2000 Meeting Highlights

Plenary Lectures

David Satcher* U.S. Surgeon General

Mamphela Ramphele University of Cape Town

Stephen Jay Gould Harvard University and AAAS

Robert P. Kirshner* Harvard University

The Honorable Madeleine K. Albright* U.S. Secretary of State

May Berenbaum University of Illinois * = Invited

17 Tracks Address Today's Critical Science Challenges

Choose from more than 140 symposia. A unique, exciting, interdisciplinary blend of symposia, plenary and topical lectures, specialized seminars, and posters. Gain practical, hands-on ideas and insights that you can put to work immediately.

Science Innovation

Find out the latest information from top investigators in the emerging fields of cell biology, medicine, bioengineering, neuroscience, and more!

Special Seminars

2000 Genome Seminar Genomic Revolution in the Fields: Facing the Needs of the New Millennium

2000 AAAS Forum for School Science *Reforming Science and Mathematics in Urban Schools: Finding the Road to Success*

At the AAAS Meeting you get more

- Poster Sessions... covering the biological, physical, and social sciences, technology, engineering, and education.
- Career Development Workshops... practical advice to help advance any career.
- Science Career Fair... FREE to all! Many opportunities in the biotech and pharmaceutical industries!
- The 2000 Exhibition... more than 100 booths demonstrating products, services, and programs you need.
- Exhibitor Workshops... hands-on demonstrations of cutting-edge technology.
- Internet Access Center... surf the web or check your e-mail.

www.aaas.org/meetings



Register Now & Save! See page 17!

Eloy Rodriguez

Cornell University

Jean E. Taylor

Rutgers University

National Center for Atmospheric Research

Warren M. Washington

Richard S. Williams, Jr.

U.S. Geological Survey

George M. Woodwell

Woods Hole Research Center

2000 AAAS Annual Meeting Program Committee

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Julie Haynes Lutz Seattle Central Community College

Jane Maienschein Arizona State University

Richard I. Morimoto Northwestern University

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Maxine F. Singer President, Carnegie Institution of Washington

H. Patrick Swygert President, Howard University 2000 AAAS ANNUAL MEETING AND SCIENCE INNOVATION EXPOSITION FEBRUARY 17-22, 2000 WASHINGTON, DC

EXPANDED PROGRAM

- 2 Plenary and Topical Lectures
- 3 Daily Timetable
- 4 Symposia at a Glance
- 6 2000 Genome Seminar and Forum for School Science
- 7 17 Theme Tracks with more than 140 Symposia
- 14 Career Development Workshops
- 17 Registration Form.
- 18 Hotel Reservation Instructions
- 20 General Meeting Information
- 21 Exhibitors



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American Association for the Advancement of Science

Plenary Lectures

Thursday, February 17

Student Science Convocation

5:00 PM American Junior Academy of Science Poster Displays

Opening Ceremony and Keynote Address

6:30 PM David Satcher,* U.S. Surgeon General

Friday, February 18

Plenary Address 6:30 PM Mamphela Ramphele, Vice Chancellor, Univ of Cape Town

Saturday, February 19

AAAS President's Address 6:30 PM

Stephen Jay Gould, Alexander Agassiz Professor of Zoology, Harvard Univ and AAAS

Sunday, February 20

Plenary Address

6:30 PM Robert P. Kirshner,* Center for Astrophysics, Harvard Univ

Monday, February 21

Special Plenary 11:30 AM The Honorable Madeleine K. Albright,* U.S. Secretary of State

Plenary Address 6:30 PM May Berenbaum, Department of Entomology, Univ of Illinois

*Invited

Topical Lectures

Friday, February 18

AM Lectures (8:00AM-8:45AM)

William E. Coyne, 3M Co Innovation as a Growth Driver

Jaron Lanier, Internetz Central Lab Information Technologies and the Future of Scientific Method

Dinda Griffith,* MIT

Special PM Lecture (12:30PM-1:15PM)

Rita R. Colwell, NSF Global Climate Change and Infectious Diseases

PM Lectures (1:30PM-2:15PM)

John P. McGovern Award Lecture: George A. Miller, Princeton Univ

Matthew Meselson, Harvard Univ Averting the Hostile Exploitation of Biotechnology

Edelgard Bulmahn,* Min of Sci and Ed, Germany

Michael Hengartner, Cold Spg Hrbr Lab Programmed Cell Death in the Nematode C. elegans

Saturday, February 19

AM Lectures (8:00AM-8:45AM)

Neil de Grasse Tyson, Hayden Planetar Bringing the Universe Down to Earth: Designing a Planetarium for the 21st Century

Jennifer Tour Chayes, Microsoft, Inc. Phase Transitions in Computer Science

Kari Stefánsson, de Code Genetics Population, Genomics, and Complex Traits: The Case of Iceland

Lectures

PM Lectures (2:00PM-2:45PM)

Carl Djerassi, Stanford Univ Contraception vs. Conception— A Millennial Prognosis

G. Edward Schuh, Univ of MN

Esther Sternberg, NIMH, NIH Does Stress Make You Sick and Believing Make You Well?

Sunday, February 20

AM Lectures (8:00AM-8:45AM)

John Cosgrove, Long Isl Jwsh Med Cntr Surgical History of the United States Presidents

Edward O. Wilson, Harvard Univ The Relation Between Biology and the Humanities

Mary Lou Pardue, MIT Drosophila Telomeres: Evolutionary Links Between Chromosome Ends and Retrotransposable Elements

Special PM Lecture (1:00PM-1:45PM)

George Whitesides, Harvard Univ and Felice Frankel, MIT Science as Art and Art as Science

PM Lectures (2:00PM-2:45PM)

George Sarton Award Lecture: Edward J. Larson, Univ of GA 75 Years Ago or Forever? The AAAS and the Scopes Trial

Felton Earls, Harvard Schl of Pub Hlth Exposure to Violence in Childhood: Causes and Consequences

William A. Haseltine, Human Genome Sci, Inc. Genes and Drugs: What to Do with All the Genes

Monday, February 21 PM

PM Lectures (2:00PM-2:45PM)

Kenneth Prewitt,* US Census Bureau

Tim White, UC-Berkeley Early Hominids

*Invited, not yet confirmed

Science Innovation

See page 17 for registration form



Daily Timetable

Thursday, 17

Morning

Public Science Day* 8:00am-1:00pm Marriott

Afternoon

Meeting Registration 2:00pm-7:00pm Marriott

Evening

Student Science Convocation and AJAS Posters 5:00pm-6:30pm Marriott

Opening Ceremony and Keynote Address 6:30pm-8:00pm Marriott

*by Invitation Only

Friday, 18

Morning

Meeting Registration 7:00am-7:00pm Marriott

Topical Lectures 8:00am–8:45am Marriott/Omni

Concurrent Sessions 9:00am–12:00pm *Marriott/Omni*

Afternoon

Topical Lectures 12:30pm–1:15pm, 1:30pm–2:15pm Marriott/Omni

AJAS Oral Presentation 1:30pm-5:30pm *Omni*

Concurrent Sessions 2:30pm–5:30pm *Marriott/Omni*

Exhibition 4:00pm-6:30pm Marriott

Evening

Exhibition Grand Opening Reception 5:00pm-6:30pm Marriott

Plenary Address 6:30pm-7:30pm *Marriott* Saturday, 19

Morning

Meeting Registration 7:30am–5:00pm Marriott

Topical Lectures 8:00am–8:45am *Marriott/Omni*

Concurrent Sessions 9:00am–12:00pm *Marriott/Omni*

Genome Seminar 9:00am–6:00pm *Marriott*

Exhibition 10:00am-3:00pm Marriott

Career Workshops 10:30am–3:30pm *Omni*

Afternoon

Awards Ceremony 12:15pm—1:15pm *Omni*

Exhibitor Workshops 12:30pm-2:00pm Marriott

General Poster Session and Student Awards Competition 1:00pm-6:00pm Marriott

Topical Lectures 2:00pm–2:45pm *Marriott/Omni*

Concurrent Sessions 3:00pm-6:00pm *Marriott/Omni*

Evening

President's Address 6:30pm-7:30pm Marriott

Presidents Reception 7:30pm-8:30pm

Marriott

Sunday, 20

Morning

Marriott

Topical Lectures

8:00am-8:45am

Career Workshops

Concurrent Sessions

9:00am-12:00pm

Genome Seminar

9:00am-6:00pm

10:00am-3:00pm

Exhibitor Workshops

12:30pm-2:00pm

Topical Lectures

1:00pm-1:45pm 2:00pm-2:45pm

Marriott/Omni

3:00pm-6:00pm

Plenary Address

6:30pm-7:30pm

Marriott/Omni

Evening

Marriott

Concurrent Sessions

Marriott

Exhibition

Marriott

Marriott

Afternoon

Marriott/Omni

8:30am-4:00pm

Omni

Marriott/Omni

Meeting RegistrationMeeting Registration7:30am-5:00pm7:30am-5:00pm

7:30am–5:00pm Marriott Concurrent Sessions

Morning

Monday, 21

8:00am–11:00am Marriott/Omni

Forum for School Science 8:00am–6:30pm *Omni*

Career Workshops 8:30am–4:30pm *Omni*

Exhibition 9:00am–2:00pm Marriott

Science Career Fair 11:00am-4:00pm Marriott

Special Plenary Address 11:30am–12:30pm Marriott

Afternoon

Topical Lecture 2:00pm-2:45pm *Marriott/Omni*

Concurrent Sessions 3:00pm-6:00pm *Marriott/Omni*

Forum/Education-Poster Session 4:00pm-6:30pm Omni

Evening

Plenary Address 6:30pm-7:30pm *Marriott*

Morning

Meeting Registration 7:30am-10:00am Marriott

Concurrent Sessions 8:00am–11:00am *Marriott*

Forum for School Science 8:00am-1:00pm Omni

Information as of 09/28/99 www.aaas.org/meetings

Sunday, 20

Symposia at a Glance

Track	Friday	Saturday	Sunday	Monday	Tuesday
Changing Landscapes See Page 7	PM Alien Species in Coastal Waters	AM Wetland Restoration PM China and Environmental Health	AM The Coevolution of Land- scape and CulturePM Guinea Current Ecosystem	AM Human Impacts on Watersheds	
Communicating Science Sec Page 7	 Amateurs and Professionals PM Scientific Modeling of Complex Relationships 	AM Cost of (Not) Sharing DataPM Legal Restrictions On Published Data		 AM Engaging the Public in Science PM Science as an Error-Correcting 	
Education and Public Under- standing of Sci See Page 8	AM Technology in Science Education	AM Teaching Mathematics to ChildrenPM Teaching for Learning	AM Shaping Future LearningPM Science is Fun!		
Environment, Food, and Nat- ural Resources See Page 8	 AM The 21st Century Food System PM Human Health and Climate Change Population and Environment in Coastal Areas 	 AM Who Will the World Feed? PM Antibiotics in Agriculture Hydrometeorological Frontiers 	 AM Sustainability Science PM Food and Ecological Resilience 	AM Open Markets Food Security	AM Organic Agriculture Risky Microbes
Global Change/ Earth Systems Science See Page 9	AM Climate Change and Values	AM Hurricane Climate Research /PM	 AM Math Modeling in Earth Sciences PM Consequences of Climate Variability 	 AM Global Change: Uncertainty for Science and Democracy PM Human Dimensions of Global Change 	AM Urban Sprawl from Spac
Human Futures See Page 9	AM Cyberterrorism AM Human Resources for S&T /PM	 AM Critical Periods of Development: Hearing Loss PM Humans, Computers, and Speech 	AM Sustainability through Science	 AM Germline Intervention PM Stem Cell Controversy Production of Renewable Hydrogen 	
Industry and Engineering See Page 10	AM Can Universities Change?PM University Research and Industrial Performance?	AM Corporate Funding of AcademicsPM How Will Industry Manage Science and Technology?	 AM R&D Performance Measurement Systems PM The Nutraceuticals Industry High-Tech Industry in the Region 		
Interconnec- tivity and Life in Cyberspace See Page 10		 AM Found in Cyberspace PM Science and Health Information 	AM Battling the Crypto Wars PM From Small-World Networks to the Web	AM Paperless PublishingPM Research, Education, and the Web	
Life Science and the Science of Life See Page 11	AM Amphibian Declines	 AM Understanding Ecosystems The Role of Water for Life PM Ecosystem Services 	AM Sociality Among PrimatesPM Genes, Genomics, and Complex Ecosystems	AM Restoring Ecosystems Impacted by FisheriesPM Endangered Species Recovery	
Looking Back to Forecast the Future See Page 11	AM Unearthing Climate VariabilityPM Peopling of the New World	AM Scientist's Workstations: 21st Century Expectations PM Predicting More, Assuming Less	AM Ecological ForecastingPM Anticipating S&T's Futures	PM Plants, Population and Welfare	

See page 17 for registration form

4

and Physical Science Science, Page 12 and Life PM Neutron Experimens and Mol Med PM and Mol Med PM Watural History in the Beer Millennium Scie Page 13 PM Integrated Science PM Ennobolary/Biogrospecting Abuse AM Sociobiology /PM Sociobiology /PM Mage of Matter Waves AM Children and improving Medical Decision Making AM Delay Sait improving Medical Decision Making AM Children and improving Medical Decision Abuse AM Integrate Science PM AM Children and improving Medical Decision Making AM Children and improving Medical Decision PM AM Children and improving Medical Decision PM AM Findung Landmines PM Findung Landmines PM Findung Landmines PM Findung Landmines PM Findung Landmines PM Findung Landmines PM Findung Landmines PM	Track	Friday	Saturday	Sunday	Monday	Tuesday
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In the New Millennium Sce Page 13 /PM Public Health and Medicine Sce Page 13 AM New Knowledge on Homo cystieline AM Chocolate Intections and list Drug Abuse AM Health Care, Economics, and Technology AM Dietary Salt Internoving Medical Decision Making AM Chidnen and Orronic Decision Science and Society Sce Page 13 PM The Science of Baseball Three Jobs-Two People AM Analysis of Electronic Threats PM AM Bio Music Volent Cirne and Punish- ment AM Environity Medical Decision Making AM Finding Landmines Science, Engi- neering, and Public Policy Science [Engi- Ree Page 14 PM The Science of Baseball Three Jobs-Two People AM Analysis of Electronic Threats PM AM Bio Music Volent Cirne and Punish- ment of Addisconts AM Environick Symmetry and Hierarchy ment AM Finding Landmines Science, Engi- neering, and Public Policy Science [Engi- Ree Page 15] AM Geoscience and Geophicoscipty Weapons of Mass Destruction AM Neurogenesis M AM Science AI State PM AM Science Savy" at State PM AM Cancer Therapeutics Science Savy Ta State PM Drosophia G	and Physical Science	and Life PM Paradigms for	PM Spintronics		and Mol Med	
and Medicine Sec Page 13 cystleline cystleline thections and Illicit Drug Abuse and Technology Improving Medical Decision Making Improving Medical Decision Making Chronic Diseases Science and Society Sec Page 14 PM About Faces Prophylaxis or Therapy AM Analysis of Electronic Threats PM AM Science and Society AM Finding Landmines AM Finding Landmines Science and Society Sec Page 14 AM Geoscience and Geosphilosophy Weapons of Mass Destruction AM Analysis of Electronic Threats PM AM Bio Music Violent Crime and Punish- ment AM Enviroshock Symmetry and Hierarchy PM AM Finding Landmines Science, Engi- neering, and Public Policy Sec Page 15 AM Geoscience and Geosphilosophy Weapons of Mass Destruction AM Sciencial crime and Punish- ment AM Science at State AM Science at State AM Science at State Science mnovation AM Drosophila Genome mnovation AM Sci Collaboration in Cuba AM Science Servery at State AM Science Therapeutics Science Therapeutics Science mnovation AM Drosophila Genome mnovation AM Sci Collaboration in Cuba AM Drug Discovery Narotechnology	n the New Millennium	PM Integrated Science	PM Ethnobotany/Bioprospecting			
Society Three Jobs-Two People PM Technology and Inequality Violent Crime and Punishment of Ment Symmetry and Hierarchy PM Dynamics of Social Interactions Evolution, Science, and Sociely Science, Engineering, and Public Policy AM Geophilosophy Weapons of Mass Destruction AM The Precautionary Principle AM AM Science Savvy' at State AM	and Medicine	cyst(e)ine PM About Faces	Infections and Illicit Drug Abuse	and Technology PM Genome Strategies in Evolution and Disease	Improving Medical Decision Making PM Does Nicotine have Beneficial Effects? International Management	
Geophilosophy Public Policy See Page 15 Geophilosophy Weapons of Mass Destruction /PM AM Sci Collaboration in Cuba PM *Science Savvy* at State Science Innovation See Page 16 AM Drosophila Genome Millennial Mind AM Neurogenesis PM AM Drug Discovery Nanotechnology AM Cancer Therapeutics Science Innovation See Page 16 AM Drosophila Genome Millennial Mind AM Neurogenesis PM AM Drug Discovery Nanotechnology AM Cancer Therapeutics See Page 16 M Development of the Brain AM Genome Seminar AM Genome Seminar AM Forum for School Science AM Forum for School Science	Society			Violent Crime and Punish- ment PM Ethnic Restaurants in DC Oriminal Punishment of	Symmetry and Hierarchy PM Dynamics of Social Interactions Evolution, Science,	AM Finding Landmines
Millennial Mind PM Cognitive Memory Nanotechnology See Page 16 PM Development of the Brain PM Cognitive Memory PM The New Era of Genomics The Thinking, Feeling Brain Seeminars: AM Genome Seminar AM Genome Seminar AM Forum for School Science AM Forum for School Science	neering, and Public Policy	Geophilosophy Weapons of Mass Destruction	/РМ	AM Scientists on Capitol Hill		AM S&T Roadmaps
	nnovation	Millennial Mind		Nanotechnology PM The New Era of Genomics	AM Cancer Therapeutics	
						AM Forum for School Science /PM

Seminars

2000 Genome Seminar

Genomic Revolution in the Fields: Facing the Needs of the New Millennium

Saturday, February 19 9:00AM-6:00PM

Sunday, February 20 9:00AM-6:00PM

Organized by J. Craig Venter, Celera Genomics, Barbara Jasny, and Pam Hines, AAAS and *Science*

In the new millennium, the needs of the world's population are sure to increase, and yet available natural resources are expected to decrease. Genomic technology will be an important part of the solution to bridge the gap. In this third in a series of seminars co-sponsored by AAAS and TIGR, we will be highlighting exciting and latebreaking advances in applications of genomic innovations to agriculture in such areas as plant responses to pathogens and environmental stresses, building more effective or non-traditional plant or animal "factories," and improving the qualities of the produce. In considering how to use the advances of genomics in agriculture, speakers will also be discussing the sociopolitical complexities of delivering the results to the people who need them and addressing issues of public acceptance of genetic engineering technology.

Among the areas to be addressed are: Arabadopsis, sequencing, policy and funding, genomics and improvement, germplasm, stress tolerance, nutritional genomics, pest resistance, molecular evolution, meristems, BT, maize, rice, biosynthetic pathways, and much more.

Speakers:

Stephen Bates*, Amgen Roger Beachy*, Danforth Plnt. Sci. Cntr The Hon. Christopher Bond*, U.S. Senate Jeffrey L. Dangl, UNC-Chapel Hill Fred Gould*, NC State Univ Peggy G. Lemaux, UC-Berkeley Xiaoying Lin, TIGR Brent Mishler, UC-Berkeley Dean DellaPenna*, Univ of NV Fred Perlak*, Monsanto Daphne Preuss, Univ of Chicago Ismail Serageldin*, The World Bank Chris Somerville, Carnegie Inst of Wash Shauna Somerville*, Carnegie Inst of Wash Scott Tingey*, Dupont Virginia Walbot, Stanford Univ And others!

*= Invited, not yet confirmed

This special seminar is co-sponsored by AAAS, *Science* magazine, and The Institute for Genomic Research (TIGR).

2000 AAAS Forum for School Science

Reforming Science and Mathematics in Urban Schools: Finding the Road to Success

Monday, February 21 8:00AM-6:30PM

Tuesday, February 22 8:00AM-1:00PM

Organized by Shirley M. Malcom, Betty Calinger, Mary Koppal, and George W. Nelson, AAAS The Forum for School Science is a two-day seminar that mixes plenary and small group sessions featuring leading academic and policy authorities. In addition, there is a poster session and reception where Forum participants and presenters meet to network and gain more information.

The 2000 Forum will reflect on the progress of the movement to reform science and mathematics education in urban schools—much of it initiated by the National Science Foundation—and then engage participants in the discussion of unresolved issues that include: (1) how best to ensure that all students are taught science and mathematics by teachers very knowledgeable about content and pedagogy; (2) what strategies can promote learning and engagement for those students who have experienced difficulty learning mathematics and science; (3) how can school restructuring be implemented even in troubled systems; and (4) what is the "formula" for developing and maintaining supportive partnerships.

The meeting will begin with an overview of significant outcomes of urban reform efforts followed by panel presentations centered on the above issues. The panelists will have solid experience in areas that have a strong influence on the devel-

See page 17 for registration form

opment and implementation of reform initiatives in urban schools, e.g., professional development, curriculum, research in teaching and learning, cognitive development, school/district restructuring, and the external community environment. Forum participants will engage in small group, facilitated discussion and analysis of the issues.

Invited Forum Speakers include:

Maria Santos, San Francisco Unified Schl District Clara Tolbert, Schl District of Philadelphia Deborah Ball, Univ of MI Meir Ben-Hur, SkyLight Training and Publishing David Hornbeck, Schl District of Philadelphia Charles W. Anderson, MSU Madeleine Long, The Implementation Grp Robert W. Ridky, Univ of MD And many others!

The Forum for School Science is co-sponsored by the AAAS Directorate for Education and Human Resources and AAAS Project 2061.

Special 2000 Meeting Events

A sampling of the many special events planned. Watch the AAAS web page for more details at:

www.aaas.org/meetings

Thursday, February 17

- Public Science Day (by invitation)
- Student Science Displays by high school students representing the American Junior Academy of Science (AJAS)

Friday, February 18

- NPR's Talk of the Nation-Science Friday broadcast
- AJAS oral presentations
- Exhibit Hall Grand Opening Reception
- Annals of Improbable Research

Saturday, February 19

- AAAS Fellows Forum
- AAAS Awards Ceremony
- 2000 General Poster Sessions
- 2000 Student Poster Award Competition
- AAAS President's Reception

Monday, February 21

 Forum for School Science Poster Sessions and Reception

AM =	Friday-Sunday	9:00-12:00
	Monday-Tuesday	8:00-11:00
PM =	Friday	2:30-5:30
	Saturday–Monday	3:00-6:00

Changing Landscapes

Alien Species in Coastal Waters: What Are the Real Ecological and Social Costs?

