Action Employer.**



# REQUEST FOR PROPOSALS FROM THE INTERNATIONAL SPINAL RESEARCH TRUST

The ISRT is a grant-giving charity (number 281325) with the purpose of funding research aimed at resolving the non- or partial functioning of the injured spinal cord.

The field of spinal cord repair has developed to the stage at which we now have demonstrable regeneration of damaged nerve fibers in the adult mammalian cord. Accordingly we feel that we have sufficient knowledge to plan a research strategy which will guarantee genuine progress. To proceed further it is recommended that ISRT funding is restricted to projects that are conducted in adult mammalian spinal cord.

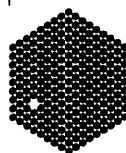
Recent success in stimulating neurite outgrowth and regeneration in a variety of model systems is very encouraging, and contributes a further step toward our overall goal of translating basic scientific advances into the clinic. We must now define methods by which axons growing through artificially constructed growth-promoting or growth-supportive environments, whether installed surgically or created by the local application of trophic or anti-inhibitory agents, are stimulated to exit from this preferred microenvironment into the distal spinal cord or effector tissue milieu. Studies in the spinal cord will be strongly favoured, and approaches that demonstrate a functionally competent regeneration are encouraged.

Applicants should submit five copies of a letter of intent (c. two sides) summarizing the proposed research and background of the laboratory. Five copies of an approximate budget and curriculum vitae of the Principal Investigator(s) should be appended.

All letters should arrive by first post on 16th February 1998. No faxed or electronic letters of intent will be accepted. Awards will average up to £250,000 over three years and, following a preliminary review, detailed proposals will be requested from a limited number of applicants.

Address letters of intent to: **The International Spinal Research Trust, Unit 8a Bramley Business Centre, Station Road, Bramley, Guildford, Surrey GU50AZ U.K.**

Enquiries: Tel: +44 (0)1483 898786; Fax: +44 (0)1483 898763; e-mail: [research@isrthq.demon.co.uk](mailto:research@isrthq.demon.co.uk).



# EMBL Monterotondo Research Programme

The European Molecular Biology Laboratory is an international research organisation consisting of three Outstations in Hamburg, Grenoble and Hinxton and a Headquarters Laboratory situated in Heidelberg, Germany. An EMBL Research Programme in Mouse Genetics was established recently at the Monterotondo campus, near Rome, at a site where the European Mouse Mutant Archive is also being established independently. The EMBL faculty already appointed include K. Rajewsky (Programme Coordinator; B-cell development, targeted recombination) W. Witke (Group Leader; cell motility, actin binding proteins) and Ulrich Kalinke (Staff Scientist; anti-viral defense mechanisms). The Programme will begin to operate at Monterotondo in January 1998. Applications are invited for the position of:

## GROUP LEADER IN MOUSE GENETICS (ref. 97/92)

We are interested in excellent candidates who work on mouse biology, in areas that use modern tools of genetic analysis. Preference will be given to projects in cell biology and immunology, but other areas will also be considered. The selected candidate will be given a standard EMBL Group Leader appointment including some research and personnel costs, initially for 5 years. He/she will also hold an associate appointment in the EMBL Headquarters Laboratory in Heidelberg, which includes groups working on vertebrate gene expression, cell biology, differentiation and development.

Informal enquiries can be made to:

Dr. Klaus Rajewsky - tel.: +49-221-4702467, fax: +49-221-4705185

Closing date for applications: February 28, 1998. The appointment will be available from Summer 1998.

EMBL is an inclusive, equal opportunity organisation.

**EMBL Web site:** <http://www.embl-heidelberg.de/>

Applications, comprising a curriculum vitae, a short description of research accomplishments and future plans, and three letters of reference should be sent to the Head of Human Resources at the address given below.