Friday PM

Organized by: John R. Greer and Jonathan G. Kramer, MD Sea Grant Coll

Daniel Simberloff, Univ of TN-Knoxville; Gregory M. Ruiz, Smith Inst; Jodi L. Cassell, CA Sea Grant Extsn Prog; David Pimentel, Cornell Univ; Mark Sagoff, Univ of MD

The Art and Science of Wetland Restoration

Saturday AM

Organized by: Judith S. Weis, Rutgers Univ; Mary C. Barber and Lori Hidinger, ESA

William J. Mitsch, OH St Univ; Joy Zedler, Univ of WI-Madison; Mark L. Kraus, Natl Audubon Soc; JeanMarie Hartman, Rutgers Univ; Beverly Getzen, U.S. Army Corp of Eng

China Coping with Environmental Health Challenges in the New Century

Saturday PM

Organized by: Devra Lee Davis, WRI; Xue Shouzheng, Shanghai Med Univ

Qu Geping,* Natl People's Cong, PRC; Keith Florig, Carnegie Mellon Univ; Yi Wang, Chinese Acad Sci; Kirk Smith, UC-Berkeley; Grant Tao, Johns Hopkins Univ; Devra Lee Davis, WRI; Xue Shouzheng and Bingheng Chen, Shangai Med Univ; Wu Changhua, WRI; Maureen Cropper,* World Bank

The Coevolution of Landscape and Culture in the Eastern Mediterranean

Sunday AM

Organized by: Lisa E. Wells, Vanderbilt Univ

Bernard Knapp, Univ of Glasgow, UK; Richard Rothaus,* St Cloud St; Timothy Gregory,* OH St Univ; Lita Diacopoulos,* Univ of Sydney, Australia; Lisa Wells, Vanderbilt Univ

Africa Meets the Challenge: Guinea Current Ecosystem Assessment and Management

Sunday PM

Organized by: Kenneth Sherman, NOAA, NMFS; Chidi Ibe, UNIDO, Ivory Coast

Chidi Ibe, UNIDO, Ivory Coast; Cletus Avoka, Min of Envir, Sci & Tech, Ghana; Kenneth Sherman, NOAA, NMFS; Kwame Korentang, Ghana Fisheries Min; Jacqueline McGlade, Cntr for Cstl & Mar Sci, UK; Alfred Duda, GEF Secretar

Information as of 09/28/99

Symposia

Human Impacts on the World's Watersheds

Monday AM

Organized by: Elizabeth J. Kirk, AAAS; Lawrence E. Band, Univ of NC

Lawrence E. Band, Univ of NC; Nina Caraco, Inst for Ecosyst Std; George Leavesley, USGS; Alexey Voinov, Univ of MD; Kirk Rodgers, OAS; Vladimir S. Selin, Inst for Econ Prob, Russia; Tatyana I. Moiseenko, Inst of the Nrth Indust Ecol

Communicating Science

Amateurs and Professionals: Advancing Science Together

Friday AM

Organized by: Richard Tresch Fienberg, Sky Publ Corp

Shawn Carlson, Soc for Amateur Sci; Adrian Hunt, Mesa Tech Coll; Rick Bonney, Cornell Univ; Ray Wakeland, PSU; Cathleen Clemens, Harvard-Smith Cntr for Astrophys

Scientific Modeling of Complex

Scale Relationships: From Astronomy to Manufacturing

Friday PM

Organized by: Eric D. Kolaczyk, Boston Univ

Max J. Egenhofer, Univ of ME; David Higdon, Duke Univ; Michael Caramanis and Eric D. Kolaczyk, Boston Univ

The Increasing Cost of (Not) Sharing Scientific Data

Saturday AM

Organized by: John S. Gardenier, US-CDC

Wendy Baldwin, NIH; Paul F. Uhlir, NAS, NRC; John Illgen, Illgen Simul Tech Inc.; John C. Bailar, Univ of Chicago; Lita Nelson, MIT

You Can't Talk About That—New Legal Restrictions on Use of Published Data

Saturday PM

Organized by: Susan R. Poulter, Univ of UT Coll of Law

William Gardner, Univ of Pitts Schl of Med; Joseph I. Rosenbaum, Greenberg Taurig; Dan L. Burk, Seton Hall Schl of Law; Peter B. Boyce, Amer Astr Soc

*= Invited, not yet confirmed

Engaging with the Public in Science-Related Controversies

Monday AM

Organized by: Suzanne King, Wellcome Trust, UK; Mark Dyball, Ofc of S&T, UK

Mark Dyball, Ofc of S&T, UK; Peter Finegold, Wellcome Trust; Philip Campbell, Nature; Sheila Jasanoff, Harvard Univ

Science as an Error-Correcting Process

Monday PM

Organized by: Lindley Darden, Univ of MD-Coll Park

Douglas Allchin, Univ of MN; Nancy S. Hall, Univ of DE; Spencer R. Weart, AIP; Lindley Darden, Univ of MD-Coll Park; Joshua Lederberg, Rockefeller Univ

Education and Public Understanding of Science

Integrating Technology into Science Education

Friday AM

Organized by: Patricia Ryaby Backer and Miriam Saltmarch, San Jose St Univ

Gary Marchionini, Univ of NC-Chapel Hill; Laura Bartolo, Kent State Univ; Donald Reed, San Jose St Univ; Michele W. Spitulnik, Univ of MI; Patricia Ryaby Backer and Miriam Saltmarch, San Jose

St Univ

College Is Too Late: Teaching Mathematics to Children and Adolescents

Saturday AM

Organized by: Ann C. Howe, NCSU

Victoria Bill, Univ of Pitts; Michael Shayer, King's Coll, Univ of London; Patricia F. Campbell, Univ of MD; George W. Bright, Univ of NC-Greensboro; Barbara Dougherty, CRDG Univ of HI; Lee V. Stiff, NCSU

Teaching for Learning in College Science Courses

Saturday PM

Organized by: Laurie Fathe, Occidental Coll; Kenneth L. Anderson, CA State Univ-Los Angeles

Laurie Fathe, Occidental Coll; Susan Wyckoff, ASU; Kenneth L. Anderson and Dan B. Walker, CA State Univ-San Jose

Shaping the Future Learning of Mathematics and Science

Sunday AM

Organized by: Judith T. Sowder, SDSU

Jeremy Kilpatrick, Univ of GA; James Hiebert, Univ of DE; Thomas P. Carpenter, Univ of WI-Madison; Kathleen M. Fisher, SDSU; Marcia C. Linn, UC-Berkeley; Frank K. Lester, IN Univ

Science is Fun!

Sunday PM

Organized by: Bassam Z. Shakhashiri, Univ of WI-Madison

Jerry Bell, ACS; Pamela Zurer, C&E News; Denice Denton, Univ of WA; Bassam Z. Shakhashiri, Univ of WI-Madison

Environment, Food, and Natural Resources

What's for Dinner? A Menu for the 21st Century Food System

Friday AM

Organized by: P. Stephen Baenziger, Univ of NE; Leonard S. Bull, NCSU

Robert S. Goodale, Raleigh, NC; Richard L. Sawyer, NCSU; G. Eric Bradford, UC-Davis; Anthony J. Cavalieri, Pioneer Hi-Bred Intl Inc.; Charles Hamner, NC BioTech Cntr

Human Health and Climate Change

Friday PM

Organized by: David Pimentel, Cornell Univ; Laura Westra, Sarah Lawrence Coll

Rita R. Colwell, NSF; Jonathan Patz, Johns Hopkins Schl of Pub Hlth; Paul R. Epstein, Harvard Med Schl; David Pimentel, Cornell Univ; Laura Westra, Sarah Lawrence Coll

Population and Environment in Coastal Areas of Africa and Asia

Friday PM

Organized by: Randall A. Kramer, Duke Univ; Catherine M. Marquette, Chr. Michelsen Inst, Norway

Ligia Noronha, Tata Energy Res Inst, India; Christopher L. Dyer, Univ of RI; Randall A. Kramer, Duke Univ; Robert E. Dewar, Univ of CT; Catherine M. Marquette, Chr. Michelsen Inst, Norway; Sara Curran, Ofc of Pop Res

Who Will the World Feed in the 21st Century?

Saturday AM

Organized by: Nicole Ballenger and Keith Wiebe, USDA; Per Pinstrup-Andersen, IFPRII

Per Pinstrup-Andersen, IFPRII; Rattan Lal, OH St Univ; Susan R. McCouch, Cornell Univ; G. Edward Schuh, Univ of MN, Humphrey Inst; Lester R. Brown, Worldwatch Inst; Sara Scherr, Univ of MD; Ellen Messer, Brown Univ; Alex McCalla, World Bank; Eileen Kennedy, USDA; Bruce M. Alberts, NAS; Donald N. Duvick, Pioneer Hi-Bred Intl Inc.

Antibiotics in Plant and Animal Agriculture

Saturday PM

Organized by: Anne K. Vidaver, Univ of NE; James M. Tiedje, MSU

Abigail Salyers, Univ of IL, Urbana-Champaign; Lester Crawford, Georgetown Cntr for Food & Nut; Patricia McManus, Univ of WI; Fred Angulo, US-CDC

Hydrometeorological Frontiers: Meeting the Nation's Needs

Saturday PM

Organized by: Robert W. Reeves, NOAA, NWS

Roger A. Pielke, NCAR; Kathleen Miller, NCAR; Soroosh Sorooshian, Univ of AZ; Louis W. Uccellini, NOAA, NWS; Danny Fread, NOAA, Ofc of Hydrol; Christopher R. Adams, CO State Univ

Sustainability Science for an Uncertain Century

Sunday AM

Organized by: Sherburne B. Abbott, NAS, NRC; Robert W. Kates, Ellsworth, ME

Jill Jäger, IHDPGEC, Austria; Hans-Joachim Schellnhuber, Potsdam Inst for Clim Impact Res; Pamela A. Matson, Stanford Univ; Ralph J. Cicerone,* UC-Irvine; Arnulf Grübler, IIASA; Robert W. Kates, Ellsworth, ME; Sherburne B. Abbott, NAS, NRC; J. Gustave Speth, UNDP

Food and Ecological Resilience: A Sustainable Balance in the Asia-Pacific

Sunday PM

Organized by: Michael Snyder and Suteera Najavajara, AAAS

Dennis R. Keeney, IA State Univ; Miguel Altieri, UC-Berkeley; M.S. Swaminathan, M.S. Swaminathan Res Fdn; T.C. Tso, lDEALS, Inc; Lori Ann Thrupp,* WRI

Open Markets and Food Security

Monday AM

Organized by: Shu Geng and Daniel A. Sumner, UC-Davis

D. Gale Johnson, Univ of Chicago; Ronald P. Cantrell, IRRI; John Barton, Stanford Univ; Fredrick A. Bliss, Seminis, Inc; Dennis R. Keeney, IA State Univ; Scott D. Rozelle, UC-Davis

Organic Agriculture: Growth of Global Markets and Directions for Research

Tuesdav AM

Organized by: Donald W. Lotter and Karen Klonsky, UC-Davis

Karen Klonsky, UC-Davis; Catherine Greene, USDA; Kieth Jones, USDA Natl Org Prog; John W. Doran, Univ of NE, USDA, ARS; Mark Lipson, Org Farm Res Fdn

Risky Microbes

Tuesday AM

Organized by: Joan B. Rose, Univ of So FL; James M. Tiedje, MSU

Joan B. Rose, Univ of So FL; George Christopher, US Army MRIID; Chuck Gerba, Univ of AZ; Tanya Roberts, USDA; Chuck Haas, Drexel Univ; Clare Narrod, USDA, ERS

Global Change/ Earth Systems Science

Global Climate Change and Human Values

Friday AM

Organized by: George W. Fisher, AAAS; Devra Lee Davis, WRI

Michael C. MacCracken, USGCRP; Devra Lee Davis, WRI; Francis G. Hilton, Loyola Coll; Tuiloma Neroni Slade, Amb of Samoa; John Haught, Georgetown Univ; Adrian Fernandez, Natl Inst of Ecol

Frontiers in Hurricane Climate Research

Saturday AM, PM

Organized by: Kam-biu Liu, LSU; Richard J. Murnane, Bermuda Biol Stn for Res

Kerry Emanuel, MIT; Isaac Ginis, Univ of RI; Christopher W. Landsea, NOAA, AOML; James B. Elsner, FSU; Kam-biu Liu, LSU; Richard J. Murnane, Bermuda Biol Stn for Res; Lixion Avila, Natl Hurr Cntr; Auguste Boissonade, Risk Mgt Solutions, Inc.; Richard J. Murnane, Bermuda Biol Stn for Res; Roger A. Pielke, NCAR; Jerry D. Jarrell, Natl Hurr Cntr

Earth, Sea and Sky: Mathematical Modeling in the Earth Sciences

Sunday AM

Organized by: Barbara Lee Keyfitz, Univ of Houston, Brown Univ; Richard C.J. Somerville, Scripps Inst

Gary Glatzmaier, UC-Santa Cruz; Rainer Bleck, LANL; David Randall, CO State Univ; Antonio J. Busalacchi, NASA, Goddard; Paul Roberts, UCLA

The Potential Consequences of Climate Variability and Change for the US

Sunday PM

Organized by: Michael C. MacCracken, USGCRP; Jerry Mellilo, Mar Biology Lab; Anthony C. Janetos, WRI

John Reilly, MIT; Steven McNulty, USDA-FS; Peter Gleick, Pacific Inst; Donald Boesch, Univ of MD; Jonathan Patz, Johns Hopkins Schl of Pub Hlth

Global Change: Uncertainty for Science and Democracy

Monday AM

Organized by: Eugene A. Rosa, WA State Univ; Thomas Dietz, GMU

Stephen H. Schneider, Stanford Univ; Richard H. Moss, PNNL; Edward A. Parson, Harvard Univ; Howard Kunreuther, Univ of PA; Granger Morgan, Carnegie Mellon Univ; Jill Jäger, IHDPGEC, Austria

Understanding the Human Dimensions of Global Environmental Change

Monday PM

Organized by: Cheryl L. Eavey, NSF

William C. Clark, Harvard Univ, JFK Schl of Govt; Hadi Dowlatabadi, Carnegie Mellon Univ; C. Gregory Knight, PSU; Emilio F. Moran, IN Univ; Thomas J. Baerwald, NSF; Jill Jäger, IHDPGEC, Austria

Heat, Smog, and Weird Weather: Studying the Effects of Urban Sprawl from Space

Tuesday AM

Organized by: Victoria L. Bruce, NASA, EOS

Marc L. Imhoff, NASA, Goddard; Douglas S. Way, OH St Univ; Jeffrey G. Masek, Univ of MD-Coll Park; Karen C. Seto, Boston Univ; Dale A. Quattrochi, NASA, Marshall

Human Futures

Cyberterrorism in the Next Millennium: An Old Threat from a New Technology

Friday AM

Organized by: Richard Marks, Vinson & Elkins, LLP; Bhavani Pathak and Sanyin Siang, AAAS Michael Vatis,* FBI; Scott Charney, U.S. DOJ;

Arnaud de Borchgrave,* Cntr for Strat & Intl Std; Richard Marks, Vinson & Elkins, LLP

Human Resources for Science, Technology, the Nation, and the World

Friday AM, PM

Organized by: Daryl Chubin, NSF

Mary Golladay, NSF; Eleanor L. Babco, CPST; Georgine Pion, Vanderbilt Univ, NIH; Peter O. Syverson, Cncl of Grad Schls; Mary Frank Fox, GA Tech; Yolanda Scott George, AAAS; Charlotte V. Kuh, NAS, NRC; Roman Czujko, AIP; Michael G. Finn, Oak Ridge Inst of Sci & Educ; Shirley M. Malcom and Stephen D. Nelson, AAAS; George Campbell, NACME; Catherine J. Didion, AWIS; Paula M. Rayman, Radcliffe Coll; Marilyn Suiter, AGI; Michael S. Teitelbaum, A.P. Sloan Fdn

Critical Periods of Development: Evidence from Children with Hearing Loss

Saturday AM

Organized by: Christine Yoshinaga-Itano, Univ of CO-Boulder; Sharon E. Moss, Amer Spch-Lang-Hrng Assn

Christine Yoshinaga-Itano, Univ of CO-Boulder; Mary Pat Moeller, Boys Twn Natl Res Hosp; Rachel I. Mayberry, McGill Univ; Brenda Schick, Univ of CO-Boulder

Humans, Computers, and Speech

Saturday PM

Organized by: Joanne L. Miller, Northeastern Univ; Patti J. Price, SRI Intl

Patti J. Price, SRI Intl; Joseph Picone, MS St Univ; Larry P. Heck, Nuance Communications; Douglas A. Reynolds, Info Syst Tech Grp; Mari Ostendorf, Univ of WA; Jim Fruchterman, Arkenstone Inc.

*= Invited, not yet confirmed

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	Monday-Tuesday	8:00-11:00
PM =	Friday	2:30-5:30
	Saturday–Monday	3:00-6:00

Information as of 09/28/99 www.aaas.org/meetings

Sustainability through Science

Sunday AM

Organized by: Paul T. Anastas and Mary M. Kirchhoff, U.S. EPA

Ronald Breslow, Columbia Univ; John W. Frost, MSU; Mark Holtzapple, TAMU; Lee Lynd,* Dartmouth Coll; Luc Moens, NREL

Changing Our Genetic Future through Germline Intervention

Monday AM

Organized by: Theodore Friedmann, UCSD; Ronald Cole-Turner, Pitt Theol Sem

Theodore Friedmann, UCSD; Michael Blaese, Kimeragen, Inc.; Eric T. Juengst, CWR Univ Sch of Med; Claudia Mickelson, MIT; Audrey R. Chapman and Mark S. Frankel, AAAS

Frontier Research: Stem Cell Controversy

Monday PM

Organized by: Audrey R. Chapman and Mark S. Frankel, AAAS

John Gearhart, Johns Hopkins Univ; Ronald Green, Dartmouth Coll; Thomas H. Murray, Natl Bioethics Advis Comm; Thomas Okarma, Geron Corp; Lana Skirboll, NIH; Audrey R. Chapman and Mark S. Frankel, AAAS

Photosynthesis and the Production of Renewable Hydrogen

Monday PM

Organized by: Elias Greenbaum, ORNL; Michael Seibert, NREL

Elias Greenbaum, ORNL; Tadashi Matsunaga, Tokyo Univ of Ag & Tech, Japan; Horst Senger, Philipps Univ, Ger; Anastasios Melis, UC-Berkeley; Margaret Mann, NREL

Industry and Engineering

Can Universities Change Quickly Enough for the Innovation Economy?

Friday AM

Organized by: Laura Meagher, Tech Development Grp

Harold Raveche, Stevens Inst of Tech; Rachel Levinson, OSTP; Joseph G. Danek, EPSCOR Fdn; Dave Evans, DNA Plant Tech Corp; Laura Meagher, Tech Development Grp

University Research and Industrial Performance: Are They Related?

Friday PM

Organized by: Robert P. Morgan, AERA Fellow, NSF; Proctor P. Reid, NAE

Jerome H. Grossman, Hlth Quality Inc; Marie C. Thursby, Purdue Univ; Annetine Gelijns, Columbia-Presbyt Med Cntr; Robert P. Morgan, AERA Fellow, NSF; Paul Citron, Medtronic Inc; J. David Roessner, SRI Intl

Corporate Funding of Academics: Managing Conflicts between Research and Profit

Saturday AM

Organized by: Gilbert Whittemore, Stalter & Kennedy, LLP; Peter Lee, Schlumberger Oilfield, UK

Gilbert Whittemore, Stalter & Kennedy, LLP; Tom Tombrello,* Caltech; Louis P. Berneman, Univ of PA; Peter Lee, Schlumberger Oilfield Svcs, UK; Eric G. Campbell, MA Gen Hosp

How Will Industry Manage Science and Technology Uncertainty in the Next Millenium?

Saturday PM

Organized by: Steven W. Popper, S&T Policy Inst Theodore W. Schlie, Lehigh Univ; Mary L. Good, Univ of AR-Little Rock, Vent Cap Invest L.L.C.; Lawrence Burns, GM; Claude C. Gravatt, U.S. DOC; Robert M. Chapman, RAND; David L. Dreifus, Lucent Tech Ofc

Lessons from Early Adopters of R&D Performance Measurement Systems

Sunday AM

Organized by: Gretchen B. Jordan, Sandia Nat Lab James F. Koonce, UC-Ofc of the Pres; Denis O. Gray, NCSU; Truman Parish, Eastman; Dugan O'Keefe, TRW; Lori Pressman, MIT; Bill Baker,* Raytheon Systems

The Functional Foods/Nutraceuticals Industry: Research Directions

Sunday PM

Organized by: Paul Lachance, Rutgers Univ; Nancy Childs, St. Joseph's Univ

Nancy Childs, St. Joseph's Univ; James E. Simon, Purdue Univ; Alan Conney, Rutgers Univ; Martin Lipkin, Weill Med Coll, Cornell Univ; Paul Lachance, Rutgers Univ; Rebecca B. Costello, NIH

The Future of High-Tech Industry in the National Capital Region

Sunday PM

Organized by: Roger R. Stough, GMU Speakers to be announced

Interconnectivity and Life in Cyberspace

Found in Cyberspace: Community for Women in Technical Fields

Saturday AM

Organized by: Carol B. Muller, Women in Engin Progs & Advoc; Yolanda Scott George, AAAS

Anita Borg, Inst for Women & Tech; Lee Sproull, NYU; Yolanda Scott George, AAAS; Peggy Boyle Single, MentorNet; Carol B. Muller, Women in Engin Progs & Advoc; Dorothy Bennett, EDC; Sara Kiesler, Carnegie Mellon Univ

Internet Bounty: How the Public Harvests Science and Health Information

Saturday PM

Organized by: Julie Ann Miller, Science News; Carol L. Rogers, Univ of MD-Coll Park

Ivars Peterson, Science News; Jon D. Miller, Northwestern Univ; Sharon Dunwoody, Univ of WI-Madison; Eve-Marie Lacroix, NLM; William Evans, GA State Univ

Battling the Crypto Wars

Sunday AM

Organized by: Susan Landau, Sun Microsyst Labs

Susan Landau, Sun Microsyst Labs; Cindy Cohn, McGlashan & Sarrail, P.C.; Whitfield Diffie, Sun Microsyst Labs; Deborah Hurley, Harvard Univ; Bruce McConnell, Exec Ofc of the Pres

Six Degrees of Separation: From Small-World Networks to the Web

Sunday PM

Organized by: Steven Strogatz, Cornell Univ

Duncan Watts, Santa Fe Inst; Gilbert Strang, MIT; Harrison C. White, Columbia Univ; Bernardo A. Huberman, Xerox Palo Alto Res Cntr

*= Invited, not yet confirmed

How Can Scientists Thrive with Paperless Publishing?

Monday AM

Organized by: Rob Kling, IN Univ

Barbara Kline Pope, NAP; Joseph I. Rosenbaum, Greenberg Taurig, Robin Peek, Simmons Coll; John P. Walsh, Univ of IL, Chicago; Pat Kreitz,* Tech Info Services Grp; Heath B. O'Connell, Stanford Lin Accel

Breaking Barriers: Research, Education, and the Web

Monday PM

Organized by: Robby Robson, OSU

Robby Robson, OSU; David Smith, Duke Univ; John Gardner, OSU; Andrew M. Odlyzko, AT&T Labs-Res

Life Science and the Science of Life

Amphibian Declines: Untangling the Complexity

Friday AM

Organized by: James Collins, ASU

James Collins, ASU; Karen Lips,* Southern IL Univ; Andrew Blaustein,* OSU; Elizabeth Davidson,* ASU; Cynthia Carey,* Univ of CO; Andrew Storfer,* Univ of FL

New Strategies for Understanding Ecosystems

Saturday AM

Organized by: Frances E. Sharples, OSTP; Michael Ruggiero, USGS

Rosina Bierbaum, OSTP; Warren M. Washington, NCAR; James Gosz, Univ of NM; Gladys A. Cotter, USGS; Donald Scavia, NOAA; Michael Dombeck* and Robert Lewis, USDA-FS

The Role of Water for Life in Precarious Circumstances

Saturday AM

Organized by: Frank H. Stillinger, Bell Labs Lucent Tech

Frank H. Stillinger, Bell Labs Lucent Tech; John A. Baross,* Univ of WA; Theresa Head-Gordon, LBNL; Peter A. Fields, Hopkins Mar Stn; Kenneth H. Nealson, NASA, JPL, Caltech

Ecosystem Services: A Free Lunch?

Saturday PM

Organized by: Rhonda Kranz, ESA; Katherine C. Ewel, Univ of HI, USDA-FS, Univ of FL

Katherine C. Ewel, Univ of HI, USDA-FS, Univ of FL; Rebecca Sharitz, Univ of GA, Savannah River Ecol Lab; Michael L. Davis, U.S. Dept of the Army; Stephen Buchmann, USDA, ARS, Univ of AZ; Jordi Bosch, UT St Univ, USDA-ARS

Origins and Nature of Sociality Among Nonhuman and Human Primates

Sunday AM

Organized by: Robert W. Sussman, Wash Univ; Audrey R. Chapman, AAAS

Richard Potts, Smith Inst; Ian Tattersall, Amer Mus of Nat Hist; Christopher Boehm,* USC; Karen B. Strier, Univ of WI; John M. Watanabe, Dartmouth Coll; Audrey R. Chapman, AAAS

The New Microbiology: Genes, Genomics, and Complex Ecosystems

Sunday PM

Organized by: Julian E. Davies, UBC

Rita R. Colwell, NSF; Julian E. Davies, UBC; Jeffrey H. Miller, UCLA; Eugene W. Nester, Univ of WA; W. Ford Doolittle, Dalhousie Univ; Richard Roberts, New Eng Biolabs

Back to the Future: Restoring **Ecosystems Impacted by Fisheries**

Monday AM

Organized by: Tony J. Pitcher and Daniel Pauly, **ÚBC**

James F. Kitchell, Univ of WI; Villy Christensen, North Sea Centre, Den; Rashid Sumaila, Michelson Inst of Econ; Andrew Trites, N Pac Univ Mar Mammal Res Cons; Nigel Haggan, UBC; Russ Jones, Cncl of the Haida Nat

Scientific Advice for Endangered Species Recovery

Monday PM

Organized by: Andrew A. Rosenberg, NOAA, NMFS; Usha Varanasi, NOAA NW Fish Sci Cntr

William Rodgers, Univ of WA; Jack Stanford, Univ of MT; Peter M. Kareiva, NOAA NW Fish Sci Cntr; Steven P. Cramor, S.P. Cramor & Assoc, Inc.; William E. Cooper, MSU; Usha Varanasi, NOAA NW Fish Sci Cntr

Looking Back to **Forecast the Future**

Unearthing Climate Variability from the Geologic Record

Friday AM

Organized by: Kathryn Moran, Jnt Ocean Instit, Inc.

Nick Pisias, OSU; Kathryn Moran, Jnt Ocean Instit, Inc.; Eugene Domack, Hamilton Coll; Richard Behl, CA State Univ-Long Beach; Larry Peterson, Univ of Miami; Lloyd Keigwin, Woods Hole Ocean Inst

The Initial Peopling of the New World

Friday PM

Organized by: C. Loring Brace, Univ of MI-Ann Arbor

David J. Meltzer, SMU; John H. Moore, Univ of FL; C. Loring Brace, Univ of MI-Ann Arbor; Theodore G. Schurr, SW Fdn for BioMed Res; Johanna Nichols, UC-Berkeley

Scientist's Workstations:

21st Century Expectations for Recording & Exchanging Scientific Information

Saturday AM

Organized by: Barbara E. Haner, UCLA; Charlotte R.M. Derksen, Stanford Univ

Judy Holoviak, AGU; Richard Johnson, Assn of Res Lib; Richard E. Lucier, UC-Ofc of the Pres; Jeff Dozier, UC-Santa Barbara; Ben Shneiderman, Univ of MD-Coll Park

Predicting More, Assuming Less—A Game Theoretic Approach to Inductive Inference

Saturday PM

Organized by: Yoav Freund, AT&T Shannon Labs; Rakesh V. Vohra, Northwestern Univ

Yoav Freund, AT&T Shannon Labs; Thomas Cover,* Stanford Univ; Rakesh V. Vohra, Northwestern Univ; David Haussler, UC-Santa Cruz

Ecological Forecasting: How Will Human Domination Impact Ecosystems This Century?

Sunday AM

Organized by: David Tilman, Univ of MN David Tilman, Univ of MN; Carla M. D'Antonio, UC-Berkeley; Andrew Dobson, Princeton Univ; David Schindler, Univ of Alberta; David Tilman, Univ of MN

Symposia

Anticipating Science and Technology's Futures

Sunday PM

Organized by: Stephen D. Nelson, AAAS; Clement Bezold, Inst for Alt Fut

Michael Marien, Futures Survey; Jerome C. Glenn, Amer Cncl for the UN Univ; Clement Bezold, Inst for Alt Fut; Kenneth W. Hunter, Univ of MD-Coll Park; Joseph F. Coates, Coates & Jarratt, Inc.

Plants, Population and Welfare: Economic Assessments of the Green Revolution

Monday PM

Organized by: Robert E. Evenson, Yale Univ Mahabub Hossain, IRRI; Douglas Gollin, Yale Univ; Prabhu Pingali and Michael Morris, CIMMYT; Paul W. Heisey, USDA, ERS; Tom Walker,* CIP; M. S.C. Bantilan, ICRISAT; Nancy Johnson, CIAT; Robert E. Evenson, Yale Univ; Uttam Kumar Deb, ICRI

Looking Beyond Earth

Space Access and Utilization Beyond 2000

Friday AM

Organized by: Yoji Kondo, NASA, Goddard; Freeman Dyson, Princeton Univ

Martin Kelly, Kelly Space; John Mankins, NASA; Leonard Jaffe, Earth Sat Corp; Kathie Olsen, NASA; Edward C. Stone, NASA, JPL; Sallie Baliunas, Harvard-Smith Cntr for Astrophys; Freeman Dyson, Princeton Univ; Jerry E. Pournelle, Byte Mag; Yoji Kondo, NASA, Goddard

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Join AAAS now and take advantage of the discounted member registration rates.

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Mars Exploration:

Recent Results and Future Plans Friday PM

Organized by: Louis D. Friedman, The Planetary Soc

David Paige, UCLA; Richard Zurek, NASA, JPL; Steven W. Squyres, Cornell Univ; Louis D. Friedman, The Planetary Soc; Jacques Blamont, CNES

New Views of the Invisible Universe: First Light From CHANDRA

Saturday AM

Organized by: Christine Jones, Harvard-Smith Cntr for Astrophys; Saeqa Dil Vrtilek, Harvard Univ, Smith Astrophys Observ

Christine Jones, Stephen Murray, William Forman, and Daniel Schwartz, Harvard-Smith Cntr for Astrophys; Mark Bautz and Kathy Flanagan, MIT Cntr for Space Res

Unpredictable Natural Events of Extraterrestrial Origin: Their Impacts on Humanity

Saturday AM

Organized by: Rolf M. Sinclair, Chevy Chase, MD

Rolf M. Sinclair, Chevy Chase, MD; Benny J. Peiser, Liverpool John Moore Univ, UK; Walter

Dean, USGS; W. Bruce Masse, LANL

Space Weather and Things that Go Bump in the Daytime

Saturday PM

Organized by: Gary Heckman and Barbara McGehan, NOAA

Ernest Hildner, NOAA Spc Envir Cntr; John Kappenman, Matatech Corp; Mike Golightly, Johnson Spc Cntr; Gary Heckman, NOAA

The Future of the Sun and the Ultimate Fate of the Earth

Sunday AM

Organized by: Lee Anne Willson, IA State Univ

Mark H. Pinsonnealt, OH St Univ; James F. Kasting, PSU; Lee Anne Willson, IA State Univ; Fred C. Adams, Univ of MI

Supermassive Black Holes in Galaxies

Sunday PM

Organized by: Richard F. Green, Natl Opt Astron Obsv; Claudia Megan Urry, STSI

Roeland van der Marel, STSI; Holland C. Ford, Johns Hopkins Univ; Claudia Megan Urry, STSI; Richard Mushotzky, NASA, Goddard; Richard F. Green, Natl Opt Astron Obsv

Mathematics and

Physical Science

The Reasonable Effectiveness of Mathematics

Friday AM, PM

Organized by: Lenore Blum, Carnegie Mellon Univ; Felix E. Browder, Rutgers Univ

Mathematics in Hollywood, Industry and Daily Life Phillip A. Griffiths, Inst for Adv Stdy; Tony D. DeRose, Pixar Animation Studios; Keith Devlin, Saint Mary's Coll of CA; K.C. Cole, LA Times; Rosemary E. Chang, Silicon Graphics Comp Syst

Paradigms for the 21st Century Steve Smale, Cty Univ of Hong Kong; Richard Karp, Univ of WA; Jennifer Tour Chayes, Microsoft, Inc.; Bernd Sturmfels, UC-Berkeley; Peter W. Shor, AT&T Res

Spintronics: Electronics for the New Millennium

Saturday PM

Organized by: Stuart Wolf and Donald Gubser, NRL

Stuart Wolf, Donald Gubser, and Berry Jonker, NRL; Stuart Parkin, IBM Almaden Lab; David Awschalom, UC-Santa Barbara; Ivan Schuller, UC-San Diego

The New Cosmology: Theory Confronts Observation

Sunday AM

Organized by: Rolf M. Sinclair, Chevy Chase, MD Clifford M. Will, Wash Univ St. Louis; Christopher W. Stubbs, Univ of WA; Andrew E. Lange, Caltech; Jeremiah P. Ostriker, Princeton Univ

Neutrino Experiments:

A New Window on the Universe

Sunday PM

Organized by: Anne Kernan, UC-Riverside Anne Kernan, UC-Riverside; Steven W. Barwick, UC-Irvine; Chang Kee Jung, SUNY-Stony Brook; Stanley G. Wojcicki, Stanford Univ; Stephen J. Parke, Fermi Natl Accel Lab

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	Saturday–Monday	3:00-6:00

Optics Enters the New Millennium

Monday AM, PM

Organized by: Charles W. Clark, NIST

Synthetic Materials, Nanofabrication,

and Molecular Medicine Todd Ditmire, LLNL; John D. Joannopoulos, MIT; Richard S. Muller, UC-Berkeley; Joseph W. Perry, Univ of AZ; Thomas Baer, Arcturus Engin, Inc.

The Magic of Matter Waves

Wolfgang Ketterle, MIT; William D. Phillips, NIST; Lene V. Hau, Rowland Inst for Sci; Deborah S. Jin, JILA

Natural History in the New Millennium

Integrated Science: The Natural History of the New Millennium

Friday PM

Organized by: Cathleen L. May, Geol Soc of Amer; Mary C. Barber, ESA; Jan Hern, USGS

Charles G. Groat, USGS; Richard Bernknopf, USGS, Cntr for Earth Sci Info Res; Cathleen L. May, Geol Soc of Amer; Edward O. Wilson,* Harvard Univ

Ethnobotany/Bioprospecting Effects on Drug Discovery in the Next Millennium

Saturday PM

Organized by: Marina Ratchford, AAAS; Mahabir Gupta, Interciencia Assn

Mahabir Gupta, Interciencia Assn; Gordon Cragg, NCI, NIH; Pei Shengji, Kunming Inst of Botany CAS, PRC; Kurt Hostettmann, Univ of Lausanne; Salomao O. Bandeira, Eduardo Mundlane Univ

Sociobiology at the New Millennium

Sunday AM, PM

Organized by: Francisco J. Ayala, UC-Irvine; Michael Ruse, Univ of Guelph

Bert Holldobler, Univ of Wuizburg; Sarah Hrdy, UC; Leda Cosmides, UC-Santa Barbara; David S. Wilson, SUNY-Binghamton; Edward O. Wilson, Harvard Univ; Terrence Deacon,* Boston Univ; Brian Skyrms, UC-Irvine; Steven Pope, Boston Coll; Philip Hefner, Zygon Cntr for Rel & Sci; Edward O. Wilson, Harvard Univ

*= Invited, not yet confirmed

Public Health and Medicine

New Knowledge on Homocyst(e)ine Could Change Public Health Policy and Medical Practice

Friday AM

Organized by: M. René Malinow, OR Reg Primate Res Cntr; Meir J. Stampfer, Harvard Schl of Pub Hlth

M. René Malinow, OR Reg Primate Res Cntr; Petra Verhoef, Wageningen Cntr for Food Sci; Donald W. Jacobsen, Cleveland Clin Fdn; Aleksandar Rajkovic, Baylor Coll of Med; Jacques Genest, Clin Res Inst of Montreal; P. Barton Duell, OR Hlth Sci Univ

About Faces: Regulating Function and Form

Friday PM

Organized by: Martha J. Somerman, Univ of MI Harold C. Slavkin, NIDR, NIH; Jill Helms, UCSF; Mary MacDougall, Univ of TX HSC, Dental Schl, Pediatric Dentistry; Roger Reeves, Johns Hopkins Univ; Jeffrey Murray, Univ of IA

Prophylaxis or Therapy: Are We Spending Our Research Dollars Wisely?

Friday PM

Organized by: Raymond E. Spier, Univ of Surrey Raymond E. Spier, Univ of Surrey; Louise B. Russell, Rutgers Univ; Tom Jefferson, UK Cochrane Cntr; Peter Paradiso, Wyeth-Lederle Vacc; George Poste, Smith Kline Beecham

Chocolate: Modern Science Investigates an Ancient Medicine

Saturday AM

Organized by: John W. Erdman, Univ of IL, Urbana-Champaign; Norman K. Hollenberg, Harvard Med

Louis Grivetti, UC-Davis; Harold H. Schmitz, Mars, Inc.; C. Tissa Kappagoda, UC-Davis; Cesar Fraga, Univ of Buenos Aires; Carl L. Keen, UC-Davis

Infections and Illicit Psychoactive Drug Abuse

Saturday AM

Organized by: Herman Friedman and Thomas W. Klein, Univ of So FL Coll of Med

Phillip K. Peterson, Univ of MN Med Schl; Toby Eisenstein, Temple Univ Schl of Med; Robert Donahoe, Emory Univ; Thomas W. Klein and Herman Friedman, Univ of So FL Coll of Med

Eradication of a Virus: Lessons from Polio Saturday PM

Organized by: Sondra Schlesinger, Wash Univ Schl of Med; Olen Kew, US-CDC

Ciro A. de Quadros, PAHO; Stephen L. Cochi and Olen Kew, US-CDC; Eckard Wimmer, SUNY-Stony Brook

Health Care, Economics, and Technology: An Evolving Balance

Sunday AM

Organized by: Norman Waitzman, Univ of UT

Robert Huefner, Univ of UT; Kenneth H. Keller, Univ of MN; John E. Wennberg, Dartmouth Coll; Ralph Synderman, Duke Med Sch; Susan Bartlett Foote, Univ of MN; Martin Brown, NCI, NIH; Clifford Goodman, Lewin Grp

Genome Strategies in Evolution and Disease

Sunday PM

Organized by: Lynn Caporale, Merck Res Labs

Lynn Caporale, Merck Res Labs; Richard Moxon, Univ of Oxford, UK; Nancy Maizels, Yale Univ; Margaret G. Kidwell, Univ of AZ; Lawrence A. Loeb, Univ of WA

Pain 2000: An Ancient Problem on the Verge of Solution?

Sunday PM

Organized by: Howard L. Fields, UCSF

Jeffrey S. Mogil, Univ of IL, Urbana-Champaign; Allan I. Basbaum, UCSF; M. Catherine Bushnell, McGill Univ; Howard L. Fields, UCSF

Dietary Salt: Past Policy and Current Science

Monday AM

Organized by: David A. McCarron, OR Hlth Sci Univ; Judith S. Stern, UC-Davis

David A. McCarron, OR Hlth Sci Univ; David A. Freedman, UC-Berkeley; Alexander Logan, Univ of Toronto; Michael Alderman, A Einstein Coll of Med; George Davey-Smith, Univ of Bristol, UK

Psychology's Prospects for Improving Physicians' and Patients' Medical Decision

Monday AM

Organized by: Robert M. Hamm, Univ of OK Hlth Sci Cntr

Vimla Patel, McGill Univ; Hal R. Arkes, OH Univ; Robert M. Hamm, Univ of OK Hlth Sci Cntr; Andre Kushniruk, McGill Univ; David R. Holtgrave, US-CDC

Information as of 09/28/99

Career Development Workshops

Providing valuable tools for any stage of your career!

Saturday, February 19

Senior Scientists and Engineers: <u>Volunteer Programs in Retirement</u> 10:30 AM–12:30 PM Org by L. Deno Reed and Jeffrey L. Charvat, AAAS

Taking Action on Young Scientist's
Career Development and Training12:00 PM-3:00 PMOrg by Jonghui K. Lee, UC, Berkeley

 Feeding Your Network to Feed You!

 2:00 PM-3:30 PM

 Org by Jaleh Daie, David & Lucile Packard Fdn

Sunday, February 20

New Careers in Biology: Building Biodiversity Informatics for the Millennium 1:00 PM-4:00 PM

Org by Bonnie C. Carroll, USGS & Info Intl Assoc

Alternative Career Paths: AAAS Fellowship Programs in Science Policy and the Mass Media 8:30 AM–11:30 AM Org by Claudia J. Sturges and Amiee King, AAAS

Monday, February 21

 Build a Career in Science with

 an International Internship

 2:30 PM-4:30 PM

 Org by Stephen Moles, Assoc for Intl Pract Trg

Post-Bac Alternatives for Science/ Math Majors: New MS Professional 9:00 AM-11:00 AM

Org by Sheila Tobias, Sloan Fdn

Preparing for Faculty Careers: What Every Doctoral Student Should Know 2:30 PM-4:30 PM

Org by Richard A Weibl, Assn of Amer Coll and Univ

Research Grants: Trolling for Dollars 8:30 AM-11:30 AM

Org by Geraldine Graves, AAAS

Does Nicotine have Beneficial Effects as a Medication in Childhood and Aging Diseases?

Monday PM

Organized by: Thomas J. Tighe and Paul R. Sanberg, Univ of So FL

Edward D. Levin, Duke Univ Med Cntr; Paul R. Sanberg, Univ of So FL; Paul Newhouse, Univ of VT; Kenneth G. Lloyd, SIBIA Neurosci Inc.

International Management of DDT: Understanding the Benefits and Risks in Malaria Control

Monday PM

Organized by: Ellen K. Silbergeld, Univ of MD James Willis,* IRPTC; Donald Roberts,* USUHS; Christopher Derosa,* USPHS; Mary Galinski,* Malaria Found Intl; Kathleen Walker,* US EPA; Erle Vanzie,* Dept. of Hlth, Belize; Clive Shiff,* Johns Hopkins Univ

Children and Chronic Diseases: Incentives for Solutions to Lifelong Problems

Tuesday AM

Organized by: Steven E. Kern, Univ of UT Edward B. Clark, Univ of UT; Brent James, Intermtn Hlth Care Inst for Hlth Care; Jack Winters, Cathol Univ; Joseph W. Thompson, Univ of AR Schl of Med; Joseph D. Andrade, Univ of UT; Barry Zallen, Harvard Vanguard Med Assoc

Science and Society

The Science of Baseball

Friday PM

Organized by: Albert H. Teich, AAAS; Stephen Jay Gould, Harvard Univ

Stephen Jay Gould, Harvard Univ; David G. Baldwin, Enterprise Data Solns, LLC; Bill James,* Winchester, KS; Robert K. Adair, Yale Univ; Tom Boswell, Wash Post; Terry Bahill, Univ of AZ

Three Jobs—Two People: 21st Century Solutions to Overwork

Friday PM

Organized by: Kathleen Christensen, A.P. Sloan Fdn; Robert Drago, Univ of WI-Milwaukee

Robert Drago, Univ of WI-Milwaukee; Patricia Raskin, Columbia Univ Tchrs Coll; Heidi I. Hartmann, Inst for Women's Pol Res; Rosalind C. Barnett, Brandeis Univ; Phyllis Moen, Cornell Univ

Analysis of Electronic Threats in Human Rights Information Management

Saturday AM

Organized by: Patrick Ball, AAAS

Bruce Schneier, Counterpane Syst; Ken Ward, UN Ver Miss, Guatemala; Oliver Mazariegos, Hum Rts Ofc/Archbishop of Guatemala; Philip Zimmermann, Network Assoc, Inc.

Technology and Inequality:

Options for Positive Action

Saturday PM

Organized by: Susan E. Cozzens, GA Tech

Robert Bullard, Clark Atlanta Univ; Gary Chapman, Univ of TX-Austin; Jabari Simama, Atlanta Cty Govt, GA Tech; Judith Sutz, Univ de la Repub, Uruguay; Rodrigo Arocena, Univ of the Republic, Uruguay; Anne C. Petersen, W.K. Kellogg Fdn

Bio Music: The Music of Nature and the Nature of Music

Sunday AM

Organized by: Stephen A. Hansen, AAAS; Patricia Gray, NAS

Carol Krumhansl, Cornell Univ; Roger Payne, WWF, LT Res Whale Cons Inst; Eugene Morton, Smith Inst Natl Zool Pk; Jelle Atema, Boston Univ; Patricia Gray, NAS

The Changing Interaction of Violent Crime and Punishment in the United States

Sunday AM

Organized by: Alfred Blumstein, Carnegie Mellon Univ

Alfred Blumstein, Carnegie Mellon Univ; Richard Rosenfeld, Univ of MO-St. Louis; Laura J. Dugan, GA State Univ; Daniel Nagin, Carnegie Mellon Univ; Steven Levitt, Univ of Chicago; Jeffrey Fagan, Columbia Univ

Politics, Migrations, and Ethnic Restaurants in Washington

Sunday PM

Organized by: Albert H. Teich, AAAS; Jill H. Pace, Amer Coll of RE Lwyrs

Donna Gabaccia, Univ of NC-Charlotte; Eve Zibart, Wash Post; Michael S. Teitelbaum,* A.P. Sloan Fdn

*= Invited, not yet confirmed



Separating the Men from the Boys: The Changing Border of Criminal Punishment of Adolescent Offenders

Sunday PM

Organized by: Jeffrey Fagan, Columbia Univ; Franklin Zimring, UC-Berkeley

Franklin Zimring, UC-Berkeley; Laurence D. Steinberg, Temple Univ; Jeffrey Fagan, Columbia Univ; Edward P. Mulvey, Univ of Pitts; Stephen Schulhofer, Univ of Chicago

Enviroshock: Systemic Appraisal of America's Health, Capability, Productivity, and Crime

Monday AM

Organized by: Richard H. Franke, Loyola Coll

Ernest J. Sternglass and Herbert L. Needleman, Univ of Pitts Sch of Med; Janette D. Sherman, W MI Univ; Raymond M. Jones, Francis G. Hilton, Richard H. Franke, Peter Lorenzi, and Tagi Sagafinejad, Loyola Coll; Donald P. Hayes and John H. Bishop, Cornell Univ; David W. Grissmer,* RAND; Ann Flanagan, GWU; Jay M. Gould,* Rad Pub Hlth Proj; Atallah Kappas,* Rock Univ Hosp; M. Harvey Brenner,* Larry Silverman, JHU, William L. Tullar,* UNC-Greensboro; H. William Vroman, Morgan State Univ; Peter Weish,* Univ Doz

Symmetry and Hierarchy in Science, Technology, Art, Design, and Humanities

Monday AM

Organized by: Arthur L. Loeb, Harvard Univ

Mireille Clapp, Boston, MA; Doris Schattschneider, Moravian Coll; Carol Bier, Textile Mus; Dorothy K. Washburn, MD Inst

Dynamics of Social Interactions

Monday PM

Organized by: Barbara Boyle Torrey, NAS, NRC; Charles Manski, Northwestern Univ

Charles Manski, Northwestern Univ; H. Peyton Young, Johns Hopkins Univ; Catherine C. Eckel, VA Tech; Robert A. Moffitt, Johns Hopkins Univ; Thomas C. Schelling, Univ of MC-Coll Park

Evolution, Science, and Society

Monday PM

Organized by: Thomas Meagher, Univ of St Andrews; James Hanken, Harvard Univ

Mary-Claire King,* Univ of WA; Michael T. Clegg, UC-Riverside; Margaret A. Riley, Yale Univ; Peter R. Crane, Field Mus; Rudolph A. Raff, IN Univ

The Science of Finding Landmines

Tuesday AM

Organized by: Saul Krasner, U.S. Cst Grd Acad; Kosta Tsipis, MIT

Regina Dugan, DARPA; Allen N. Garroway, US NRL; Nathan S. Lewis, Caltech; Jerry Bromenshenk, Univ of MT-Missoula

Science, Engineering, and Public Policy

Geoscience and Geophilosophy: New Theoretical and Practical Issues

Friday AM

Organized by: Carl Mitcham, CO Schl of Mines; Robert Frodeman, Univ of CO

Christine Turner, USGS; Kristin Shrader-Frechette, Univ of So FL; Daniel Sarewitz, Columbia Univ; Radford Byerly, Boulder, CO; Bruce V. Foltz, Eckerd Coll; Robert Frodeman, Univ of CO

Weapons of Mass Destruction and Scientific Responsibility

Friday AM

Organized by: Irving A. Lerch, APS

Matthew Meselson, Harvard Univ; Pervez Hoodbhoy, Quaid-e-Azam Univ, Univ of MD; Luis Masperi, Centro Latinoamero de Fisica, Brazil; George Rathjens, Pugwash; John P. Holdren,* Harvard Univ

The Mathematics of Politics: Census, Representation, and Voting

Friday PM

Organized by: Leon H. Seitelman, Univ of CT

Leon H. Seitelman, Univ of CT; David A. Freedman, UC-Berkeley; David Housman, Goshen Coll; Steven J. Brams, NYU; Donald G. Saari, Northwestern Univ

Scientific Collaboration in Cuba-Opportunities and Obstacles

Saturday AM

Organized by: Elisa Munoz, AAAS; Zafra Lerman, ACS

Gillian Gunn, Georgetown Univ; Stanley N. Katz, Princeton Univ; Gail Reed, Med Educ Coop Cuba; Ismail Clark, Cuban Acad of Sci; Michael L. Smith, Carib Biodiv Prog; Elisa Munoz, AAAS

The Precautionary Principle: When Is It Appropriate to Presume "Guilty Until Proven Innocent"