**EMBL, Postfach 10.2209, D-69012 Heidelberg, Germany. Fax: +49 6221 387555; Tel.: +49 6221 387208; email: [jobs@EMBL-Heidelberg.de](mailto:jobs@EMBL-Heidelberg.de)**

## GLOBAL CAREER OPPORTUNITIES



# The Victor Chang CARDIAC RESEARCH INSTITUTE SYDNEY, AUSTRALIA

## Faculty Position

The Institute is seeking an outstanding researcher for a faculty position at the Associate- or Full-Member Level. Applicants will be expected to hold a PhD, MD, or both with relevant postdoctoral training, and to have developed a recognised, well-funded research program. The Institute will provide a strong package to allow a dynamic research program to be established rapidly. Candidates with a distinguished record of research in any area of cardiovascular science will be given serious consideration, although those with programs in *molecular genetics*, *gene therapy* or *transplantation biology* are particularly encouraged to apply.

In addition to continuing a high-quality individual and interactive research program, the appointee will have responsibility for further developing the programmatic research interests of the Institute in the molecular basis of cardiovascular biology and disease, and in training postgraduate students in molecular cardiology. This is an exceptional opportunity for a leadership position in a thriving and growing institute committed to excellence in cardiovascular research. The VCCRI is affiliated with the University of New South Wales, Australia.

Applicants should send a curriculum vitae, short description of research plans and the names of at least three referees to:

**Professor Robert M Graham,  
Victor Chang Cardiac Research Institute,  
384 Victoria Street, Darlinghurst, Sydney, NSW 2010, Australia.  
Tel: 61-2-9295 8500 Fax: 61-2-9295 8501  
or e-mail: [b.graham@victorchang.unsw.edu.au](mailto:b.graham@victorchang.unsw.edu.au)  
Affirmative Action/Equal Opportunity Employer**



## POSITIONS OPEN

### MOLECULAR MECHANISMS OF BIRTH DEFECTS POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

Positions available to investigate molecular, molecular genetic, and/or cellular signal transduction mechanisms of craniofacial defects. Particular emphasis directed toward clarification of interactions among growth factors, protein kinases, and transcription factors in regulating gene expression and cell differentiation during normal and abnormal mammalian embryonic development. Background in molecular/molecular genetic methodologies, cell and/or developmental biology required. Applicants should submit: curriculum vitae, a statement of current research activities, and names of three references to: **Dr. Robert Greene, Laboratory of Molecular Craniofacial Development, Department of Biological and Biophysical Sciences, School of Dentistry, University of Louisville, 501 South Preston Street, Louisville, KY 40292.** *The University of Louisville is an Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

### MEMBRANE PROTEINS, CELL SIGNALING, CELL COMMUNICATION THE SCRIPPS RESEARCH INSTITUTE

Several POSTDOCTORAL POSITIONS are available to participate in novel research initiatives focused on understanding membrane protein structure/function relationships, signal transduction pathways that are regulated by bioactive lipids, and gap junctional communication between cells. These positions will be funded at a level that is commensurate with the prior experience of the candidates.

Applicants with experience in chemistry, biochemistry, molecular biology, cell biology, and neurobiology are encouraged to apply. If interested, please send a curriculum vitae and three letters of reference to: **Cheryl Negus, Administrative Manager, Department of Cell Biology, MB6, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037.**

*Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL POSITION JOINT DISEASES LABORATORY SHRINERS HOSPITALS McGill University, Montreal

Arthritis Research—T Cell Immunity to Cartilage

A Postdoctoral Fellowship is available (up to four years) in a cartilage research group to work with **Dr. Yiping Zhang** and **Dr. Robin Poole** on the relationship of human T cell immunity to cartilage, to arthritis induction in immunodeficient mice. We seek an individual with a background in cellular and molecular immunology. Previous experience with immunodeficient mice is an advantage, but not essential. The salary will be on the MRC scale dependent on experience. Please submit a curriculum vitae and names of at least two referees to: **Dr. Yiping Zhang, Joint Diseases Laboratory, Shriners Hospital, 1529 Cedar Avenue, Montreal, Quebec H3G 1A6 Canada.** E-mail: yzhang@shriners.mcgill.ca.