Saturday AM, PM

Organized by: Shanna H. Swan, Univ of MO-Columbia

Shanna H. Swan, Univ of MO-Columbia; Paul K. Dayton, Scripps Inst; Mark Fogarty, NOAA, NMFS; Ellen K. Silbergeld, Univ of MD; Richard Jackson, NCEH; Lynn R. Goldman, Johns Hopkins Univ; Gilbert S. Omenn, Univ of MI; John Graham, Harvard Cntr for Risk Analysis; Dale Hattis, Clark Univ; Sander Greenland, UCLA; Charles Poole, Univ of NC; Lawrence H. Goulder, Stanford Univ; Lester Lave, Carnegie Mellon Univ; Carl Cranor, UC-Riverside; Jonathan B. Wiener, Duke Univ

Scientists on Capitol Hill: A New Model

Sunday AM

Organized by: Donna M. Gerardi, NAS, NRC; Mary Woolley, Research!America

Jane Maienschein, ASU; Glenn Hamer, U.S. House of Rep; Lattie Coor, ASU; Mary Woolley, Research!America; M. R. C. Greenwood,* UC-Santa Cruz; Karen Hein, Wm T Grant Fdn

Spotlight on Science at State: Where Science Fits in Foreign Policy

Monday AM

Organized by: Brooke C. Holmes, State Dept

Cathleen Enright, State Dept; Mark Hambley, UN Comm on Sust Dev; Peter O. Thomas and Ann Harrington, State Dept; Tim Beach, Georgetown Univ; James E. Goodby, Carnegie Mellon Univ, MIT; Victor Alessi, DynMeridian Corp

Developing "Science Savvy" at the Department of State

Monday PM

Organized by: Richard W. Getzinger and Elizabeth J. Kirk, AAAS

Robert A. Frosch, Harvard Univ, JFK Schl of Govt; Robert Gallucci, GWU; R. James Cook, WA State Univ; Ann K. Solomon, APCO Assoc; Deborah Hurley, Harvard Univ

Science and Technology Roadmaps

Tuesday AM

Organized by: Ellen H. Goldberg, Santa Fe Inst Robert W. Galvin, Motorola; S. R.J. Brueck, Univ of NM; Floyd E. Bloom, Scripps Res Inst, AAAS, & *SCIENCE*; Martha A. Krebs, U.S. DOE

(Information as of 09/28/99 www.aaas.org/meetings



The Drosophila Genome

Friday AM

Organized by: J. Craig Venter, Celera Genomics Corp

Mark Adams, Celera Genomics; Edward Lewis,* Caltech; Eugene Myers, Celera Genomics; Gerald Rubin, UC-Berkeley

The Millennial Mind

Friday AM

Organized by: Michael S. Gazzaniga, Dartmouth Coll

Paul Glimcher, NYU; Renee Baillargeon, Univ of IL, Urbana-Champaign; Nancy Kanwisher, MIT; Michael S. Gazzaniga, Dartmouth Coll

Synapses, Memory and

Development of the Brain

Friday PM

Organized by: Richard L. Huganir, Johns Hopkins Univ, HHMI

Richard L. Huganir, Johns Hopkins Univ, HHMI; Robert Malenka, Stanford Univ Schl of Med; Hollis T. Cline, Cold Spg Hrbr Lab; Mark R. Bear, Brown Univ & HHMI; Susumu Tonegawa, MIT

Neurogenesis: The Generation of New Neurons in the Adult Brain

Saturday AM

Organized by: Fred H. Gage, Salk Inst

Pasko Rakic, Yale Univ; Fernando Nottebohm, Rockefeller Univ; Fred H. Gage, Salk Inst; Elizabeth Gould, Princeton Univ; Arturo Alvarez-Buylla, Rockefeller Univ

Varieties of Cognitive Memory and Their Neural Substrates

Saturday PM

Organized by: Mortimer Mishkin, NIMH, NIH

Mortimer Mishkin and Elisabeth A. Murray, NIMH, NIH; Faraneh Vargha-Khadem, Univ Coll Lon Med Schl; Eleanor A. Maguire, Wellcome Dept of Cog Neurol; Endel Tulving, Univ of Toronto, Can

Drug Discovery: The Promise of the New Millennium

Sunday AM

Organized by: Barrie Hesp and Kelvin Cooper, Pfizer Inc.

Brian Metcalf, SmithKline Beecham Pharm; Stephen Kaldor, Lilly Coporate Cntr; Peppi Prasit, Merck Frosst Canada; Nick Terrett, Pfizer Inc.; Mark Murcko, Vertex

Nanotechnology for the 21st Century

Sunday AM

Organized by: S. Thomas Picraux, Sandia Nat Lab

Joseph Jasinki, IBM; Steven M. Block, Princeton Univ; Jene A. Golovchenko, Harvard Univ; Jeff Brinker, Sandia Nat Lab; Mihail C. Roco, NSF

The New Era of Chemical, Structural, and Functional Genomics

Sunday PM

Organized by: Wilma K. Olson, Rutgers Univ

Chris Sander, Millennium Predictive Med, Inc; Craig Nevill-Manning, Rutgers Univ; Stephen K. Burley, Rockefeller Univ, HHMI; Charles R. Cantor, Sequenom, Inc.; David C. Schwartz, NYU; Matthew D. Shair, Harvard Univ

The Thinking, Feeling Brain

Sunday PM

Organized by: Robert Desimone, NIMH, NIH Joseph LeDoux, NYU; Robert Desimone, NIMH, NIH; Judith Rapoport, NIH; Paula Tallal, Rutgers Univ

The Revolution in Cancer Developmental Therapeutics

Monday AM

Organized by: John M. Cassady, OH St Univ

Edward A. Sausville, DCTD, NCI; Susan Horwitz, A Einstein Univ; C. Thomas Caskey, Merck & Co, Inc.; Gary Stoner, OSU-NCI Comp Cancer Cntr

Sign up now!

Four ways to Register!

by Web

www.aaas.org/meetings

by Fax 202-842-1065

by Phone **202-326-6450**

or use the

Special Registration card in this issue of *Science* and AAAS pays your postage!



*= Invited, not yet confirmed

vance Registration For

2000 AAAS Annual Meeting and

Sign up Now! Deadline: December 20, 1999

Science Innovation Exposition February 17-22, 2000 Washington, DC

1. Registration Information (Please type or pril	nt clearly)	
First Name	Last Name	
Institution		
Address		
City	Daytime Phone	—
State		
Zip	E-mail Address	
Country		SCI

Check here if you have special needs due to a disability; AAAS will contact you prior to the meeting.

	AAAS Member ¹	Non-Member
Regular	□ \$245	□ \$295
Student ¹	□ \$50	□ \$70 ⁻
Postdoc	□ \$190	□ \$230
K-12 Teacher'	□ \$190	□ \$230
Retired	□ \$190	□ \$230
 Seminar Only: Specified se Genome Seminar Forum for School Science 	erninar, pius career work □ \$195 □ \$195	□ \$245 □ \$245
. One Day Only: Passport ac	cess for one day only.	
All Registrants	□ \$124	□ \$158
Please specify day:	🗆 Fri 🗆 Sat 🗆	🗆 Sun 🗆 Mon 🗆 Tu

E. Exhibition Only: □ \$0 □ \$0 All Registrants

3. Member/Special Rate Verification¹

To qualify for AAAS Member rate, indicate: AAAS Member Number

(On your membership card or SCIENCE label)

To qualify for student rate, indicate: Expected year of graduation _

Institution

To gualify for postdoc or K-12 teacher rate, indicate:

Institution

Chair or Principal's name ____

To qualify for retired rate, indicate: Retirement Year

Birth year ____

4. AAAS Membership Dues² (Optional)

If you are not a AAAS member, you can join now by checking the appropriate box below and take advantage of the discounted member registration fees. You will also get a year's subscription (51 issues) to the journal SCIENCE at the 1999 rate.

Category	USA	Canada	International
Regular	□ \$110	🗆 \$176.55	□ \$200
Student	□\$62	□ \$125.19	□ \$152 [·]
Postdoc	🗆 \$ 87	□ \$151.94	🗆 \$177
K-12 Teacher	🗆 \$ 87	□ \$151.94	🗆 \$177
Retired	🗆 \$ 75	□ \$139.10	□ \$165

5. Payment Total³

Please add the amounts from the box(es) you have checked in sections 2 and 4 and write in the total amount due below:

TOTAL AMOUNT \$

🗆 🗆 Check Enclosed (made payable to "A	AAAS")* 🗆 Original Purchase Order Enclosed
Credit Card: 🗆 VISA 🛛 🗆 MasterCard	American Express
(No other cards accepted)	
Credit Card Number	

Expiration Date ___ Signature ___

6. How to Register

Do NOT mail hard copy if you register via fax or phone

Fax: (credit card payment only) Fax this form to 202-842-1065 Phone: (credit card payment only) Call 202-326-6450

Mail: Send this form to:	Registrar AAAS Meetings Department 1200 New York Avenue, NW Washington, DC 20005
	USA

Web: Use the online registration form at www.aaas.org/meetings

Important Notes:

Members, students, postdocs, K-12 teachers, and retirees must complete the verification information in section 3 to qualify for the special registration rates. (1)

- (2) Membership dues indicated herein are the 1999 rates, which are guaranteed through February 22, 2000 for those registering for the annual meeting \$62 of dues plus international postage are allocated to SCIENCE. Please allow up to four weeks for receipt of your first issue. Canadian rates include GST #125488122.
- Cancellations must be received in writing by January 17, 2000. No refunds will be made for cancellations received after this date. Refunds are subject to a \$25 processing fee and will be issued after the meeting. (4) Checks must be in United States currency and be payable on a United States bank.

See special insert registration form in Science for Paid Postage

Reservations

Hotels

Marriott Wardman Park

2660 Woodley	Park Road, NW
Single	\$140.00
Double	\$160.00
Triple	\$190.00
Quad	\$220.00

Omni Shoreham

2500 Calvert Street, NW		
Single	\$141.00	
Double	\$165.00	
Triple	\$189.00	
Quad	\$213.00	

All meeting events will be held in these two co-headquarter hotels, which are located across the street from each other.

U.S. and Canadian Attendees

To make hotel reservations, call the Washington DC Convention and Visitor Association (WCVA) toll free weekdays, 9:00AM–5:00PM, Eastern time at 1-800-535-3336. <u>Reservation requests must be made by January 18, 2000.</u>

International Attendees Only

International delegates may make reservations by calling the WCVA at (202) 842-2930 or by faxing the information requested below to Convention Housing's 24-hour fax number, (202) 289-8079. A written confirmation will be sent to you. Please be sure to include your fax number and provide all of the information requested below.

Information Needed for Reservation

Please have the following information available <u>prior</u> to calling for reservations.

- Name of convention (AAAS Annual Meeting)
- · First and second choice of hotels
- Arrival and departure dates
- Number of rooms required
- Number of people in party
- Name(s) of all occupants in room(s)
- Type of room (single, double, triple, quad)
- Type of bed (one double, two doubles, king)Special accommodations
- (smoking/non-smoking, handicapped accessible)Credit card type, account number,
- name printed on card, expiration date • Address (*home or company*)
- Daytime phone number (area code first)

Deposit

A \$125.00 per room deposit is required for all reservations. The deposit amount is payable by credit card or check only.

Credit Card

Your credit card will be immediately charged the \$125.00 per room deposit. Most major credit cards are accepted. Your room confirmation will be sent to you upon acceptance of your credit card charge. For groups requesting six (6) rooms or more, only one credit card will be accepted for the deposit. The charge on your credit card statement will read: Convention Housing Deposit–Washington, DC.

Check

An invoice for the \$125.00 per room deposit will be mailed to you. Payment must be received within 15 days of the invoice date or your reservation will be cancelled. Do not send payment without the invoice stub. Your room confirmation will be sent to you upon acceptance of your check. Returned checks are subject to a \$25.00 service charge.

Changing Your Reservation

On or before January 18, 2000, all changes must be made directly with the WCVA Housing Service. After January 20, 2000, changes should be made directly with your assigned hotel.

Cancellation and Refunds

Cancellations made on or before January 18, 2000 must be made with WCVA Housing Service and will be refunded in full. The WCVA Housing Service will issue the refund. Cancellations made after January 20, 2000 and <u>prior</u> to 72 hours of arrival should be made with your assigned hotel. A \$12.50 fee will be deducted from your deposit and the hotel will issue the refund. Your reservation must be canceled 72 hours <u>prior</u> to arrival or the entire \$125.00 per room deposit will be forfeited.

Deadline

Reservation requests must be made by January 18, 2000.

Questions About Your Reservation?

Please contact the WCVA Housing Service, 1212 New York Avenue, NW, Washington, DC 20005; Fax: (202) 289-8079; Phone: 1-800-535-3336.

Discount Air/Rail Fares

Save up to 15% on air fares or 10% on rail fares!

The following co-official airlines and Amtrak are offering special discounts on travel to and from the AAAS Annual Meeting in Washington, DC:

United Airlines

Save 5% off the lowest applicable discount fares (including First Class) or save 10% off unrestricted mid-week coach fares purchased 7 days in advance. Buy your ticket at least 60 days in advance and you'll save an additional 5%. Discounts are good for travel on United Airlines, United Express or Shuttle by United, to and from DC-area airports (Dulles, Reagan National, or Baltimore–Washington) during February 12–27, 2000. Seats are limited and some restrictions may apply. For details and reservations, you or your travel agent should call 1-800-521-4041 (7 days a week, 7AM–midnight ET) and give the agent the following United Airlines Meeting ID Code: <u>5551W</u>.

US Airways

Save 5% off First Class, Envoy Class, or any published US Airways promotional round-trip fares. Or save 10% off unrestricted coach fares purchased 7 days in advance. Buy your ticket at least 60 days in advance and you'll save an additional 5%. If you can't meet the restrictions of promotional fares, you can still save with exclusive discounted zone fares for travel from the continental U.S. or Canada (minimum 2-night stay, no Saturday-night requirement, 7-day advance purchase). Discounts are good for travel on US Airways, US Airways Express, US Airways Shuttle, or Metrojet, to and from DC-area airports (Dulles, Reagan National, or Baltimore-Washington) during February 12-27, 2000. Seats are limited and some restrictions may apply. For details and to make reservations, you or your travel agent should call toll free at 877-874-7687 (7 days a week; 8AM-9:30PM ET) and give the agent the following US Airways Gold File number: 20121155.

Amtrak

Save 10% off the lowest applicable rail fare. Discount is valid for all regular fares (except peakhour Metroliner service, Custom or Club Class service, or Auto Train) for travel to and from Washington, DC, during February 14–24, 2000. To make reservations at the discounted rates, you or your travel agent should call 1-800-872-7245 and give the agent the following fare code: X-44L-951.

Discount Car Rental

AAAS has negotiated special discounts on car rentals for AAAS members attending the Annual Meeting. Dollar and Hertz are pleased to provide the following rates to AAAS members:

Dollar

Dollar offers AAAS members a 15% discount off daily, weekly, and weekend SENSIBLE RATES for Economy–full size vehicles and 5% discount off daily, weekly, and weekend retail rates for Premium, Luxury, and Minivan car classes. SENSIBLE RATES are available at all participating Dollar locations when vehicles are returned to original renting location. SENSIBLE RATES include unlimited mileage, however, geographic driving restrictions may apply. On weekends and during certain holiday periods, SENSIBLE RATES are not available in the New York metro area, New York City airports, and Newark, New Jersey.

Hertz

Hertz offers AAAS members a 15% discount on Hertz Daily Member Benefit Rates (all car classes), a 10% discount on Hertz standard daily, weekend, weekly, and monthly rates (all car classes), and a 5% or greater discount on Hertz leisure daily, weekend, weekly, and monthly rates (all car classes).

Reservation Phone Numbers in the USA

Dollar:	1-800-800-4000
Hertz:	1-800-654-2200

Reservations on the Internet

Members can also make reservations or view additional information on the Internet:

Dollar:	http://www.dollarcar.com
Hertz:	http://www.hertz.com

Important!

When making reservations, please make sure to use your special Dollar or Hertz AAAS Identification code provided in your membership package to get our reduced rate. If you do not have this code, please contact membership@aaas.org or (202) 326-6417 and an AAAS customer service representative will provide you with this information. Members must also present proof of AAAS membership at the time of rental.





General Information

Meeting Location

Marriott Wardman Park

2660 Woodley Road, NW Washington, DC 20008

Site of: Concurrent Sessions, Topical Lectures, Science Innovation, Genome Seminar, Exhibition, Meeting Registration, Poster Sessions, Career Fair, and Resource Room for Disabled Registrants.

Omni Shoreham

2500 Calvert Street, NW Washington, DC 20008

Site of: Concurrent Sessions, Topical Lectures, and Forum for School Science.

The Marriott Wardman Park and the Omni Shoreham are co-headquarters for the 2000 Annual Meeting. The hotels are located directly across the street from each another.

Plan to be there!

Science Career Fair

Monday, February 21 11:00AM-4:00PM Marriott Wardman Park Hotel

The AAAS Science Career Fair is FREE to all candidates! Plan to be there! Employers will be on-site in Washington, DC to talk with candidates about the excellent job opportunities in the biotechnology and pharmaceutical industries. Make sure to bring multiple copies of your resume and visit as many employers as you wish. Be sure to sign up on-site for Science's Job Alerts Service, a free e-mail job notification service.

Also Available

Career Development Workshops conducted by top science development professionals. (Workshop registration is \$10 for AAAS members and \$25 for non-members. Workshops will be held Saturday-Monday. See page 14 for details)

Employers

For information about recruiting at the Science Career Fair, call (202) 326-6534.

Sponsored by AAAS and Science Magazine

On-Site Registration

Registration for the 2000 Annual Meeting will be located in the Atrium on the Exhibit level of the Marriott Wardman Park.

Hours are as follows:	
Thursday	
February 17	2:00PM-7:00PM
Friday	
February 18	7:00AM-7:00PM
Saturday–Monday	
February 19-21	7:30AM-5:00PM
Tuesday	
February 22	7:30AM-10:00AM
,	

Exhibition

The Exhibition will be located in the Marriott Wardman Park's Exhibit Hall C.

Hours are as follows: Friday	
February 18	4:00PM-6:30PM
Grand Opening Reception	5:00PM-6:30PM
Saturday–Sunday	
February 19–20	10:00AM-3:00PM
Monday	
February 21	9:00AM-2:00PM

Internet Access Center

The Internet Access Center, located in the AAAS Exhibit Hall, will be open during exhibition hours. Multiple stations will be available for attendees to check e-mail or surf the web.

Parking

Both the Marriott Wardman Park and the Omni Shoreham have on-site parking. Parking rates for hotel guests are \$14 per day.

Barrier-Free Environment

Accommodations for persons with disabilities are provided upon request at all general lectures and other sessions. Services include interpreters for persons who are deaf or hearing impaired, audiotaped highlights, and mobility assistance within and outside the conference facilities as needed. In addition, a resource room for persons with disabilities will be available in Suite 8206 in the Marriott Park Tower. Please make sure to check the special assistance box on the meeting registration form.

Airport Transportation

Baltimore Washington International (BWI)

30 miles north of Washington.

By train: MARC and Amtrak trains run between the airport and Washington's Union Station (30-minute ride). For MARC schedules and fares: 1-800-325-7245. For Amtrak schedule and fares: 1-800-872-7245. Shuttle buses take you between the BWI Rail Station and airport terminal.

SuperShuttle: Door-to-door service to your hotel. One-way fares range from \$28 to \$30. Service from the airport departs within 60 minutes of your request from the lower level of Pier C: 1-800-258-3826.

Taxi service: Approximately \$45 and a 45-minute ride to Washington: 1-800-435-9294

Dulles International (IAD)

28 miles west of downtown Washington.

Metrorail: A Washington Flyer Express bus links the airport to the West Falls Church Metrorail station. Express buses leave between 6:30AM and 11:00PM weekdays and 8:00AM to 11:00PM weekends. One way fare is \$8: (202) 637-7000. From West Falls Church, take the Orange Line to Metro Center and then Red Line to Woodley Park station.

SuperShuttle: Door-to-door service to your hotel: 1-800-258-3826.

Taxi service: Approximately \$45 and a 35-minute ride to Washington.

Ronald Reagan Washington National (DCA)

Just across the Potomac River from downtown Washington.

Metrorail: Take the Yellow Line to Gallery Place-Chinatown station and then Red Line to Woodley Park station: (202) 637-7000.

SuperShuttle: Door-to-door service to your hotel: 1-800-258-3826

Taxi service: Approximately \$9 and a 20-minute ride to downtown.

Exhibitors

Opportunities Available!

Does your organization have a Marketing, Outreach, or Education Department that wants to reach science and engineering professionals of all disciplines?

Let them know that the 2000 AAAS Annual Meeting and Science Innovation Exposition is a good place to do just that.

There are several ways to get your message or image across to those who attend the meeting.

- Exhibit Hall Booths
- Meeting Sponsorships
- Advertising in the 2000 Program/Abstract Book Many opportunities still remain! For more information and a prospectus contact:

Ryan Strowger, AAAS Exhibit Sales Manager Phone (202) 326-6736 E-mail rstrowge@aaas.org For more details about these opportunities, visit www.aaas.org/meetings

Exhibitors at a Glance

Academia Book Exhibits American Association of Physics Teachers American Chemical Society American Geological Institute Arizona Collaborative for Excellence in the Preparation of Teachers (ACEPT) Association of American University Presses The Boeing Company Brock Optical Inc. Cold Spring Harbor Laboratory/ DNA Learning Center Columbia University Press Cricket Magazine Group DoD SBIR/STTR Program Dorling Kindersley Family Learning Ecumenical Roundtable Foundation for Genetic Medicine, Inc. W.H. Freeman and Company Graduate Women in Science Harbor Branch Oceanographic Institution Harvard University Press Heldref Publictions Howard Hughes Medical Institute Island Press Johnson Space Center, Space and Life Sciences Directorate

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21



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POSITIONS OPEN

CHAIR, DEPARTMENT OF **BIOCHEMISTRY AND** MOLECULAR BIOLOGY University of North Dakota

The University of North Dakota School of Medicine and Health Sciences invites applications and nominations for the position of CHAIR of the Department of Biochemistry and Molecular Biology. We seek an outstanding medical scientist with a strong research record in an area of biochemistry and molecular biology who has a proven ability to obtain extramural support. The successful candidate will complement, expand and strengthen existing areas of research in the department, and will be expected to participate in medical, graduate, and allied health education, and therefore must be committed to excellence in teaching. The applicant should also possess interpersonal and leadership skills in mentoring faculty, directing students, and performing administrative duties.

The Chair will oversee a department whose active research interests include enzyme regulation, proteinprotein interactions, cyclic nucleotide interactions, drug resistance, transporter proteins, mitochondrial enzymes, effects of oxidative stress, protein phosphorylation, and gene regulation. The department offers M.S., Ph.D., and M.D./Ph.D. degrees, and is involved in the education of medical students. Further information is available at: website: http://www. med.und.nodak.edu/depts/biochem/home.htm.

Review of applications will begin immediately and the search will remain open until the position is filled. The position will be available July 1, 2000. Applicants should submit a detailed curriculum vitae, a statement that addresses administrative philosophy, research goals and teaching interests, and the names and addresses of three references to:

Dr. Roger Mclvold Professor and Chair of the Department of Microbiology and Immunology, And Chair of the Search Committee c/o Office of the Dean School of Medicine and Health Sciences University of North Dakota Box 9037 Grand Forks, ND 58202-9037

The University of North Dakota is an Equal Opportunity/ Affirmative Action Institution.

TENURE-TRACK POSITION MOLECULAR AND CELLULAR BIOLOGY PHARMACOLOGY/BIOCHEMISTRY

The Department of Basic Sciences and Oral Research at the University of Colorado School of Dentistry invites applications for a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level. Applicants should have a Ph.D. or equivalent degree with postdoctoral research experience in the area of molecular biology, biochemistry, and/or molecular pharmacology. Individuals with research interests in the signal transduction pathways involved in mammalian developmental biology, cell growth, and differentiation and/or programmed cell death should apply. Prior teaching experience is desirable. The successful applicant will be expected to develop an externally funded research program and contribute to the teaching program at the graduate and undergraduate level. Joint appointment will be available to a suitable applicant in the Departments of Biochemistry and Molecular Genetics, Pharmacology, or Cellular and Structural Biology, in the School of Medicine. Applicants should submit curriculum vitae, brief description of research interests, reprints, and three letters of reference forwarded to:

Chair, Faculty Search Committee Department of Basic Sciences and Oral Research University of Colorado School of Dentistry 4200 East 9th Avenue, C-286 Denver, CO 80262

For full consideration completed applications should be received by December 20, 1999 The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.

29 OCTOBER 1999 VOL 286 SCIENCE www.sciencemag.org

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA SANTA BARBARA ENDOWED CHAIR NEUROBIOLOGY/DIRECTORSHIP

The Department of Molecular, Cellular and Developmental Biology invites applications for a tenuretrack faculty appointment at the Senior level. In addition to appointment in the Department, the appointee will also become the first holder of the Harriman Chair in Neuroscience and the new Director of the Neuroscience Research Institute, an interdisciplinary research unit with an emphasis on cellular and molecular neuroscience. Applications are welcome in all areas of neurobiology, but individuals with research programs that will strengthen existing efforts in neural development, ion channel/membrane biology, neurodegeneration, or vision, and those with an emphasis on cellular and molecular mechanisms are especially encouraged to apply.

A Ph.D. or equivalent is required. The successful candidate will be expected to have an established track record of research excellence and funding, and to maintain a vigorous independent research program. The appointee will be expected to participate in undergraduate and graduate instructional activities within the department, and to provide direction for the expansion of neuroscience research within the Institute. Information about the Neuroscience Research Institute (and links to relevant departments) can be found at: website: http://lifesci.ucsb. edu/~nriweb/.

Applicants should submit a letter describing research and teaching interests accompanied by a curriculum vitae, representative publications, and the names and addresses of three individuals who will be prepared to provide letters of recommendation to:

Neurobiology/NRI Director Search Committee Department of Molecular, Cellular, and Developmental Biology University of California Santa Barbara, CA 93106

The position will remain open until filled. Website: http://lifesci.ucsb.edu/MCDB/facrecruit.html. University of California, Santa Barbara is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS IN MOLECULAR, CELL OR DEVELOPMENTAL BIOLOGY

The Department of Biological Sciences at the University of Pittsburgh anticipates making three fulltime tenure-track faculty appointments in any area of molecular, cell, or developmental biology. The posi-tions would begin with the fall term 2000-2001, subject to budgetary approval. Applicants with interests in signal transduction, regulation of transcription, or the cell cycle are especially encouraged to apply. These appointments are expected to be made at the starting ASSISTANT PROFESSOR level, but experienced candidates with outstanding records may be considered at higher rank. The successful candidates must have a Ph.D. and substantial postdoctoral experience and will be expected to establish an extramurally funded research program, train graduate students, and participate in undergraduate education. We seek excellence in teaching and research. In order to ensure full consideration, applications must be re-ceived by December 7, 1999. Applicants should send a curriculum vitae along with a summary of research interests and goals, up to three reprints of relevant publications, and arrange to have at least three letters of reference sent to:

Search Committee Department of Biological Sciences University of Pittsburgh Pittsburgh, PA 15260 Telephone: 412-624-4350

Further information on the Department of Biological Sciences is available at: website: http://www. pitt.edu/~biology. The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer. Women and members of underrepresented minority groups are especially encouraged to apply.



POSITION ANNOUNCEMENT

PROJECT COORDINATOR – INTEGRATED CONTROL OF LIVESTOCK DISEASES Ref.: - PCICLD/09/99

General:

The International Livestock Research Institute (ILRI) is a non-profit international research organisation, serving a global mandate to improve productivity of small-holder livestock systems and to protect the natural resources that support these systems. ILRI has staff and activities in Latin America, Asia and Africa, headquarters in Nairobi and principal facilities in Kenya and Ethiopia. ILRI is one of the 16 research centres supported by the Consultative Group of International Agricultural Research (CGIAR), which comprises over 55 member countries, international organisations and foundations. The co-sponsors for the CGIAR are the World Bank, the Food and Agriculture Organization (FAO), the United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP).

The Position:

ILRI is recruiting a livestock scientist to lead its research in animal health and livestock disease control. This is a senior position in the Institute reporting to the Deputy Director General (Programmes). The successful candidate will lead multi-disciplinary research in vaccines and diagnostics for improved control of diseases of livestock in the tropics (with current emphasis on haemo-parasitic diseases) and develop improved strategies for disease control through quantitative epidemiology and economic impact assessment.

The Project Coordinator will be responsible for providing intellectual leadership, and planning, coordinating and managing the research from product development to delivery. This will include: prioritising research; developing project plans and budgets; obtaining external funds; developing linkages with external research groups to establish critical research capacity and with the private sector for product development and marketing; and developing appropriate linkages with national programmes to identify research priorities and ensure effective delivery of products and technologies. In order to develop an integrated programme, close collaboration will be required with other research groups in ILRI including those involved with: genetics and feeds research, systems analysis and impact assessment, socio-economic policy and production systems.

Current research capacities that the Project Coordinator will oversee include molecular biology, immunology, antigen identification and delivery, genomics, epidemiology, decision support systems, and vaccine/diagnostics delivery. Resources include advanced research laboratories, electron microscopy, biometrics, small and farm animal facilities, and tsetse and tick rearing facilities.

Qualifications:

A PhD or equivalent with sound knowledge of tropical animal health, and appropriate specialisation in veterinary immunology, parasitology, epidemiology, and/or vaccine production are required. Successful experience in funding proposal development, research management and team building and significant publication record are essential. Good communication and interpersonal skills, an ability to work in a multi-disciplinary and multi-cultural society and fluency in spoken and written English are also essential.

Location:

ILRI-Nairobi, Kenya

Conditions:

The initial contract for this position will be for a three-year term with the possibility of extension. ILRI offers a competitive compensation package, dependant on experience, that is paid in US dollars.

Applications:

Applicants should send a cover letter, curriculum vitae and the names and addresses (including telephone, fax and email) of three referees who are knowledgeable about the candidate's professional qualifications and work experience to the Human Resources Manager, ILRI, P.O. Box 30709, Nairobi, Kenya; Telephone: 254-2-630743; Fax: 254-2-631499; e-mail: ILRI-KENYA@cgiar.org. The name and reference number of the position for which the application is made should be clearly marked on the envelopes of mailed, or on the fax or email applications. Screening of applications will begin on 1st December 1999 and will continue until the post is filled.

To find more about ILRI, visit our Website at http://www.cgiar.org/ilri.

ILRI is an equal opportunity employer. Qualified women and professionals from developing countries are particularly encouraged to apply.

FACULTY POSITIONS

Department of Microbiology and Immunology, Department of Biomedical Engineering, and Center for Infectious Diseases

The University of North Carolina at Chapel Hill BIOINFORMATICS/GENOMICS and BACTERIAL PATHOGENESIS

Applications are invited for two tenure-track or tenured faculty appointments in the School of Medicine of The University of North Carolina at Chapel Hill, beginning summer 2000, in Bioinformatics/Genomics and Bacterial Pathogenesis.

Bioinformatics/Genomics: We seek candidates with expertise in the development of genomic analysis tools and/ or application of such tools to biological problems. This position will be a joint appointment in the Departments of Biomedical Engineering (http://www.bme.unc.edu/) and Microbiology and Immunology (http://www.med.unc.edu/ wrkunits/2depts/microimm/), and will include responsibility for teaching in one or both of those departments. The primary appointment will depend on the expertise of the candidate, and can be at the Assistant, Associate, or Full Professor level, depending on the candidate's experience. Preference will be given to candidates whose focus is on prokaryotes.

Bacterial Pathogenesis: Candidates for this position should have expertise in the area of bacterial pathogenesis and/or host responses to bacterial infection and should be prepared to participate in teaching medical microbiology and bacterial pathogenesis to graduate students and medical students. The appointment will be in the Department of Microbiology and Immunology and can be at the level of Assistant Professor or Associate Professor, depending on the candidate's experience. The Department has a strong program in bacterial genetics and molecular pathogenesis. The successful candidate will also become a member of the newly formed Center for Infectious Diseases, which brings together investigators from the Department, the Division of Infectious Diseases, and the School of Public Health who share interests in infectious disease pathogenesis, epidemiology, and prevention.

For both positions, the successful candidates will be expected to develop and/or maintain outstanding independent research programs and to excel in teaching. A doctoral degree, relevant postdoctoral experience, and a strong publication record are required. Candidates for appointment at the Associate Professor or Full Professor level should have a record of productive research supported by extramural funding.

Applicants should send curriculum vitae, statement of research interests and future plans, representative reprints, and arrange to have three letters of reference sent to the appropriate Search Committee Chair. Bioinformatics: Dr. Marshall Edgell; Bacterial Pathogenesis: Dr. Janne Cannon. Mailing address: Department of Microbiology and Immunology, CB# 7290, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599. Preference will be given to candidates whose applications are complete before December 6, 1999. Women and minorities are encouraged to apply and to identify themselves. The University of North Carolina at Chapel Hill is an Equal Opportunity Employer.

FACULTY POSITIONS (NMR) STRUCTURAL BIOLOGY

SENIOR POSITION (SB99-2). Applications are invited for a tenuretrack senior faculty position, Associate or Professor level, in structural biology. Preference will be given to applicants with expertise in NMR spectroscopy applied to problems of macromolecular structure. The successful candidate must have a record of research and academic productivity commensurate to academic rank and a record of having established and supported from extramural sources an independent research laboratory. The applicant is expected to apply interdisciplinary interest in continuation of research and in the teaching of graduate and undergraduate students in courses adopted by the School of Biological Sciences. New facilities and complementary expertise in crystallography and electron microscopy (see http://sgi.bls.umkc.edu) are available as well as competitive start-up financial packages.

ASSISTANT PROFESSOR (SB1). The School of Biological Sciences as part of the expansion of its structural biology program, which has been selected for comprehensive development within the school, seeks investigators with outstanding potential in any aspect of molecular or cellular structural biology to complement or expand existing activities in spectroscopy (including a new NMR facility), crystallography or microscopy. (UMKC faculty, as part of the Southeast Regional Collaborative Access Team, can use the Advanced Photon Source at Argonne National Laboratory to conduct research.) Excellent start-up package, competitive salary and state of the art instrumentation available. Successful candidates for this tenure-track position will participate in undergraduate and graduate-level instruction and must have two to three years postdoctoral experience in an appropriate field. In addition, candidates must have received graduate, and preferably undergraduate, instruction in an English-speaking environment (a seven-year residence in such environments will satisfy this requirement).

Evaluation of applications will begin November 1, 1999. Candidates should provide *curriculum vitae*, a brief statement of research interests and the names, addresses, and telephone numbers of four references to:

Search Committee, Position (specify SB99-2 or SB 1) Office of the Dean, School of Biological Sciences 5007 Rockhill Road, University of Missouri-Kansas City Kansas City, MO 64110-2499

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Virology Faculty Position Department of Microbiology and Immunology The University of Texas Medical Branch at Galveston http://microbiology.utmb.edu

We invite applications for a tenure-track position at the Asst./Assoc. Professor level. We seek an individual capable of independent, innovative research focusing on molecular aspects of viral replication and/or pathogenesis. We offer a competitive start-up package, excellent laboratory space, and access to a BSL-4 facility expected to be operational by 2002. UTMB provides an interactive environment with opportunities for collaborations with numerous faculty sharing interests in virology and infectious diseases, including members of the Sealy Center for Structural Biology and the WHO Collaborating Center for Tropical Diseases. The review process will begin January 1, 2000 and will continue until the position is filled. Please send a curriculum vitae, a summary of past accomplishments, future research plans, and the names, addresses, and telephone numbers of three references to:

> Dr. Shinji Makino, Chair Virology Search Committee Department of Microbiology and Immunology The University of Texas Medical Branch Galveston, TX 77555-1019

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How >>> For application instructions and further information: fellowships.aaas.org.
 AAAS Science and Engineering Fellowship Programs, 1200 New York Avenue, NW, Washington, DC 20005 • Phone 202/326-6700 • E-mail science_policy@aaas.org
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An applicant must:

- Hold a Ph.D. or equivalent degree in a biomedical life or physical science
- Be appointed as a postdoctoral fellow during the 2000 calendar year at an academic or non-academic research institution (private industrial laboratories are excluded)

Applicants must be African American (Black, non-Hispanic), U.S. citizens or permanent residents and at an institution in the U.S.A. Applications must be postmarked by January 31, 2000 For application forms and more information, please contact your department chairperson or Jerry L. Bryant, Ph.D., by mail at *The College Fund/UNCF*, 8260 Willow Oaks Corporate Drive, P.O. Box 10444, Fairfax, VA 22031-4511, by fax (703) 205-3574, or by E-mail: uncfmerck@uncf.org

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Anticipated CHAIR Department of Biological Sciences Louisiana State University



We seek a chair with an exemplary publication record, sustained federal funding, and a commitment to research, education, and outreach. Candidates in any area of Biological Sciences with proven leadership, strong interpersonal skills and qualifications commensurate with a tenured, full professor are preferred. Competitive salary and research support packages are available. The Department was recently selected as one of only 12 departments at LSU for significant enhancement funding and will expand into a new 60,000 square foot building addition within a year. Biological Sciences is one of the largest academic units on campus, with 54 tenure-track faculty, 120 graduate students, 1,000 undergraduate majors and over 3 million dollars in grants and contracts attracted annually. The department is organized into three areas: 1) Systematics, Ecology and Evolution; 2) Biochemistry and Molecular Biology; and 3) Developmental, Cell and Integrative Biology. Future plans emphasize research in macromolecular structure, biological signaling, and biological diversity LSU has Carnegie Research I status, and is located in an area with a unique cultural heritage. For more information, visit our web site at http:// www.biology.lsu.edu. Evaluation of applications will begin on December 1. 1999, and will continue until the position is filled. Nominations, or applications, which should include a curriculum vitae, statement of research interests, administrative philosophy, and three letters of recommendation (stressing evidence of leadership, interaction skills, and administrative experience), should be sent to:

> Dr. Kenneth M. Brown Associate Dean, College of Basic Sciences Ref. Log #0554 Louisiana State University Baton Rouge, LA 70808-1725 email: Kmbrown@lsu.edu

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Assistant Professor-Environmental Toxicology, UC Santa Cruz

The new graduate program in ENVIRONMENTAL TOXICOLOGY at the University of California, Santa Cruz invites applications for a tenure track position, which is open at the Assistant Professor level. We are interested in candidates with strong, extramurally funded research programs, preferably focusing on organic contaminants in aquatic environments. This may include the introduction, transport, and fate of organic contaminants in the environment, and/or the mechanisms underlying their metabolic fate and toxicity in organisms. The candidate will be expected to teach both graduate and undergraduate classes in Environmental Toxicology, and to actively participate in the ongoing development of the new department and graduate program in Environmental Toxicology.

Rank: Assistant Professor, Step I-III.

Minimum Qualifications: Ph.D. or equivalent in Toxicology, Chemistry, Biology, Biochemistry, or a related field completed or expected by effective date, a demonstrated record of research excellence and potential to obtain external funding, and a commitment to and talent for teaching at undergraduate and graduate levels.

Position available: 1 July 2000, contingent upon availability of funding. Salary: \$44,300-49,400

Apply to: Applicants should submit a curriculum vitae, a brief description of research and teaching interests, copies of reprints, and arrange for three confidential letters of recommendation to be sent to:

Chair, Environmental Toxicology Search Committee Department of Environmental Toxicology Applied Sciences Building, Room 269 University of California Santa Cruz, CA 95064

Visit the Environmental Toxicology website at: http://natsci.ucsc.edu/acad/etox

Please refer to Provision #260 in all letters of recommendation and other correspondence. Closing date: January 3, 2000 5pm

UCSC is an Equal Opportunity Employer. Women and minorities are encouraged to apply.



The Department of Biological Sciences at Binghamton University welcomes applications for a tenure-track Assistant Professor position in one of the following areas:

ECOSYSTEM ECOLOGY AND MANAGEMENT Specific areas include, but are not restricted to, community processes, microbial control of ecosystem processes, ecosystem responses to environmental change, and a theoretical component to the research. The successful applicant will join a department and a university with multidisciplinary interests and expertise in environmental science. **EUKARYOTIC APOPTOSIS/CELL SENESCENCE**

The applicant should utilize molecular biological approaches for the study of intracellular signal transduction or gene regulation. We particularly welcome individuals whose research may, in part, complement one or more existing research strengths in the department including apoptosis, cell-cell interactions, cell cycle regulation, development, proteolysis, and thermal tolerance.

We encourage applications from individuals having strengths in basic science and practical applications. strengths in basic science and practical applications, including biotechnology and bioengineering. The applicants should have postdoctoral experience and are expected to maintain a vigorous, extramurally-funded research program. We also expect proficient teaching at the undergraduate and graduate levels in commensurative the area of conduct conduct of the sec courses appropriate to the area of expertise. Submit curriculum vitae, statement of research and teaching interests/experiences, representative reprints, and have three letters of recommendation sent by December 1, 1999 to:

Dr. David Sloan Wilson Cosystem Ecology and Management) or Dr. Dennis W. McGee (Eukaryotic Apoptosis/Cell Senescence), Department of Biological Sciences Binghamton University Binghamton, NY 13902-6000

Binghamton, 141 15902-0000 Binghamton University is one of the four doctoral-granting campuses of the State University of New York system. Please visit our web site (http://www.binghamton.edu).Binghamton University is an equal opportunity/affirmative action employer.

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RESEARCH INVESTIGATOR & RESEARCH SCIENTIST

Molecular Biology

While using Bioinformatics tools, the selected individuals will be responsible for exploring and isolating novel genes for target proteins, in particular kinases and proteases. Duties will include isolating full length cDNAs from cDNA libraries and developing mutagenesis/ engineering strategies to understand the expression, regulation, and structural/functional roles of target proteins.

Qualifications for the RESEARCH INVESTIGATOR include a Ph.D. with a minimum of 2 years post-doctoral experience in molecular biology or a related science. Extensive experience in full-length cDNA cloning, searching genomic/genetics related database, and DNA mutagenesis is required. Experience in mammalian cell culture and protein expression is desired. Search for Job ID #8042 when applying.

Qualifications for the RESEARCH SCIENTIST include an MS or BS in Molecular Biology with 3 years of relevant experience. Proficiency in recombinant DNA technologies, including the cloning of cDNAs from cDNA libraries, PCR techniques, DNA/RNA isolation, DNA/RNA hybridization is required. Experience in the construction of expression vectors for E.coli baculovirus, and mammalian cells is desired; background with gene expression, cDNA library construction or tissue culture is a plus. Search for Job ID #7629 when applying.

RESEARCH INVESTIGATOR Cell Biology/Molecular Biology

Selected individual will join our multi-disciplinary functional analysis team involved with the Nuclear Receptor Project for Therapeutic Target Discovery. Individual will explore the biological processes regulated by orphan members of the nuclear receptor super-family. Responsibilities will include the design, derivation, and construction of cellular models and functional gene analysis for testing novel, receptor-selective chemical tools to elucidate the role of orphan nuclear receptors in human physiology and disease.

Qualifications include a Ph.D. in Molecular Biology, Cell Biology or a related discipline. Experience in mammalian cell culture techniques, cell immortalization strategies and prokaryotic and eukaryotic expression systems is desirable, as is knowledge of nuclear receptor and transcription factor biology. Search for Job ID #7198 when applying.

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POSITIONS OPEN

TENURE-TRACK FACULTY POSITION LIFE TECHNOLOGIES PROFESSORSHIP Center for Advanced Research in Biotechnology Protein-Nucleic Acid Interactions

The Center for Advanced Research in Biotechnology (CARB) announces the reopening of a search to identify outstanding candidates for a tenure-track, Life Technologies Professor faculty position. We are particularly interested in applicants that are highly motivated toward creative research in the area of protein-nucleic acid interactions; candidates with an interest in polymerase-nucleic acid interaction are especially encouraged to apply. The position is with the University System of Maryland at the rank of **ASSIST**-ANT PROFESSOR, although exceptional Senior Scientists may be considered. The successful candidate will be expected to develop a strong, independent, externally funded research program, and to interact with other CARB faculty and with investigators at Life Technologies, Inc., with expertise in macro-molecular crystallography, high field NMR spectroscopy, computational chemistry, and biochemistry and molecular biology.

CARB is a research center of the University of Maryland Biotechnology Institute and the National Institute of Standards and Technology devoted to fundamental problems of macromolecular structure, function, engineering, and design. Review of applications will begin December 1, 1999. Applicants should submit a curriculum vitae, a statement of research plans, and have three letters of reference sent to:

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

CARB is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

FACULTY POSITION EPIDEMIOLOGY

The Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM), Maryland Campus, invites applications for a 12-month, tenure-track position in epidemiology. Minimum requirement: a) Ph.D.'or equivalent degree in epidemiology or related field, or b) medical degree (D.V.M., M.D., etc.) with an advanced degree in epidemiology or related field. Gandidates must be willing to expand their field of expertise into food safety, poultry production, and disease ecology in commercial poultry. Rank will be at the level of **ASSISTANT/ASSOCIATE PRO-FESSOR** and salary will be commensurate with qualifications.

Submit a letter of application, curriculum vitae, statement of career goals, and names of three references to: Dr. Yvette J. Johnson, Chair, Search Committee for Epidemiologist, VA-MD Regional College of Veterinary Medicine, University of Maryland, 8075 Greenmead Drive, College Park, MD 20742-3711. The Search Committee will begin to review applications on December 15, 1999, and continue until a suitable candidate has been identified.

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

Belmont University invites applications for two **TENURE-TRACK POSITIONS** in the Department of Biology to begin fall 2000. Position one: teaching responsibilities include human anatomy and physiology. Position two: teaching responsibilities include microbiology and immunology; experience in biotechnology techniques desirable. Successful candidates must have a Ph.D. For more information, visit the Belmont home page at website: www.belmont. edu. Send letter of application, curriculum vitae, statement of teaching philosophy, all transcripts, and names of at least three professional references by December 1, 1999, to: Dr. Robert Grammer, Departmont Boilogy, Belmont University, 1900 Belmont Boulevard, Nashville, TN 37212-3757. Minorities and women are encouraged to apply.

POSITIONS OPEN

CHAIR DEPARTMENT OF BIOENGINEERING The University of Toledo

The Department of Bioengineering is inviting applications and nominations for the position of Chair with a start date as early as August 2000. The Department seeks a visionary leader with the skills and ability to continue to strengthen our educational and research programs. Applicants are required to have a Ph.D. in Engineering or a related field, a strong record of teaching, an excellent record of scholarship, and extramural support in the area of Bioengineering or Biomedical Engineering, and warrant the rank of at least Associate Professor with tenure. Previous experience as a department chair is not required, but applicants must show evidence of leadership skills.

The Department of Bioengineering was founded in 1996, has 10 full-time faculty, including an Endowed Chair of Orthopedic Biomechanics, and offers Bachelor of Science in Bioengineering, Master of Science in Bioengineering, and Ph.D. degree programs. The Department has undergone its first Accreditation Board for Engineering and Technology, Inc. accreditation review for its Bachelor of Science in Bioengineering program this fall semester 1999. Research interests in the Department focus in the areas of medical imaging and informatics, cellular engineering, and biomechanics. The Department has recently received a Whitaker Foundation Special Opportunity Award that will enhance its existing strength in the area of cellular and physiologically-based imaging. The Department has recently invested significantly in the development of state-of-the-art teaching and research laboratories. For more information about the Department, please visit our website: www.bioe. eng.utoledo.edu.

Interested applicants should provide a résumé, a list of five references, and a narrative describing their goals and vision for the Department. In order to ensure full consideration, applications and nominations should be received before February 1, 2000. The position will remain open and applications reviewed until an appointment is made. Applications and nominations should be sent to: Ms. Suzette Fronk, Business Manager, 5012 Nitschke Hall, The University of Toledo, Toledo, OH 43606-3390. Please address questions to: Dr. Ronald L. Fournier, Dean and Professor, at Telephone: 419-530-8000 or through e-mail: rfourni@uoft02.utoledo.edu.

An Affirmative Action/Equal Opportunity Employer. Minorities/Female/Disabled/Veterans.

VIVARIUM DIRECTOR AND CHIEF LABORATORY ANIMAL MEDICINE UNIVERSITY OF ROCHESTER

The University of Rochester invites applications for the position of Vivarium Director and Chief, Laboratory Animal Medicine. The successful applicant will provide leadership as the institutional veterinarian and director of a modern, diverse, Association for Assessment and Accreditation of Laboratory Animal Care, International accredited research resource.

Responsibilities will include directing the research support staff, maintaining accredited standards and development, and implementation of policies regarding the humane care and use of laboratory animals. The successful applicant will possess outstanding communication and managerial skills. Qualifications include a Doctor of Veterinary Medicine or V.M.D. from an accredited school of veterinary medicine, American College of Laboratory Animal Medicine board-certification, and eligibility for licensure to practice in the State of New York.

Salary is competitive and commensurate with qualifications and experience. To apply, please send a letter of interest, a curriculum vitae, and the names of three references to: Lawrence A. Tabak, D.D.S., Ph.D., Senior Associate Dean for Research, School of Medicine and Dentistry, 601 Elmwood Avenue, Box 611, University of Rochester, Rochester, NY 14642.