### NEW YORK UNIVERSITY MEDICAL CENTER

POSTDOCTORAL POSITIONS available to study (1) hormonal and neuropeptide regulation of ion channels,  $Ca^{2+}$  signaling, and stimulus-secretion coupling using insulin-secreting pancreatic beta-cells; or (2) regulation of hypothalamic appetite control centers by hormones and neuropeptides using cultured neurons or brain slices (*Nature* 361:362, 1993; *J. Biol. Chem.* 270:17749, 1995; *Diabetes* 46:1087, 1997). Individuals with an interest in GLP-1, PACAP, leptin, diabetes, and obesity should apply. Send curriculum vitae, summary of research experience, and names of three references to: **Dr. George G. Holz, Department of Physiology and Neurosciences, NYU Medical Center, 550 First Avenue, New York, NY 10016.** E-mail: holz@helix.mgh.harvard.edu.

POSTDOCTORAL POSITION available to study molecular mechanisms of intracellular cholesterol transport and cholesterol homeostasis. Applicant must have M.D., Ph.D., or equivalent and a strong background in molecular and cellular biology. Send curriculum vitae and names of three references to: **Daniel S. Ory, M.D., Center for Cardiovascular Research, Washington University School of Medicine, Box 8086, 660 South Euclid Avenue, St. Louis, MO 63110.** FAX: 314-362-8957; e-mail: dory@imgate.wustl.edu.

## POSITIONS OPEN

### NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE Basic Neurosciences Program Synaptic Function and Formation Unit

Two POSTDOCTORAL POSITIONS (U.S. citizen, permanent resident, or non-U.S. citizen) are available immediately in the Synapse Formation and Function Unit of the National Institute of Neurological Disorders and Stroke (NINDS) Intramural program to study the physiology of early synaptic connections. Research in the laboratory focuses on the role of immature synaptic connections in shaping the spatiotemporal properties of spontaneous activity in the developing mammalian retina which is required for normal visual system development (see *Science* 272:1182-1187, 1996; *Neuron* 19:293-306, 1997). Candidates with experience in electrophysiology, imaging, or cell culture are strongly encouraged to apply. The initial appointment will be for two years with a salary range between \$27,500 and \$38,000. Please send a letter describing your research interest, a curriculum vitae, and three letters of reference to: **Marla B. Feller, 221 Life Sciences Addition, Department of Molecular and Cell Biology, University of California, Berkeley, CA 94720-3200.** Future address will be: **NIH/NINDS, 36 Convent Drive, MSC-4152, Building 36, Room 5A13, Bethesda, MD 20892-4152.** *NIH is an Equal Opportunity Employer.*

### POSTDOCTORAL POSITION IN IMMUNOLOGY University of California, Los Angeles

A position is available in the research laboratory of **Dr. Rhonda Voskuhl, UCLA Department of Neurology.** The laboratory investigates basic mechanisms in the immunopathogenesis of experimental autoimmune encephalomyelitis (EAE), a murine model for multiple sclerosis (MS). Particular areas of interest include mechanisms in autoantigen specific central and peripheral tolerance as well as mechanisms through which sex hormones affect susceptibility to autoimmune disease. Experience in cellular and/or molecular biology with a strong background in immunology is desired. Submit a letter of interest, references, and a curriculum vitae to: **Dr. Rhonda Voskuhl, Reed Neurological Research Center, A145, 710 Westwood Plaza, Los Angeles, CA 90095.** E-mail: rvoskuhl@ucla.edu.

### POSTDOCTORAL POSITION MOLECULAR BASIS OF NEURODEGENERATION College of Physicians and Surgeons of Columbia University

Defining the genes associated with and controlling astrocyte and neuronal dysfunction. Application of novel cloning strategies and functional analysis of genes inducing and preventing astrocyte and neuronal degeneration. Ideal candidate will have a background in molecular biology, biochemistry, and cellular and molecular neurobiology. Send curriculum vitae and three references to: **Prof. P. B. Fisher, Departments of Pathology and Urology, Columbia University, 630 West 168th Street, New York, NY 10032.** FAX: 212-305-8177. *An Affirmative Action/Equal Opportunity Employer.*

A POSTDOCTORAL POSITION is available immediately to study the effects of chromatin structure on gene expression. Applicants must have a Ph.D. in molecular biology, genetics, biochemistry, or a closely related field and have specific knowledge related to molecular biology. Desirable qualifications include experience working with *Drosophila*, examining protein-DNA interactions, performing PCR, sequencing, and vector construction. Send curriculum vitae, reprints, and names of three references to: **Dr. Lori Wallrath, Department of Biochemistry, 4-772 Bowen Science Building, Iowa City, IA 52242.** FAX: 319-335-9570; e-mail: lori-wallrath@uiowa.edu.