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

POSITIONS OPEN

FACULTY POSITION NATURAL RESOURCE ECOLOGY

The Vancouver Campus of Washington State University invites applications for a tenure-track ASSIST-ANT PROFESSOR position in natural resource science. Required qualifications: Ph.D with primary expertise in watershed, wetland, or riparian zone ecology and management. Experience in teaching and advising students in an interdisciplinary program. Research experience that includes emphasis on applied ecology in natural resource management. Desired qualifications: Experience with interdisciplinary research and/or teaching, developing upper-division, college-level courses, postdoctoral research, and supplemental expertise in one or more of the following areas: landscape ecology; conservation biology; interaction of land uses/management with biological communities; terrestrial-aquatic ecosystem (including fisheries) interactions; resource management at the urban-wildland interface. Quantitative and analytical skills in statistics, natural resource measurements and/or GIS; and experience in natural resource policy and planning. Washington State University Vancouver offers both undergraduate and graduate programs and is expected to double its student body (currently 1,500) and faculty in the next six years, with science and engineering as an area of emphasis. Washington State University is a Tier I research institution and offers competitive salaries and start-up packages.

Send: 1) a cover letter discussing training and experience as related to the required and desired qualifications, 2) curriculum vitae, and 3) name, address, and telephone number of three references; postmarked by December 31, 1999 to: Dr. Brian Tissot, Washington State University Vancouver, 14204 Northeast Salmon Creek Avenue, Vancouver, WA 98686-9600. E-mail: tissot@vancouver.wsu.edu; FAX: 360-546-9037.

For a complete job description see website: <http://www.vancouver.wsu.edu/programs/sci/ default.htm>. Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer.

SEARCH EXTENDED TENURE TRACK FACULTY MEMBER ANATOMY AND PHYSIOLOGY/BIOLOGY EDUCATION

The Department of Zoology and Genetics at Iowa State University seeks a tenure-track faculty member to teach a large enrollment, non-majors course in introductory anatomy and physiology, to supervise coordination of accompanying laboratories, and to develop a scholarship program in biological science education. The successful candidate will have a Ph.D. in a biological science, and a record of scholarly accomplishments in biology education. Those making a transition from biological research into educational scholarship are encouraged to apply. Areas of interest include, but are not limited to, distance education, innovative teaching methods, outreach to teachers, or areas such as science education or curriculum reform. It is expected that the person chosen will attract outside funding to support their scholarship or teaching innovations and attract graduate students. The person will join a growing campus community of faculty from several departments who are interested in science education. A portfolio approach to evaluation and opportunities for professional development in the university will provide clear support for this position. A start-up package and logistical staff support will be provided. Applications will be reviewed until the position is filled. Submit a curriculum vitae, a statement of teaching philosophy, and a plan for future scholarly activities, and arrange for three letters of reference to be sent to:

> Dr. Dennis G. Emery Department of Zoology and Genetics Iowa State University Ames, IA 50011 E-mail: dgemery@iastate.edu

Iowa State University is an Affirmative Action/Equal Opportunity Employer.



R&D PROFESSIONALS NEW PRODUCTS ARE YOUR LIFEBLOOD. OURS TOO.

When we at Johnson & Johnson ask "what's new?", we're not speaking casually. We're reflecting a belief we all share—innovation is key. Because it is our ongoing innovation of products that help people, like Risperdal and Retin-A, that leads to the ongoing success of Johnson & Johnson, the world's leading health care company. If you have an intense desire to make our next innovation your claim to fame, the opportunity is now open at the following operating company.

THE R.W. JOHNSON PHARMACEUTICAL RESEARCH INSTITUTE

The R.W. Johnson Pharmaceutical Research Institute, located in Raritan, New Jersey, conducts pharmaceutical research in therapeutic areas including anti-infectives, central nervous system, dermatology, immunology, inflammation and oncology.

Scientist, Drug Discovery Molecular Immunology and Signal Transduction

The successful candidate will investigate basic molecular mechanisms in T-cell activation and related areas, discover and validate new therapeutic targets, and contribute to the discovery of new potential therapeutics. The Department offers a wide variety of expertise, technology and support.

The ideal applicant will be a Ph.D. with 3 or more years' postdoctoral experience in immunology, molecular biology, cell biology or a related discipline. Experience in basic molecular biological techniques and familiarity with signal transduction mechanisms are required.

Some recent publications from the department :

1. IRAK requirement for optimal induction of multiple IL-1 signaling pathways and IL-6 production. (1998) J. Exp. Med. 187: 2073-2079.

2. p38 alpha mitogen-activated protein kinase is activated by CD28mediated signaling and is required for IL-4 production by human CD4+CD45RO+ T cells and Th2 effector cells. (1999) J Immunol. 162: 7110-9.

3. T cell activation signals up-regulate p38 mitogen-activated protein kinase activity and induce TNF-alpha production in a manner distinct from LPS activation of monocytes. (1999) J Immunol. 162: 659-68.

4. 6-Amino-2-(4-fluorophenyl)-4-methoxy-3- (4-pyridyl)-1H-pyrrolo[2,3-b] pyridine (RWJ 68354): A Potent and Selective p38 Kinase Inhibitor. (1998) J. Med. Chem., 41: 4196-8.

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employer totally committed to diversity.



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DIRECTOR NIH Undergraduate Scholarship Program for Individuals from Disadvantaged Backgrounds (UGSP)

The National Institutes of Health (NIH), located in Bethesda, Maryland, is the world's largest biomedical research facility. The Office of Loan Repayment and Scholarship, a program office within the Office of Intramural Research, Office of the Director, NIH, is seeking an experienced individual to direct the NIH Undergraduate Scholarship Program (UGSP). The UGSP is a competitive scholarship program for students from disadvantaged backgrounds who are committed to careers in biomedical research. The program is designed to improve access to education leading to biomedical research careers for those who have had fewer opportunities than others, and to provide an incentive for exceptional scholars to pursue biomedical research careers at NIH. Additional information regarding this program is available on the Internet at http://ugsp.info.nih.gov.

We are seeking candidates who have a Ph.D. (or equivalent degree) in the life sciences and at least 2 years of college-level teaching experience. Experience working with students from populations who are underrepresented in the life sciences or from disadvantaged backgrounds is required. Candidates must have the ability to work effectively with proven outcomes with members of the educational and scientific communities, proven organizational and time management skills, strong oral and written communication skills, and a strong commitment to the success of students from underrepresented and disadvantaged backgrounds. Experience at the bench in biomedical research and/or biomedical research training is highly desirable

This position is classified as a Health Scientist Administrator, GS-601. The starting salary for GS-12 is \$48,796 (includes locality pay). The starting salary for GS-13 is \$58,027 (includes locality pay). The starting salary for GS-14 is \$68,570 (includes locality pay). Relocation expenses to cover shipment of household goods up to a maximum of \$3,000 may be provided to individuals outside of the commuting area. Application materials will be available on November 1 on the Internet at http://careerhere.nih.gov/ CHPublic/hrvacmenu.taf or via facsimile by calling 301-402-4111. Completed applications must be received or postmarked no later than 11/22/99. This is vacancy announcement OD-99-7103, fax ID # 97103.

NIH is an Equal Opportunity Employer, dedicated to building a diverse community in its training and employment programs.

UNIVERSITY OF WASHINGTON DEAN, FOREST RESOURCES

The University of Washington invites applications and nominations for the position of Dean, College of Forest Resources. The College holds a position of national and international leadership in instruction and research. The College's Seattle location, a vibrant urban area in a region endowed with abundant natural resources and some of the most productive forests in the world, offers a unique opportunity for leadership in addressing critical issues of urbanization and its ecological and natural resource implications. College faculty and students enjoy interdisciplinary collaboration with prominent departments throughout the University, including programs in the social and biological sciences, engineering and design disciplines, urban planning, computer science, and business. Faculty regularly participate in international programs, while the College attracts students and visiting scientists from many countries who contribute to its longstanding international reputation. For more information, see www.cfr.washington.edu. The Dean is the College's chief administrator and reports to the President and Provost. He or she must be able to work with a diverse group of University students, staff, faculty, and administration, as well as public and private agencies outside the university, to ensure that the challenges of education, research, and service to the community are met with vision and integrity. We seek a candidate with the leadership and vision necessary to influence the shape of forest resources education in the 21st century at the University of Washington and in the Pacific Northwest. The candidate should be qualified by academic or practitioner performance to be appointed to the rank of professor. Preferably, applicants should be prepared to assume the position on or before Fall 2000. Review of applications will begin on October 29, 1999, and continue until the position is filled. Applications and nominations should be sent to the Committee on the Deanship of the College of Forest Resources, Dean Denice D. Denton, Chair, c/o Linda Kaye, Box 351237, University of Washington, Seattle, Washington 98195-1237. The University is an Equal Opportunity/Affirmative Action employer.

POSITIONS OPEN

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT TYLER FACULTY POSITIONS

The Biomedical Research Departments at The University of Texas Health Science Center at Tyler are expanding their research programs by hiring additional state-funded faculty at all ranks. The Center's Mission focuses on basic and clinical research on heart and lung diseases. Current faculty research interests include infectious diseases of the lung, especially tuberculosis, asbestos and environmental-related diseases, inflammatory cell biology, complement biochemistry, coagulation and fibrinolysis, lung fibrosis, regulation of lung-specific gene expression, the molecular mechanisms of bacterial chromosome replication and recombination, oxidant mediated DNA damage, and RNA structure-function. Investigators occupy a modern facility equipped with state-of-the-art instrumentation. Start-up funds are available, but preference will be given to candidates with external funds. Teaching requirements are minimal. Tyler is situated approximately 100 miles east of the Dallas/Fort Worth metroplex amid the beautiful lakes and piney woods of East Texas. Tyler has a population of 100,000 and is the regional center for the arts, medical care, finance, and higher education. More information can be obtained at website: www.utbct.edu.

Interested candidates should submit a curriculum vitae, a future research plan, and the names and addresses of three references to: Dr. Mark A. L. Atkinson, Chair of Faculty Search Committee, University of Texas Health Science Center at Tyler, 11937 US Highway 271, Tyler, Texas 75708-3154 or e-mail: Mark@uthct.edu.

Equal Employment Opportunity/Affirmative Action Employer/Minority/Female/Veteran/Disabled. Applications are strongly encouraged from minorities and women.

INSECT ECOLOGIST

Department of Biology and Microbiology, California State University, Los Angeles, will hire tenuretrack ASSISTANT PROFESSOR starting fall 2000. Ph.D. required. Candidates must have strong molecular and quantitative skills and conduct research in insect ecology at the population, community, or evolutionary levels. Successful applicant is expected to participate in a multidisciplinary program of instruction and research in environmental science, the Center for Environmental Analysis (website: http://cea-crest. calstatela.edu/). Teaching duties in lower division biology, entomology, and area of specialty. Research start-up funds and core facilities in DNA sequencing, image processing, and GIS are available. Applicants should submit curriculum vitae, statement of research interests, and three letters of recommendation to: Dr. Robert Desharnais, Department of Biology and Microbiology, California State University, Los Angeles, CA 90032-8201. FAX: 213-343-6451. E-mail: rdeshar@calstatela.edu. Deadline 10 December 1999, or until filled.

An Equal Opportunity/Title IX Employer. Reasonable accommodations may be requested.

POPULATION GENETICIST DEVELOPMENTAL BIOLOGIST The University of Southern Mississippi

The Department of Biological Sciences at The University of Southern Mississippi (website: http:// www-dept.usm.edu/~bsc) invites applications for two tenure-track positions at the ASSISTANT **PROFESSOR** level, in the areas of population genetics and developmental biology. We seek individuals with postdoctoral experience who will develop strong, extramurally funded research programs and participate in undergraduate and graduate instruction. Application deadline is November 29, 1999. Send curriculum vitae, statement of research and teaching interests, and names and addresses of three references to: **Dr. Frank Moore, Chair, Department of Biological Sciences, The University of Southern Mississippi, Hattiesburg, MS 39406-5018.** *Affirmative Action/Equal Opportunity Employer/ADAI*.

FACULTY DEVELOPMENT POSITION ASSISTANT PROFESSOR TENURE-TRACK (EDUCATION)

Applications are invited for an Assistant Professor tenure-track (Education) position. The successful candidate will have a 75 percent appointment in the Centre for University Teaching and Learning (CUTL) and a 25 percent appointment in Education. The position calls for someone who enjoys working in a team-based approach with other Faculty Developers to make scholarly contributions to higher education and to carry out faculty development activities across the university.

Candidates for the position should provide evidence of (1) expertise and experience in higher education and faculty development; (2) an appropriate background in science; (3) excellence in teaching and research in higher education. Duties will include consulting with individual Professors, team building, providing advice and support for faculty curriculum initiatives, and scholarly contributions to higher education.

Those interested in applying should consult website: http://www.education.mcgill.ca/outl/ position for further information and list of documents to be submitted.

The expected date of appointment is September 1, 2000. Applications will be considered after November 30, 1999. Position will remain open until it is filled. Applications and inquiries should be directed to: Director, Centre for University Teaching and Learning, 3700 McTavish Street, Montreal, Quebec H3A 1Y2 Canada. FAX: 514-398-4679. McGill University is committed to Equity in Employment. In accordance with Canadian immigration requirements, initial priority will be given to Canadian citizens and permanent residents.

ASSISTANT PROFESSOR IN MOLECULAR BIOLOGY University of Wisconsin-Parkside

The Biological Sciences Department is recruiting for a Molecular Biologist (September 2000) with expertise in either virology, immunology, structural biology, or protein chemistry who desires a balance of research and teaching. Experience in bioinformatics is desirable. Candidates must have (1) a Ph.D. with postdoctoral experience; (2) a commitment to excellence in teaching at the graduate and undergraduate levels; (3) the ability to conduct significant and independent research as judged by peer-reviewed publications. Teaching assignments will include a course in the isolation, characterization, and molecular modeling of proteins; the successful candidate will also have the opportunity to teach a course in his/her specialty to graduate and upper-division undergraduates.

Further information on applying can be found on our website: http://www.uwp.edu/academic/ biology. Additional information can be obtained by e-mail: carmel.ruffolo@uwp.edu or telephone: 414-595-2327. The University of Wisconsin-Parkside is an Affirmative Action/Equal Employment Opportunity Employer. Women, minorities, dual career couples, veterans, and persons with disability are encouraged to apply.

EXERCISE PHYSIOLOGIST

The Department of Nutrition, Food and Exercise Sciences at Florida State University invites applicants for a tenure-track ASSISTANT PROFESSOR position (begins August 2000). Candidates must have an earned doctorate in exercise physiology or a closely related field and postdoctoral training. Applicants will be expected to develop an extramurally funded research program and teach undergraduate and graduate courses in exercise physiology. Preferred research areas include energy metabolism, exercise biochemis-try, and effects of exercise on chronic disease. Applications must be postmarked by December 10, 1999. Send letter of application, five-year research plan, curriculum vitae, and list of five references to: Chair, Exercise Physiology Search Committee, 436 Sandels, Florida State University, Tallahassee, FL 32306-1493. Florida State University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

CLARE BOOTHE LUCE PROGRAM AWARD JUNIOR FACULTY POSITION FOR WOMEN University of Notre Dame College of Science

Applications are invited for the Clare Boothe Luce PROFESSORSHIP within the College of Science at the University of Notre Dame. The search for this tenure-track ASSISTANT or ASSOCIATE PRO-FESSOR position is necessarily restricted by the Clare Boothe Luce bequest to the Henry Luce Foundation to women who are U.S. citizens and open to the areas present in our Departments of Biological Sciences, Chemistry and Biochemistry, Mathematics, and Physics. Candidates should have a Ph.D. and a rea Chair position at this rank. The new faculty member will be appointed to one of the above departments. She will be expected to develop an independent research program and participate in the teaching of students at the graduate and undergraduate levels. Research space appropriate to need and competitive start-up funds are available; additionally, the Clare Boothe Luce Professor will have an excellent starting salary and a discretionary fund. Interviewees will meet with members of the appropriate department and additionally with the Clare Boothe Luce Professor Selection Committee from the College of Science. Applications, including a curriculum vitae, a list of publications, a statement of research interests and plans, and three letters of reference should be received by: Prof. Kathie E. Newman, Associate Dean, College of Science, University of Notre Dame, 229 Nieuwland Science Hall, Notre Dame, IN 46556 prior to January 7, 2000. University of Notre Dame is an Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF WYOMING WILDLIFE BIOLOGIST

The Department of Zoology and Physiology at the University of Wyoming invites applications for a tenure-track position in terrestrial wildlife biology at the level of **ASSISTANT PROFESSOR**. A Ph.D. is required and post-doctoral experience desirable. Teaching responsibilities include wildlife biology along with other undergraduate and graduate courses in the candidate's area of interest. The candidate will be expected to develop an extramurally-funded research program, mentor undergraduates in our wildlife program, and advise Master's and Ph.D. students. We seek an individual interested in wildlife management issues who will develop a research program that includes work on problems of importance in the Rocky Mountain region.

Review of applicants will begin on January 3, 2000, and will continue until the position is filled. Applicants should send a curriculum vitae, statement of research and teaching interests, and the names, addresses and telephone numbers of three references to: Chair, Wildlife Biology Search Committee, Department of Zoology and Physiology, University of Wyoming, Laramie, WY 82071-3166. The University of Wyoming is an Affirmative Action/Equal Opportunity Employer, and strongly encourages applications from female and minority candidates.

BIOLOGICAL ANTHROPOLOGIST EMORY UNIVERSITY

ASSISTANT PROFESSOR, tenure-track position. Ph.D. required; focus in paleoanthropology, ecological/evolutionary processes. Strong field/research record; established strengths in evolutionary biology. Candidates should interact effectively with faculty in department with a vigorous biocultural focus; committed to quality undergraduate/graduate teaching. Review commences December 1, 1999. Send curriculum vitae, description of current and planned research, teaching interests, and names of four referees to: Search Chair, Dr. George Armelagos, Department of Anthropology, Emory University, Atlanta, GA 30322. Emory University is an Affirmative Action/Equal Opportunity Employer.



Clinical Director Intramural Research Program National Institute of Arthritis and Musculoskeletal and Skin Diseases National Institutes of Health

The National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) of the National Institutes of Health (NIH) is seeking exceptional candidates to fill the position of Clinical Director in the Intramural Research Program (IRP) of NIAMS, NIH. We are interested in outstanding physician scientists with leadership skills to develop and implement innovative clinical research programs that take advantage of the unique resources afforded by the Intramural Research Program and the NIH Clinical Center. The successful candidate will be responsible for coordinating the exciting clinical research programs in the IRP relating to the broad field of rheumatologic, musculoskeletal, and/or skin disorders.

Candidates must have an M.D. degree, licensure as a physician, completed an accredited residency program, board eligibility in rheumatology, orthopaedic surgery, or dermatology, and have substantial experience initiating and directing translational research programs. Salary and resources will be commensurate with the qualifications and experience of the candidate.

Applicants should submit curriculum vitae, bibliography, statement of research interests, and the names of three references to:

Dr. Peter Lipsky c/o Scott Sigley, NIAMS, HRMB Building 31, Room 4C13 31 Center Drive, MSC 2350 Bethesda, MD 20892-2350 or E-mail SS403P@nih.gov Applications must be postmarked by 11/30/99

NIH is an Equal Opportunity Employer

Chief, Laboratory of Pulmonary Pathobiology (LPP) National Institute of Environmental Health Sciences (NIEHS) National Institutes of Health (NIH)

The NIEHS (http://www.niehs.nih.gov) in Research Triangle Park, North Carolina, is seeking a senior tenured investigator to direct the Laboratory of Pulmonary Pathobiology within the Division of Intramural Research, NIEHS.

The Challenge:

To develop and maintain a strong personal research effort in the general area of pulmonary pathobiology, particularly as it relates to interactions of the pulmonary system with the environment.

To provide overall leadership for the existing principle investigators within the LPP, who study airway cell biology, airway inflammation, and asthma pathogenesis.

To recruit talented investigators to the LPP, and to provide a focus for collaborations within the NIEHS.

The Opportunity exists for an outstanding senior scientist to establish a cutting edge intramural research program in pulmonary pathobiology, and to direct and expand the efforts of the LPP in this critical area of environmental medicine. Excellent space and research support are available. Clinical appointments and access to patients are possible at neighboring medical centers and at the NIH Clinical Center in Bethesda. Levels of appointment, salary and research support will be commensurate with the experience and qualifications of the candidate.

The *Candidate* should be a senior investigator with an international reputation in a specific area within the broad context of pulmonary pathobiology and its relationship to the environment. Investigators with clinical qualifications and translational research activity are particularly encouraged to apply. Possible specialized research areas include but are not limited to signal transduction mechanisms, receptor biology, immunology-hypersensitivity, inflammatory cell biology, extracellular matrix signaling, and developmental biology. The successful candidate will have an outstanding publications record and proven history of research leadership.

Applicants will require a M.D. and/or Ph.D. degree. Applications from women and members of minority groups are particularly welcome. Applicants should submit a curriculum vitae and list of publications, a plan for future research, and the names of three individuals who can write reference letters on the candidates' behalf. These materials should be mailed by 12/31/99 to:

Ms. Naomi Teasley, Human Resource Management Branch, (HNV99-34) National Institute of Environmental Health Sciences P.O. Box 12233, Research Triangle Park, NC 27709, (919)541-5151

NIEHS/NIH is an Equal Opportunity Employer

POSITIONS OPEN

WESTERN UNIVERSITY OF HEALTH SCIENCES FACULTY POSITION MICROBIOLOGY

The discipline of microbiology invites applications for a tenure-track position in Microbiology at the **ASSISTANT PROFESSOR** level. A Ph.D. is required. The candidate is expected to teach medical microbiology to first- and second-year osteopathic medical students. Major emphasis is on teaching and service to the college, but research is encouraged. Send current curriculum vitae, transcripts, three letters of recommendation, and a statement of teaching philosophy and career objectives no later than December 1, 1999, to: Chair, Microbiology Search Committee, Western University of Health Sciences, College of Osteopathic Medicine of the Pacific, 309 East Second Street, College Plaza, Pomona, CA 91766.

GROSS ANATOMIST

Full-time, tenure-track position available for a Medical Gross Anatomist at the ASSISTANT or ASSOCIATE PROFESSOR level. The curriculum is conducted in a team-taught setting and primarily encompasses medical gross anatomy (lectures and laboratory), histology (laboratory only), and neuroanat-omy (laboratory only). Candidates must have a Ph.D. in anatomy or closely-related field and significant teaching experience. Western University has modest research facilities, and the new faculty member will be encouraged to develop scientific research and/or innovative, academic programs. Send current curricu-lum vitae, statements of teaching and research interests, and three letters of recommendation to: Chair. Anatomy Search Committee, Basic Sciences Department, Western University of Health Sciences, 309 East Second Street, College Plaza, Pomona, CA 91766.

FACULTY POSITION PHARMACOLOGY

Full-time, tenure-track position available at the level of ASSISTANT/ASSOCIATE PROFESSOR. Candidates should have a Ph.D. in pharmacology and at least two years of postdoctoral experience. The successful candidate is expected to participate in teaching in the medical and allied health programs as well as to establish a research program. Previous teaching experience in central nervous system pharmacology is desirable. Send current curriculum vitae, letter of interest, and three letters of recommendation no later than December 1, 1999, to: Dr. Stanley Wong, Western University of Health Sciences, 309 East Second Street, College Plaza, Pomona, CA 91766. Telephone: 909-469-5228; FAX:

Western University of Health Sciences is an Equal Opportunity/Affirmative Action Employer.

MICROBIOLOGIST

Applications are invited for a tenure-track ASSIST-ANT PROFESSOR of microbiology, appointment to begin September 2000. Successful candidates will teach an upper-level microbiology course, an upperlevel course in the area of expertise, and will participate in teaching departmental introductory courses. A productive research program involving undergradu-ate participation is expected. Candidates must have completed all requirements for the Ph.D., including thesis defense, by June 30, 2000. We hope to attract faculty who share a commitment to diversity, tolerance, and an active examination of ideas that can provide our students with a greater understanding of the richness and complexity of our society. Send letter of application stating teaching and research interests, currriculum vitae, and the names/addresses/e-mails/ phone numbers of three references postmarked by November 30, 1999, to: Dr. Theresa Theodose, Chair, Microbiologist Search Committee, Department of Biological Sciences, University of South-ern Maine, P.O. Box 9300, Portland, ME 04104-9300.