*The University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.*

### POSTDOCTORAL FELLOWSHIP

Texas A&M University at Galveston (TAMUG) seeks applications for two three-year Postdoctoral Fellowships from highly qualified candidates interested in any aspect of marine biology, marine science, or environmental research. For details, see website: <http://www.tamug.tamu.edu/postdoc> or Telephone: 409-740-4810.

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS UNIVERSITY OF CALIFORNIA, IRVINE

Multiple research positions are available in laboratories of the Research Department of the University of California, Irvine—VA Long Beach Medical Program. The emphasis of the Department is molecular and cellular aspects in the specialty areas listed below, by faculty member.

**Dr. Ellis Levin:** Molecular biology of angiogenesis, estrogen action, neural anti-growth and growth.

**Dr. Thomas Ma:** Intracellular regulation and molecular characterization of intestinal epithelial tight junctions.

**Dr. Timothy Morgan:** molecular biology of isolated liver following alcohol administration.

**Dr. Christopher Reist:** Molecular mechanisms of serotonin receptor signal transduction.

**Dr. Hamid Said:** cellular/molecular aspects of vitamin membrane transport.

**Dr. Sandor Szabo:** Gene expression and transcription factors in ulcer healing.

**Dr. Andrez Tarnawski:** The cellular and molecular mechanisms of mucosal injury and healing.

Interested applicants should send a curriculum vitae to: **Dr. Hamid M. Said, University of California, Irvine—Long Beach Medical Program, VA Medical Center (151), Long Beach, CA 90822.**

### POSTDOCTORAL RESEARCH POSITIONS

Newly funded Postdoctoral Research positions will be available in the Laboratory of Cellular and Molecular Cerebral Ischemia beginning spring/summer 1998. Research focuses on the basic mechanisms that determine neuronal plasticity such as programmed cell death, peptide growth factors, signal transduction pathways, metabotropic glutamate receptors, and gene regulation. Successful applicants must have a Ph.D. and/or M.D. with expertise in cellular and molecular biology. Please send or e-mail a curriculum vitae, a summary of research interests, and names of three references to: **Kenneth Maiese, M.D., Departments of Neurology and Anatomy and Cell Biology, 6E-19 UHC, Wayne State University School of Medicine, 4201 St. Antoine, Detroit, MI 48201.** E-mail: kmaiese@med.wayne.edu; website: World Wide Web, search "maiese". *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITIONS UNIVERSITY OF PITTSBURGH MEDICAL CENTER Cardiovascular Research Laboratories

Two positions available January 1998 in the Division of Cardiology, laboratory of **Dr. Arthur M. Feldman:** (1) to study abnormal  $Ca^{2+}$  handling, cellular electrophysiology, and arrhythmias in transgenic and knockout mouse models of CHF, and (2) to study the cellular and molecular determinants of CHF. Prior experience with myocyte isolation, cell physiology, fluorescent intracellular calcium measurement, patch clamp, and/or molecular techniques including transgenic technology, is required. Send curriculum vitae and names of three references to: **Attn: Mary Beth Bawden, Division of Cardiology, University of Pittsburgh Medical Center, Fifth Floor Scaife Hall, 200 Lothrop Street, Pittsburgh, PA 15213.**