POSITIONS OPEN

ECOLOGIST. The Department of Plant Sciences at the University of Western Ontario invites applications for a tenure-track **ASSISTANT PROFESSOR** position in ecology, beginning July 1, 2000.

The successful applicant's research interests should be in the areas of ecology of plants and/or microorganisms at the population, community, or ecosystem level. The applicant should have a broad-based background in ecological methods, a good knowledge of plant diversity, and expertise in advanced quantitative data analysis and/or molecular approaches.

The preferred applicant will have a Ph.D. and appropriate postdoctoral training or equivalent experience and a proven research record including publications of high quality, and will be expected to develop a vigorous and innovative research program, well supported by external funding. The applicant should also have the ability to work well with others and provide evidence of ability in teaching, conveying enthusiasm and ideas that will excite and inspire students, and to contribute to the department's commitment to excellence in both undergraduate and graduate teaching.

Further information about the position, the department and the University can be found at website: http://www.uwo.ca/plantsci.

Applications including a curriculum vitae and copies of recent significant papers should be forwarded to: Dr. I. F. Creed, Chair, Ecologist Search Committee, Department of Plant Sciences, University of Western Ontario, London, Ontario, CANADA N6A 5B7. Please provide the names and addresses of three external referees who would be willing to assess your work and abilities. Applications will be accepted until January 31, 2000, or until a suitable candidate is found. All appointments are subject to budgetary authorization.

The University of Western Ontario is committed to the principle of equity of employment, welcomes diversity in the workplace, and encourages applications from all qualified individuals, including women, members of visible minorities, aboriginal persons, and persons with disability. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

FACULTY POSITIONS IN EVOLUTIONARY BIOLOGY

The University of Oregon seeks applications for faculty positions in the broad field of evolutionary biology, of which at least one may be at the Senior level. Candidates with research programs involving both empirical and theoretical approaches are encouraged to apply, as are those with a molecular component to their research. Areas of special interest include evolutionary approaches to genetics, development, and ecology. New university resources and a National Science Foundation IGERT award in evolution, development, and genomics provide substantial opportunities for programmatic expansion. Applicants should submit a curriculum vitae, a statement of research and teaching interests, and three letters of recommendation to: Evolutionary Biology Search Committee, Department of Biology, University of Oregon, Eugene, OR 97403-1210. To assure full consideration, applications must be received by December 1, 1999.

The University of Oregon is an Equal Opportunity/Affirmative Action Institution committed to cultural diversity and compliance with the Americans with Disabilities Act.

FULL PROFESSOR DEPARTMENT OF PHARMACOLOGY Boston University School of Medicine

Applications are invited from accomplished scientists in neurobiology, molecular genetics, or cell biology. The department is interested in faculty working on general biological mechanisms on a molecular, cellular, or systems level. Start-up funds, core facilities, and laboratory space are available to establish a high-level research program. Please direct inquiries to: Dr. David H. Farb, Chairman, Department of Pharmacology, Boston University School of Medicine, 715 Albany Street, Boston, MA 02118. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

INSECT SCIENCE FULL PROFESSOR BOSTON COLLEGE

As part of an ongoing program of expansion of research and teaching in the life sciences, Boston College is developing an initiative in insect and vector biology. This initiative will provide a focus for molecular and genetic studies of insect systems and will facilitate connections between research on insects of medical and agricultural importance, and studies using *Drosophila* and related investigations in other insect models.

We seek a colleague, to be appointed as a full professor in the Department of Biology, to join this initiative at its inception. The successful candidate will have a proven and internationally recognized record of research accomplishments in insect biology. The appointee will have the skills and experience to lead an innovative program in molecular genetics and cell biology of insect systems, and to contribute to the teaching mission of the department. This appointment will begin on or after July 1, 2000.

The successful appointee will benefit from investments being made in conjunction with the ongoing \$80 million expansion and renovation of Higgins Hall, home to the Departments of Biology and Physics. Those investments include substantial expansion of the infrastructure for molecular and cell biological research, as well as creation of insectary and other enhanced animal facilities.

Applicants should submit a curriculum vitae, statements regarding research and teaching interests, and the names of four colleagues who can provide letters of recommendation to: Marc A.T. Muskavitch, Ph.D., Chair-Designate, c/o Insect Science Search Committee, Department of Biology, Higgins Hall, Boston College, Chestnut Hill, MA 02467. Review of applications will begin November 15, 1999, and will continue until the position is filled.

1999, and will continue until the position is filled. Boston College is an Affirmative Action, Equal Opportunity Employer. Women and minority group members are encouraged to apply.

MICROBIOLOGY Western Connecticut State University

TENURE-TRACK fall 2000. Appointment academic rank dependent on candidate's background and experience. The successful candidates will have a Ph.D. demonstrated excellence in teaching, and will be seeking a career at a small, teaching oriented university. Duties: teach introductory microbiology courses for nursing and biology majors; teach electives in microbiology and related fields for upper-division undergraduate and M.A.-level graduate students in biology; establish a research program in their area of specialization involving upper-division under-graduate and M.A.-level graduate students; may in-clude coordinating a small Medical Technology Program. Send letter of application, a current curriculum vitae, transcripts, three letters of recommendation, and salary requirements by November 29, 1999, to: Dr. Howard I. Russock, Chairperson, Biological Sciences, 181 White Street, Danbury, CT 06810. Western Connecticut State University is an Affirmative Action/ Equal Employment Opportunity Educator/Employer.

ASSISTANT PROFESSOR ORAL BIOLOGY

An opening for an Assistant Professor position is immediately available in the Department of Periodontology and Oral Biology at the Boston University Goldman School of Dental Medicine. Candidates with a Ph.D. and at least two years of postdoctoral research experience in the fields of microbiology and biochemistry are expected to investigate antimicrobial mechanisms of salivary proteins. Please submit curriculum vitae and three letters of references to: Frank Oppenheim, D.M.D., Ph.D. Chairman, Department of Periodontology and Oral Biology, Boston University Goldman School of Dental Medicine, 100 East Newton Street, Room G217, Boston, MA 02118.

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U.S. Department of Agriculture • Agricultural Research Service ARS is an equal opportunity employer. Department of Health and Human Services Public Health Service National Institutes of Health Staff Scientist - Developmental Toxicologist (HNV99-33) National Toxicology Program Division of Intramural Research National Institute of Environmental Health Sciences

The National Institute of Environmental Health Sciences (NIEHS) is recruiting for the position of Developmental Toxicologist in the Laboratory of Toxicology, National Toxicology Program (NTP). This staff scientist is expected to have expertise in the area of developmental toxicology and a strong foundation in molecular and developmental biology. The successful applicant will bring an in-depth knowledge of developmental toxicology to the range of activities carried out by the National Toxicology Program (NTP), will be responsible for the supervision of some contracts, and will develop independent research that is relevant to the NTP. The successful applicant will be expected to integrate the findings from animal studies into improved risk assessments, to conceive, design, and conduct investigations on mechanisms of developmental toxicity, and publish their evaluations and findings in leading biology and toxicology journals.

The Laboratory of Toxicology: (1) Designs, directs, and conducts studies to characterize chemical toxicity including system/organ-specific effects; (2) Studies the interactions of chemicals and metabolites with subcellular macromolecules; (3) Plans and conducts research to update and improve methods for characterizing toxicity of chemicals and other agents; (4) Coordinates Laboratory activities with those of other intramural and extramural scientists to develop mechanistic data relevant to chemical-induced toxicities; and (5) Interacts with other research and regulatory agencies regarding toxicological evaluations of agents of public health concern. These activities are accomplished through a combination of investigator-initiated research, program-related work that involves methods development, toxicity testing and mechanisms determinations achieved through contracts, interagency agreements, and external projects involving collaborations and partnerships with the private and public sectors.

The NTP is a multi-agency federal government program headquartered at NIEHS, established to coordinate toxicology research and testing activities, to provide information about potentially toxic chemicals to regulatory and research agencies and the public, and to strengthen the science base in toxicology. The NTP carries out a major animal research and testing program and, with this recruitment, seeks to strengthen the scientific research basis for assessing human developmental hazards and making public health decisions, for improving the selection and evaluation of chemicals, mixtures and exposure circumstances for study by the NTP, and to improve the communication of the results of studies to the public. Minimum qualifications include M.D., Ph.D., or D.V.M. Degree in developmental biology, toxicology, or other directly related field or equivalent education and experience. Applicants must have a proven track record of accomplishments in developmental toxicology or a closely related field.

Information about the NIEHS, the Laboratory of Toxicology, and the National Toxicology Program can be obtained by accessing their respective home pages on the internet at: http://www.niehs.nih.gov/direb/home.htm and http://ntp-server.niehs.nih.gov/. For additional information concerning this position, contact: Dr. Robert Chapin, Search Committee Chair at (919)541-3474. Applications from women and minority groups are particularly welcome. Interested parties should submit a curriculum vitae with bibliography, a brief statement of research interests, and arrange for three letters of recommendation to be sent to:

Ms. Naomi Teasley (HNV99-33) National Institute of Environmental Health Sciences Human Resource Management Branch, (MD EC-11), P.O. Box 12233 Research Triangle Park, NC 27709, (919) 541-5151

Applications received by the first committee meeting will be given first consideration. NIH is an Equal Opportunity Employer

POSITIONS OPEN

COMPUTATIONAL MOLECULAR BIOLOGY

The Department of Biology of Pomona College, a highly selective, national liberal arts college, invites applications for a tenure-track ASSISTANT PRO-FESSORSHIP to begin in fall 2000. Applicants should have broad training in biology, with considerable expertise in molecular modeling or bioinformatics. Postdoctoral experience is preferred. The appointee will participate in Pomona's Molecular Biology Program. The successful candidate will teach an introductory biology course (with lab) either in biochemistry/molecular biology/cell biology or in genetics. In addition, he/she will teach an upper-division course (with lab) involving molecular modeling or bioinformatics, which may alternate with another upper-division course in biology or molecular biology. The successful candidate will establish an active research program involving undergraduates, for which start-up funds are available. A multistation laboratory with SGI O2s, PCs, and Macintoshes is available for teaching and research. The successful candidate will demonstrate a commitment to teaching an ethnically diverse student body in a liberal arts and sciences setting. Please provide a statement of teaching philosophy and interests, which would indicate which introductory course the applicant prefers and include a description of the upper-division course(s) proposed. In addition, please send curriculum vitae, statement of research interests, and three letters of recommendation to: Computational Molecular Biology Search, Department of Biology, Pomona College, Claremont, CA 91711. Telephone: 909-607-2950; FAX: 909-621-8878; e-mail: lhoopes@ pomona.edu. For full consideration, applications should be received by December 1, 1999, and will be accepted until the position is filled. *Pomona College is an* Affirmative Action/Equal Opportunity Employer. We strongly encourage applications from members of groups underrepresented in the sciences.

PHYSIOLOGIST-ASSISTANT PROFESSOR, Tenure-track, Ph.D. September 1, 2000, teach animal physiology, graduate courses in area of specialty, lower level biology courses, and advise medical technology students. The candidate's potential as a teacher and as a director of undergraduate and graduate research are essential criteria. Preference given to individuals with research background in physiology, health science background, and a record of publications in refereed journals. The application deadline is January 15, 2000. Midwestern State University is a liberal arts university with an enrollment of 5,800 students. The Biology Department offers both the Bachelor's of Science and Master's of Science degrees in biology. Submit curriculum vitae, description of proposed research, copy of transcripts, a statement of educational philosophy, and a list of three references with their addresses and telephone numbers who are familiar with your teaching and research to: Dr. William Cook, Chair, Biology Program, Faculty Search Committee, Midwestern State University, 3410 Taft, Wichita Falls, TX 76308-2099. Equal Opportunity / Affirmative Action Employer.

ICHTHYOLOGIST, tenure-track, ASSIST-ANT PROFESSOR beginning August 2000. The successful candidate will teach at the undergraduate and graduate levels, including a course in ichthyology, maintain an extramurally funded research program and direct graduate students. Candidates with experience in marine finfish ecology, behavior, or physiol-ogy are encouraged to apply. A Ph.D. and postdoc-toral experience required. Send curriculum vitae, a brief statement of teaching and research interests, all transcripts, names of three references, and selected reprints by 15 December 1999, to: Dr. Ileana Clavijo, Chair Search Committee, Department of Biological Sciences, University of North Carolina at Wilmington, Wilmington, NC 28403-3297. Please see our website: uncwil.edu/bio/ for additional information or contact e-mail: clavijo@ uncwil.edu. University of North Carolina, Wilmington is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

POSITIONS OPEN

QUANTITATIVE ECOLOGY SOUTHERN ILLINOIS UNIVERSITY CARBONDALE

The Department of Zoology invites applications for a nine-month, tenure-track ASSISTANT PROFES-SOR position in quantitative ecology. Possible research specialties include (but are not limited to) behavioral, evolutionary, population, or community ecology; and/or ecological modeling. Applicants should have demonstrated skills in experimental design, statistical analysis, and computer applications. The department seeks an animal researcher to complement strengths in aquatic ecology, behavior, conservation, fisheries, systematics, and wildlife ecology. Modern research facilities and start-up funds are available. The successful candidate will be expected to develop an externally funded research program, supervise M.S. and Ph.D. students, teach some combination of undergraduate and graduate courses in zoology, ecology, and biostatistics. Candidates must have a Ph.D. in an appropriate field with a record of peer-reviewed publication and scholarly accomplishments commensurate with experience, and demonstrated grant success or strong evidence of funding potential. Preference will be given to applicants with postdoctoral experience. Position begins 16 August 2000. Applicants should send a curriculum vitae, statement of research and teaching interests and plans, copies of transcripts, and have three letters of reference sent to: Search Committee Chair, Department of Zoology, Southern Illinois University Carbondale, Carbondale, IL 62901-6501. Review of applications will begin on 15 January 2000 and continue until the position is filled. Information about the department and university can be found at website: http://www.science.siu.edu/zoology. E-mail inquiries should be directed to the Search Committee Chair (e-mail: zoology@zoology.siu.edu). Southern Illinios University Carbondale is an Affirmative Action/Equal Opportunity Employer. Qualified women and minorities are encouraged to apply.

ASSISTANT PROFESSOR-Biology. State University of New York, Potsdam seeks a Ph.D. biologist who is committed to the preparation of science teachers. The successful candidate will teach regular biology courses as well as sections of a three-semester sequence of interdisciplinary four-credit science courses currently under development that will be required for all future elementary and middle school teachers graduated from this college. The biology portion of the interdisciplinary sequence will be broad and will include laboratory and field biology. Required qualities: Ph.D. in biology and a strong commitment to teacher preparation. For full consideration completed applications should be received by December 20, 1999. Send letter of application, curriculum vitae and the names and telephone numbers of three current references to: Dr. Albert Robinson, Chair, Biology Department, State University of New York, Potsdam, Potsdam, NY 13676. State University of New York at Potsdam is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity

BIOINFORMATICIST. Assistant Professor, tenure-track, to begin September 2000. Individual with background in molecular biology, computational modeling, and database management preferred. Duties include the development and teaching of bioinformatics courses supporting molecular biology, biochemistry, and bioinformatics program and development of an extramurally funded research program involving undergraduate and graduate students. Ph.D. required, postdoctoral experience desirable. Send curriculum vitae, transcripts, three letters of recommendation, and statements of teaching philosophy and research goals to: Bioinformatics Search Committee, Department of Biological Sciences, Towson University, Towson, MD 21252-0001. Review of applications begins December 15, 1999. Additional information is available at website: www.towson. edu/biology. Towson University is an Affirmative Action/ Equal Employment Opportunity, encourages application from women and minorities, and provides reasonable accommodations of the disability of applicants and employees.

POSITIONS OPEN ENVIRONMENTAL STUDIES DIRECTOR

Bowdoin College invites applications for the position of Director of Environmental Studies at the AS-SOCIATE or FULL PROFESSOR rank, beginning in fall 2000. The successful candidate will hold a Ph.D. in an academic discipline, have a distinguished record of scholarship and teaching that addresses issues of past or present national and/or international environmental policy, and have demonstrated skills in interdisciplinary program building and leadership. This will be a joint appointment in the Environmental

Studies Program and an appropriate department. The normal teaching responsibility at Bowdoin is two courses per semester (with adjustments if labs are involved). At least half of the teaching will be in the area of environmental studies with special emphasis on environmental policy. The remaining teaching will be in the department in which the appointment is made.

Bowdoin College is a selective liberal arts college on the Maine coast. Its 29-year-old Environmental Studies Program is being strengthened. It consists of a broadly interdisciplinary coordinate major with 40 to 50 students in each class and faculty offering courses from all three of the divisions of the curriculum. Facilities include the Bowdoin Scientific Station on Kent Island, New Brunswick, and the 118-acre Coastal Studies Center on nearby Orrs Island.

Please send a letter of application, curriculum vitae, and at least three letters of reference to: A. Myrick Freeman III, Director of Environmental Studies, 6700 College Station, Bowdoin College, Brunswick, ME 04011-8476. Review of applications begins on November 15, 1999. For further information about the program and the college, visit our website: www.bowdoin.edu.

Bowdoin College is committed to Equal Opportunity through Affirmative Action. Women and members of minority groups are urged to apply and invited to identify themselves as such.

TUMOR IMMUNOLOGIST THE CLEVELAND CLINIC FOUNDATION

The Center for Surgery Research invites applicants for an appointment at the ASSISTANT/ASSOCI-ATE STAFF level. We are seeking individuals capable of applying molecular biology methods to basic biological issues of tumor immunology and/or gene therapy. Preference will be given to investigators with experience in manipulation of T cells, identification of MHC-binding, tumor-associated peptides, and clinical application of immunotherapy. Candidates must have a Ph.D. and/or M.D. with a minimum of five years of postgraduate training and must give evidence of potential distinction in scholarship through publications and external grant support. Applicants should send curriculum vitae and a statement of research goals before December 1, 1999 to: Suyu Shu, Ph.D., Center for Surgery Research-FF50, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195.

FACULTY POSITION MATERIALS SCIENCE AND ENGINEERING Northwestern University

The Department of Materials Science and Engineering at Northwestern University invites applicants for a tenure-track **ASSISTANT PROFESSOR** appointment. The applicant should have research interests in any areas of electronic, magnetic, and optical materials, including the area of molecular electronics. Post-doctoral experience is highly desirable.

Applicants should send their complete curriculum vitae, a brief description of research interests and the names and addresses of four references to:

Professor J. B. Cohen Search Committee Chair Department of Materials Science and Engineering Northwestern University 2225 North Campus Drive Evanston, IL 60208-3108

Northwestern University is an Equal Opportunity Employer.

Postdoctoral and Research Associate Positions Mouse Molecular Genetics National Cancer Institute, NIH

Postdoctoral and research associate positions are available immediately to study the molecular mechanisms of developmental processes and human disease predisposition and susceptibility through manipulation of GDNF/c-RET signaling pathways and analysis of the in vivo consequences of deregulated cell-cell interaction during organogenesis and carcinogenesis. Applicants with experience in molecular, biochemical and/or histological techniques and an interest in mammalian development and human disease modeling are encouraged to apply.

Applicants with M.D. or Ph.D. degree must have less than five years of postdoctoral experience to qualify for the postdoctoral positions. For the research associate position, a B.S. or M.S. degree in molecular biology or developmental biology and at least three years of laboratory experience are required. Salary and benefit commensurate with experience and position appointed. Please send C.V. and names of three references to:

Dr. Liya Shen National Cancer Institute, NIH Bldg. 37, Room 2B15 37 Convent Dr. MSC 4255 Bethesda, MD 20892-4255 shenl@mail.nih.gov

NIH is an equal opportunity employer.

UNIVERSITY OF NEVADA, LAS VEGAS

AOUATIC BIOLOGIST

Tenure-trackAssistant Professor

The University of Nevada, Las Vegas Department of Biological Sciences invites applications in the area of aquatic biology for a tenure-track position as Assistant Professor starting August 2000. Candidates must have a Ph.D. We seek applicants interested in integrating the unique and diverse aquatic or riparian habitats of the southwest into their research. The successful candidate will be expected to participate in undergraduate and graduate education, as well as to establish an independent, extramurally funded, nationally recognized research program.

Please submit a curriculum vitae, three letters of recommendation, and statements of research and teaching interests to: Dr. Jay Jones, Search Chair, Department of Biological Sciences, University of Nevada, Las Vegas, 4505 Maryland Pkwy, Box 454004, Las Vegas, NV 89154-4004.

MOLECULAR GENOMICS

Tenure-trackAssistant/Associate Professor

Candidates are sought whose research uses functional genomics to address cellular or molecular processes. The research area and model system are flexible but may include: cell cycle, pathogenesis, signal transduction, development and immunity, in animal, plant or microbial systems. The successful candidate will receive a generous start-up package, have access to state-of-the-art genomics facilities, and will join a team of faculty in a state-wide NSF-funded comparative genomics initiative. He/she will be expected to develop and maintain an externally funded research program that includes the training of graduate students. Applicants must have a doctorate as well as postdoctoral training. Teaching responsibilities will include rotation into an introductory cell biology course, as well as contributions to upper-division and graduate courses in cell and molecular biology and/or biotechnology.

Applicants should provide a CV, research and teaching statements, and arrange for three letters of reference to be sent to **Dr. Penny Amy, Search Committee Chair, Department of Biological Sciences, 4505** Maryland Parkway, Box 454004, Las Vegas, NV 89154-4004.

Continuous review of applications will begin November 22, 1999 and continue until positions are filled. Positions are contingent upon funding. Salaries are commensurate with qualifications and experience. Specific information concerning faculty research interests, course offerings, graduate programs, and facilities is available at http://www.unlv.edu/Colleges/Sciences/Biology. For more information about UNLV, see the UNLV World Wide Web site at: http://www.unlv.edu. UNLV is an Equal Opportunity/Affirmative Action employer. Persons are selected on the basis of ability without regard to race, color, sex, age, national origin, sexual orientation, religion, disability or veteran status.

FACULTY POSITION

Department of Microbiology and Molecular Genetics University of Medicine and Dentistry of New Jersey New Jersey Medical School

Applications are invited for this TENURE-TRACK POSITION at the level of Assistant Professor, although distinguished applicants at senior levels will also be considered. The department is scheduled to move to new facilities in 2001 as part of a major programmatic expansion in microbial pathogenesis. While candidates interested in establishing a program in this area are encouraged to apply, investigators in all areas will be considered fully.

Department faculty have established research programs in diverse experimental systems. Interests include control of cell proliferation; transcriptional, posttranscriptional and translational regulation; mutagenesis; DNA replication and recombination; chromosome structure and segregation; human molecular genetics; and molecular pathogenesis of viruses, bacteria and trypanosomes. The successful candidate will develop an independent research program and participate in teaching of graduate and medical students.

New Jersey Medical School is part of the Medical University of the State of New Jersey and is located in the University Heights section of Newark, minutes from New York City and pleasant New Jersey suburbs.