### EAST TENNESSEE STATE UNIVERSITY

An immunology POSTDOCTORAL POSITION is available immediately to study the cellular and molecular biology of T cell signaling of macrophage inflammatory and effector functions. See website: <http://www.bioscience.org/1997/v2/stout1/htmls/197-206.htm>. Candidate will have a Ph.D. and record of productivity in cellular and/or molecular immunology. Submit curriculum vitae and three references to: **Robert D. Stout, Ph.D., Department of Microbiology, Quillen College of Medicine, East Tennessee State University, Box 70579, Johnson City, TN 37614-0579.** Position is contingent on grant funding. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS studying the role of complement in ischemia/reperfusion injury are available. A Ph.D. in cardiovascular physiology/pharmacology or cellular/molecular biology is required. Please send letter of interest, names of three references, and curriculum vitae to: **Dr. Gregory L. Stahl, Ph.D., Center for Experimental Therapeutics and Reperfusion Injury, Brigham and Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115.**

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## Head of Cardiovascular Biology

Pfizer is at the forefront of the discovery and development of new medicines, and recognised as one of the most innovative companies in the world. This year, Fortune magazine's survey of leading American CEOs saw Pfizer voted most admired pharmaceutical company.

Our research laboratories at Sandwich have seen success after success. For example, they discovered amlodipine and doxazosin, two of the world's leading cardiovascular medicines. Moreover, we have an impressive pipeline of innovative products already in the clinic.

Due to our continued expansion, an opportunity has emerged for an outstanding scientist to join our senior management team and lead our cardiovascular biology group. Our commitment to the future is such that the Sandwich human medicinals discovery groups will increase from 500 to over 800 people by 2005. We are looking for a talented scientist with an excellent track record in innovative research to participate in the leadership of this team of dedicated drug hunters.

This is a position that will test your organisational skills to the full - but your focus will be on the quality of the science within your group. The challenge will be to ensure the initiation of novel cardiovascular projects and the development of candidate compounds through their pre-clinical stages and beyond.

In the competitive arena of drug discovery, you will already have been associated with successful projects. A leader in your field, you will have around five years' experience of running discovery programmes. Now it's time you enjoyed the resources and support we can provide.

**If you are ready for such a challenging role, please send your CV, mentioning current salary and quoting reference 175/SCI, to Michael Hinds at Ashley Search & Selection, The Graftons, Stamford New Road, Altrincham, Cheshire WA14 1DQ. Fax: 0161 926 8483.**





## POSITIONS OPEN

### POSTDOCTORAL RESEARCH ASSOCIATE IN FOREST SOIL BIOLOGY

A project on the role of arthropods in the cycling of carbon and nutrients in forest soils seeks a scientist to develop, conduct, and publish research in this area. The position will be for two years at an annual salary of \$28,000. Generous support for travel and personnel will also be provided to the successful applicant. It is intended that research will address the role of soil arthropods in root predation in an existing field study evaluating nitrogen nutrition of *Populus deltoides*. However, the candidate is not limited to this subject matter. Qualifications are: (1) completed Ph.D. in ecology or other biological discipline, with a strong background in either root/rhizosphere biology or chemical controls over herbivory; (2) the ability to work independently; and (3) demonstrated abilities in oral and written communication of research results. Applicants should send résumé; names, addresses, and telephone numbers of three references; academic transcripts; up to two relevant publications; and a one-page preproposal detailing the scientific direction you would like to take in this position to: **Dr. Alexander L. Friend, Forestry Department, Box 9681, Mississippi State, MS 39762-9681. Telephone: 601-325-2779; e-mail: afriend@cf.msstate.edu** for further information on this position. Closing date: 15 February 1998, or until the position is filled.

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### POSTDOCTORAL POSITION AVAILABLE IN IMMUNOBIOLOGY

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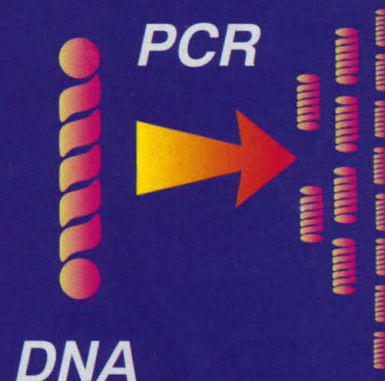
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