Send complete curriculum vitae including future research plans and arrange to have 3 letters of recommendation sent to:

Dr. Harvey L. Ozer, Chairman Department of Microbiology and Molecular Genetics UMDNJ-New Jersey Medical School 185 South Orange Avenue Newark, NJ 07103-2714



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

Visit our website at: http://www.umdnj.edu/njmsweb

Postdoctoral Opportunities in Breast Cancer Research



Lombardi Cancer Center Georgetown University Medical Center

An integral component of the Specialized Programs of Research Excellence (SPORE) in Breast Cancer grant awarded to the Lombardi Cancer Center is the training of new investigators for a career in translational research. The goals of the program include the development of individuals having the capability to move basic research findings into applied research settings with patients and populations. Postdoctoral positions are immediately available. Successful applicants will have the opportunity to choose a mentor from among an interactive group of peer reviewed and funded investigators who are currently committed to breast cancer research. Research programs cover the development of novel anticancer therapies, the evaluation of prognostic indicators, dissemination of the genetic and molecular mechanisms that underlie the malignant progression, prevention models, loss of estrogen sensitivity, and increased metastatic potential of breast cancer cells. Complete descriptions of individual research programs are available upon request. Salary is competitive and commensurate with qualifications and experience. Applications from women and minorities are encouraged. Applicants should have a Ph.D. or M.D. Please send curriculum vitae, a short statement of research interests and goals, and the names and addresses of three references to:

Breast Cancer SPORE Postodoctoral Training Program c/o Marc E. Lippman, M.D. Lombardi Cancer Center Research Building, 3970 Reservoir Rd., NW Washington, DC 20007-2197 http://lombardi.georgetown.edu


The Department of Biological Sciences at The University of Alabama invites applications for two tenure-track, ASSISTANT PROFESSOR positions to begin August 2000. 1. Animal Physiologist whose research interfaces with existing programs, such as comparative physiology, evolutionary biology, developmental/molecular genetics, molecular systematics, neurobiology, or aquatic ecology. Teaching includes undergraduate and graduate courses in animal/ human physiology, vertebrate functional morphology, and area of specialty. 2. Evolutionary/Population Biologist who explores mechanisms of evolutionary processes. Teaching includes undergraduate and graduate courses in area of specialty and participation in an introductory, organismal-based course for majors emphasizing comparative biological processes. Candidates, who must have a Ph.D. and postdoctoral experience, should complement departmental research foci in aquatic biology and developmental genetics. Appointees will be expected to develop active, externally funded research programs and to work closely with undergraduate and graduate students as advisors and directors of research. We are especially seeking individuals interested in developing quality instruction and in vigorously interacting with our growing interdisciplinary research groups, such as the Coalition for Biomolecular Products and the Center for Freshwater Studies. Each application should include a curriculum vitae, a letter of application indicating teaching philosophy and research goals, and at least three letters of reference sent to: Search Committee, Department of Biological Sciences, Box 870344, The University of Alabama, Tuscaloosa, AL 35487. Review of applications begins November 29, 1999, and continues until positions are filled. For more information visit our website: http://www. as.ua.edu/biology/. Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR ECOLOGY BIOLOGY DEPARTMENT Williams College

Tenure-track position at the rank of **ASSISTANT PROFESSOR** beginning July 2000 for an **ECOLO-GIST** to teach courses in community/ecosystem ecology, conservation biology, evolution, and, on occasion, introductory biology. A Senior appointment is possible in exceptional circumstances. The course load in the department is one course and two laboratory sections, or an equivalent load, per semester. Faculty members are expected to establish an independent research program that attracts external funding and involves undergraduates.

Ph.D., postdoctoral experience, and a strong academic research record are required. Please send curriculum vitae, one-page statements of teaching and research interests, and three letters of recommendation by November 15, 1999, to: Dan Lynch, Department of Biology, Williams College, Williamstown, MA 01267.

An Equal Opportunity/Affirmative Action Employer, Williams College especially welcomes applications from women and minority candidates.

TROPICAL BIOLOGY

The Department of Ecology, Evolution, and Organismal Biology at Tulane University invites applications for a tenure-track position of ASSISTANT PROFESSOR in tropical biology to build areas of specialization in evolutionary ecology, population genetics, conservation biology, biodiversity, and/or aquatic organisms or systems (see website: http:// www.tulane.edu/~ecob/faculty_search). Evidence of outstanding research, publications, and teaching ability will be the primary criteria for selection. Each candidate should submit a curriculum vitae, statement of research and teaching interests, selected publications, and three references by December 15, 1999, to: David C. Heins, Chair, Department of Ecology, Evolution, and Organismal Biology, 310 Dinwid die Hall, Tulane University, New Orleans, LA 70118-5698. Tulane University is an Affirmative Action/ Equal Opportunity Employer committed to excellence through diversity; women and minorities are encouraged to apply.

POSITIONS OPEN

The Department of Biology at Shippensburg University invites applications for three tenure-track positions at the rank of **ASSISTANT PROFESSOR** beginning August 2000. Successful candidates will demonstrate: a strong commitment to excellence in undergraduate instruction; strong potential for successful scholarly activity, with an emphasis on undergraduate research supervision; a doctorate completed by the application deadline; an effective teaching presentation and research seminar at the time of interview. Preference will be given to candidates with two or more years of full time college teaching experience.

Microbiologist. Teaching responsibilities include microbiology, pathogenic microbiology and introductory biology for majors and nonmajors. Preference will be given to applicants with expertise in biotechnology/molecular biology. Deadline for receipt of completed applications: November 15, 1999.

Ecosystem Ecologist. Teaching responsibilities include ecology and upper division ecosystem ecology, and introductory biology for majors and nonmajors. Deadline: December 1, 1999.

Developmental Biologist. Primary responsibilities will include teaching developmental biology, nonmajors biology of aging, introductory biology for majors and nonmajors and developing a course in neurobiology. Deadline: January 15, 2000. Applicants must submit a curriculum vitae, copies

Applicants must submit a curriculum vitae, copies of undergraduate and graduate transcripts, names of three references with contact information, and a statement of teaching philosophy and research interests to:

Chair Search Committee, _____ Position Department of Biology 1871 Old Main Drive Shippensburg University Shippensburg, PA 17257

Shippensburg University is committed to Equal Employment Opportunity. Women, persons of color, veterans, and persons with disability are encouraged to apply.

ASSISTANT PROFESSOR PHYSIOLOGY

Tenure-track position starting fall 2000, involvement in one-semester of introductory biology for non-majors, a core course (genetics or ecology) for majors, and an elective in plant, microbial, or ecological physiology. The successful candidate will be committed to excellence in teaching and be expected to seek external funding in establishing an active research program. Ph.D. required, teaching experience and familiarity with modern molecular techniques preferred. Submit curriculum vitae, transcripts, statements of teaching and research interests, and three letters of recommendation to: Dr. Elliott B. Mason, Chair, Department of Biological Sciences, Post Office Box 2000, State University of New York at Cortland, Cortland, NY 13045. To ensure full consideration, applications must be received by November 22, 1999. State University of New York, Cortland is an Affirmative Action/Equal Employment Opportunity/ADA Employer. The College has a strong commitment to the affirmation of diversity, offers interdisciplinary degree programs in the areas of multicultural studies, and is committed to science education for future elementary educators.

ECOLOGIST TENURE-TRACK ASSISTANT PROFESSOR

We seek a broadly trained Ecologist who works at landscape or ecosystem levels, who will establish a vigorous research program, and who will teach courses in addition to directing student research. For information about the department, see website: http:// life.bio.sunysb.edu/ee/. By 31 December 1999, send curriculum vitae, statement on research and teaching, no more than three reprints, and the contact information (including e-mail) for three referees to: Ecology Search, Department of Ecology and Evolution, State University of New York, Stony Brook, NY 11794-5245.

The University at Stony Brook is an Equal Opportunity/ Affirmative Action Employer. Applications from women, people of color, disabled persons, and/or special disabled or Vietnamera veterans are especially welcome.

TWO TENURE-TRACK FACULTY POSITIONS (1) ENTOMOLOGIST

POSITIONS OPEN

(2) DEVELOPMENTAL BIOLOGIST Boise State University Department of Biology invites applications for two tenure-track positions at the rank of ASSISTANT PROFESSOR to begin in August 2000. A Ph.D., postdoctoral experience and a record of research productivity are required. The successful candidates are expected to establish an independent, extramurally-funded research program. (1) Entomologist: a broadly-trained terrestrial entomologist with expertise in ecology, systematics, or evolution will teach general entomology, general zoology and a course in his/her area of expertise. (2) Developmental Biologist: this broadly-trained candidate will teach developmental biology, general zoology and a course in his/her area of expertise. Further information available at website: www.boisestate. edu/biology. Submit curriculum vitae, unofficial transcripts, research and teaching statements, three reprints, and addresses, e-mail, and telephone numbers of three references to: Dr. James Smith, Chair, Entomologist Search Committee or Dr. Richard McCloskey, Chair, Developmental Biologist Search Committee, Department of Biology, Boise State University, Boise, ID 83725 by December 9, 1999. Boise State University is an Equal Opportunity Employer/Affirmative Action Institution.

OPEN PROFESSOR and **ENTOMOLOGIST**: Molecular Basis of Odor and/or Pheromone Perception in Insects, Department of Entomology, University of California, Riverside. Tenure-track position available July 1, 2000, 11 month, 25 percent teaching, 75 percent research. Appointment level and salary commensurate with research/teaching experience. Ph.D. in entomology, neuroscience, insect physiology or a related discipline, with graduate training and postdoctoral experience in using molecular and physiological techniques to investigate the perception of odors and/or pheromones in insects is required. The appointee will conduct molecular and physiological research into the molecular basis of odor and/or pheromone perception in insects, will supervise graduate students and will also participate in the department's teaching programs. Applicants should send curriculum vitae, transcripts, statement of research interests, reprints and manuscripts in press, and names and addresses of five references by December 15, 1999, to: Dr. Peter W. Atkinson, Search Committee Chair, Department of Entomology, University of California, Riverside, California, 92521; e-mail: peter.atkinson@ucr.edu. Information about the Entomology Department can be found at website: http://cnas.ucr.edu/~ento/index.html. The University of California is an Equal Opportunity/Affirmative Action Employer.

ANIMAL BEHAVIOR/BIOLOGY Bucknell University

Applications are invited for an entry-level tenuretrack position as **ASSISTANT PROFESSOR** in animal behavior/biology. Ph.D. required. Applicants should have expertise in evolutionary and invertebrate behavior. Teaching responsibilities will involve introductory and advanced animal behavior/biology courses, including behavioral genetics. Cover letter addressing teaching philosophy and research goals, curriculum vitae, and three letters of recommendation should be submitted to:

> Dr. Douglas Candland, Director Animal Behavior Program Bucknell University Lewisburg, PA 17837 E-mail: <dcandlan@bucknell.edu> Telephone: 570-577-1431 FAX: 570-577-3760 Website: http://www.bucknell.edu/ department/animalbehavior

Review of applications will begin on December 6, 1999. The search will remain open until the position is filled. Bucknell University encourages applications from women and members of minority groups. Equal Employment Opportunity/Alfirmative Action.

Senior Scientists

Protein Engineering Job #212 We are seeking several individuals to join a group generating proteins with novel functions. Experience in the following areas a plus: Procaryotic Expression, Directed Evolution, Protein Structure-Function, or Phage Display.

In situ Hybridization Job #213

We are looking for an individual with in situ hybridization and histology experience to work on the development of new products in this area.

RNA Methodology Job #217

We are always looking for talented individuals with experience related to any aspect of technologies related to RNA.

Candidates should have a Ph.D. and postdoctoral experience, a strong publication record and an innovative and entrepreneurial spirit. Senior Scientists have considerable freedom in developing their own research programs. They typically have a small research group, have NIH small business grants and write papers and patents. We feel that Ambion's diverse and interactive R&D group is unique in the industry and has been important to our continuing success.

QC - Manufacturing

Quality Control Manager Job #219

Ambion seeks a dynamic scientist to head our Quality Control Department. A BS in molecular biology or related field, MS or Ph.D. preferred, and strong experience in RNA related techniques are required. This individual must have proven managerial skills and interact well with both R&D and manufacturing scientists. Previous experience in manufacturing, QC environment and ISO9000 quality systems is preferred.

Manufacturing Development Scientist Job #220

Ambion seeks a creative scientist who can add depth to our manufacturing group as a product and process development scientist. An MS in molecular biology or related field, Ph.D. is preferred, and strong experience in a variety of molecular biology techniques is required. This individual will be expected to create and develop new product lines. A diverse background in RNA related techniques and the innate ability to tinker and troubleshoot is highly desirable. Previous experience in biotech manufacturing is a plus. This individual must provide leadership for a manufacturing development group and interact well with both R&D and manufacturing scientists.

Postdoctoral and Research Associate positions are also available.

Ambion is a rapidly growing biotechnology company that focuses on applications related to RNA. It is located in Austin, the state capital, on the edge of the "Texas Hill Country," which provides rivers, lakes, scenic rolling hills and a comfortable climate. Austin is home to the main campus of the University of Texas and offers an exciting array of restaurants, music and cultural events. Austin is widely recognized as one of America's most livable cities.

We offer a stimulating work environment, competitive salary and benefits, 401(k) plan, employee stock option and bonus plans. Equal Opportunity Employer. M/F/D/V

Reply to:

Ambion, Inc. 2130 Woodward St. Austin, TX 78744-1832 Ph: (512) 651-0200 Fax: (512) 651-0201 Email: resumes@ambion.com

POSTDOCTORAL RESEARCH

Study molecular and immunologic basis for the dissimilar oncogenicities of human papillomaviruses (HPV) and adenoviruses (Ad) in humans. Funding by a National Institute of Health Training Grant requires that candidates be US citizens or permanent residents. Candidates should have a recent or pending Ph.D. in molecular biology, biochemistry or immunology.

Please provide a curriculum vitae, a letter describing research skills and goals, reprints and three references to the attention of Dr. John Routes.

> National Jewish Medical and Research Center 1400 Jackson St., B121 Denver, C0 80206 FAX: (303) 398-1775 e-mail: StichmanD@nic.org

NATIONAL JEWISH Medical and Research Center

AA/EOE



Ambon

Research Scientists

Merck & Co., Inc. is a leading research-driven pharmaceutical products and services company. Recently ranked by *Fortune* in the top 10 of "America's Most Admired Companies," we continually live up to our reputation with a truly unique work environment that fosters diversity and growth. We currently have exciting opportunities for Research Scientists at our Rahway, NJ location.

The successful candidates will be involved in research of G-protein coupled receptors. This includes the cloning of receptor genes and/or other relevant proteins, their expression in mammalian cells, their pharmacological characterization and the identification of novel antagonists or agonists. The ultimate goal is to determine the pharmacological effects of novel ligands in primary cells or tissues and in animal models, in order to assess the physiological role of these receptors' pathways and to identify compounds suitable for clinical development.

Candidates should have a B.S./M.S. degree or equivalent in Biochemistry, Molecular Biology, or Cell Biology with at least two years' experience in a biochemistry or molecular biology laboratory with research skills that include cloning, mammalian cell expression, characterization of signal transduction pathways and receptor binding assays. Applicants with some experience in small animal handling are preferred. Good oral and written communications skills are required.

Merck is committed to providing employees with a stimulating work environment, as well as a competitive salary and benefits package. For consideration, please forward your resume and a cover letter, including salary requirements and Ad #109, to: Merck & Co., Inc., PO Box 2000, RY 80-A3, Rahway, NJ 07065 or e-mail to staffing.resume@merck.com We are an Equal Opportunity Employer, M/F/D/V.





ASSISTANT PROFESSOR DEVELOPMENTAL BIOLOGIST

Creighton University invites applicants for a tenure-track, nine month appointment at the rank of Assistant Professor to begin in August 2000. Candidates should have completed a Ph.D. with a specialization in developmental biology. Postdoctoral experience and teaching experience are both highly desirable. The teaching load is four courses per year. Primary responsibilities include: a vertebrate embryology course with laboratory and an upper division nolec-ular developmental course with laboratory. In addition, the successful candidate will contribute a celllevel course complementary to the present depart-mental offerings. The successful candidate should possess a strong desire to teach in a liberal arts college. Mentoring of undergraduate research students is required. The individual must establish an effective and sustainable research program that leads to peer-reviewed publications required for tenure and advancement. To apply, send 1) a curriculum vitae; 2) statements on teaching philosophy, research interests, background training and special skills, and long-term goals; 3) documentation (if available) of teaching effectiveness; 4) undergraduate and graduate transcripts; and 5) three letters of reference to: James E. Platz, Chair of Search Committee, Department of Creighton University, Omaha, NE Biology, 68178-0103. Applications should be complete by Wednesday, December 8. Creighton is a Jesuit, Catholic institution that seeks qualified applicants from all backgrounds who believe they can contribute to the university's outstanding educational traditions. We encourage applications from women and minorities. Equal Opportunity Employer/Affirmative Action

PLANT DEVELOPMENTAL BIOLOGY YALE UNIVERSITY

The Molecular, Cellular, and Developmental Biology Department of Yale University invites applications for a tenured ASSOCIATE or FULL PRO-FESSOR in the area of plant developmental biology. We seek scholars with a record of outstanding achievement in research who are accomplished and creative teachers at both the undergraduate and graduate level. We are interested in both external and internal candidates with breadth of expertise pursuing molecular, genetic, and cellular approaches to problems in plant development and/or the evolution of plant development.

Please send curriculum vitae, description of research interest along with the names, postal and email addresses, and telephone numbers of at least three referees by January 1, 2000, to: Plant Development Search, c/o Chair, Molecular, Cellular, and Developmental Biology Department, Yale University, P.O. Box 208103, New Haven, CT 06520-8103.

Yale University is an Affiniative Action / Equal Opportunity Employer. Women and members of minority groups are urged to apply.

Biology. Hartwick, a nationally ranked, selective liberal arts and sciences college with approximately 1,450 students, located in upstate New York, seeks candidates for a full-time, tenure-track position be-ginning September 2000. Successful candidates must demonstrate excellence in undergraduate teaching, establish a research program involving undergraduate students, and be willing to seek external funding for research. Ph.D. required. We are seeking a **NEURO**-BIOLOGIST to teach anatomy and physiology and upper-level courses such as neurobiology, invertebrate zoology, and electron microscopy, and to advise pre-allied-health students. Please send a statement of teaching and research interests, curriculum vitae, and three letters of recommendation to: M. Richard Segina, Chair, Biology Department, Hartwick College, Oneonta, NY 13820. Review of applications will begin immediately and continue until position is filled. Women and members of underrepresented groups are especially encouraged to apply. Hartwick College is an Equal Opportunity Employer.

POSITIONS OPEN

ENVIRONMENTAL STUDIES PROGRAM

Gettysburg College invites applications for two tenure-track ASSISTANT PROFESSOR positions in environmental studies to begin fall 2000: Geographer with strong GIS background to teach introductory geography and upper-level GIS-based courses in environmental aspects of human and physical geography; Social Scientist with focus in resource management to teach introductory and upper-level courses that integrate environmental science and policy. Candidates must hold Ph.D. and be committed to interdisciplinary teaching in the liberal arts tradition and to research involving students. The growing Environmental Studies Program benefits from proximity to policy-making agencies and a variety of terrestrial, freshwater, and marine habitats. We will move into a new science complex in 2001. Successful candidates will have a unique opportunity to assist in designing their teaching and research space, including a GIS laboratory. Gettysburg College is a highly selective liberal arts college located within 90 minutes of the Baltimore/Washington, D.C. area. Established in 1832, the college has a rich history and is situated on a 220-acre campus with an enrollment of 2,300 students. Send curriculum vitae and statement of teaching and research goals and have three letters of reference (at least one of which can speak to the candidate's teaching effectiveness) sent to: Dr. John A. Commito, Coordinator, Environmental Studies Program, Gettysburg College, Gettysburg, PA 17325 USA. Review of applications will begin December 1, 1999, and continue until position is filled.

The college seeks to promote diversity in its community through its Affirmative Action/Equal Opportunity programs; included in an attractive benefits package is a Partner Assistance Program.

Natural sciences: biology, chemistry, environmental science, or physics: ASSOCIATE PROFES-SOR/PROFESSOR and CHAIR of the Department of Natural Sciences.

To begin July 1, 2000. Appointment as Chair is for a three-year term, with additional three-year terms possible. The Chair is expected to provide creative leadership and effective management for a department of 21 faculty members. The department offers undergraduate degrees in biology, chemistry, and physics; minors in environmental studies, earth science, and geography; and a Master's degree in environmental studies. Initial planning is underway for a new science building. Requirements include a Ph.D. in biology, chemistry, environmental science, or physics; a demonstrated record of excellence in teaching at the undergraduate level, and an established research record. Administrative experience preferred. To apply, send letter of application, curriculum vitae, statement of teaching philosophy and research goals, transcripts, and contact information for three references to: Human Resources, Attn: Science Department, Search Committee Chair, Longwood College, 201 High Street, Farmville, Virginia 23909. Review of applications will begin immediately and will continue until the position is filled. Longwood College is an Affirmative Action, Equal Opportunity Employer. Women and under-represented minorities strongly encouraged to apply.

ASSISTANT PROFESSORSHIPS IN INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY Harvard University Department of Chemistry and Chemical Biology

Applicants are invited to apply for Assistant Professorships in inorganic, organic, and physical chemistry. Applicants should arrange to have three letters of recommendation sent independently and should provide a curriculum vitae, a list of publications, and outlines of two future research projects. Applications and supporting materials should be sent to: Professor James Anderson, Chairman, Department of Chemistry and Chemical Biology, Harvard University, 12 Oxford Street, Cambridge, MA 02138-2902. Harvard University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minority group members.

POSITIONS OPEN

FACULTY POSITION MASS SPECTROMETRY NATURAL PRODUCTS DISCOVERY ENZYMOLOGY The University of Texas Southwestern Medical Center

The Department of Biochemistry at The University of Texas Southwestern Medical Center announces the opening of up to three tenure-track appointments. We are particularly interested in Ph.D. and/or M.D. scientists having expertise in: (i) mass spectrometry; (ii) the isolation and identification of novel, bioactive natural products and/or the exploitation of new techniques to achieve molecular diversity; or (iii) enzymology and chemical biology. University of Texas Southwestern maintains state-of-the-art facilities and employs a faculty including four Nobel Laureates and twelve members of the National Academy of Sciences. The Biochemistry Department offers a vibrant environment for interdisciplinary research, attractive startup support, and participation in graduate level teaching. For more information, visit the Biochemistry Department website: http://biochemistry.swmed. edu. Applicants should submit a curriculum vitae, description of research interests, and the names of three references by December 15, 1999, to: **Steven** McKnight, Chair, Department of Biochemistry, University of Texas Southwestern Medical Cen-ter, 5323 Harry Hines Boulevard, Dallas, Texas 75235-9038. The University of Texas Southwestern Medical Center is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

ASSISTANT PROFESSOR DEPARTMENT OF MICROBIOLOGY AND MOLECULAR CELL SCIENCES

The Department of Microbiology and Molecular Cell Sciences at The University of Memphis invites applications for a tenure-track ASSISTANT PRO-**FESSOR** position. We seek outstanding candidates with postdoctoral experience in basic molecular and cellular biology of bacteria or yeast. Candidates will be expected to establish an externally funded research program and participate in graduate and undergraduate teaching and research. A competitive salary and startup package are available. Research facilities include an integrated microscopy center and a molecular core. Additional information about the department can be found at: website: http://www. people.memphis.edu/~microcell/mmcs.html. Applicants should submit a curriculum vitae, concise statement of research plans, and names/addresses of at least three references to: Charles A. Lessman, Ph.D., Search Committee Chair, Department of Microbiology and Molecular Cell Sciences, The University of Memphis, 201 Life Sciences, Memphis, TN 38152. Review of applications will begin anuary 5, 2000, and continue until the position is filled. Equal Opportunity/Affirmative Action Employer.

Environmental Sciences: The University of Ten-nessee-Chattanooga. ASSISTANT PROFESSOR (full time, tenure-track), beginning August 1, 2000, pending budget approval. Environmental Scientist. Ph.D. required. Responsibilities include lecture and/ or laboratory in introductory environmental science, environmental conservation, behavioral ecology, and animal behavior. Scholarly activities and a productive research program involving graduate and undergraduate students expected. Advising students and participation in departmental matters required. Preference given to candidates with demonstrated excellence in college and university teaching. Applicants should send a statement of teaching and research interests, transcripts, and three reference letters to: Dr. Charles H. Nelson, Head, Department of Biological and Environmental Sciences, 615 McCallie Avenue, The University of Tennessee at Chattanooga, Chattanooga, TN 37403. Screening of credentials will begin on November 17, 1999, and will continue until the position is filled. The University of Tennessee at Chattanooga is an Equal Employment Opportunity/Affirmative Action/Title VI & IX/Section 504, ADA/ADEA Institution.

FACULTY POSITIONS

Pharmacology & Cell Biophysics University of Cincinnati College of Medicine

The Department of Pharmacology & Cell Biophysics is recruiting several new faculty. We are expanding our neuropharmacology and cancer pharmacology programs, as well as adding to our established cardiovascular program. Applications from candidates in other areas of modern pharmacology are welcomed. We are primarily seeking Assistant Professors, but outstanding candidates at the Associate and Full Professor levels will also be considered.

Applicants are expected to bring or establish a strong, independent research program and contribute to medical and graduate educational programs. For more information: http://www.med.uc.edu/pharmacology/.

Generous start-up resources are available. Core facilities include transgenic and knockout mice, DNA synthesis and sequencing, mouse physiology/pharmacology, microscopy, structural biology/NMR, genomics, proteomics and bioinformatics. For details: http://med.research.uc.edu/.

Applicants should send curriculum vitae, statements of research accomplishments and future plans, and the names of at least three references to: Faculty Search Committee, Department of Pharmacology & Cell Biophysics, University of Cincinnati College of Medicine, P.O. Box 670575, Cincinnati, OH 45267-0575 USA. Review of applications will begin upon receipt and continue until available positions are filled.

The University of Cincinnati is an Equal Opportunity Employer

Symposium

Center for Organogenesis The University of Michigan

3rd INTERNATIONAL SYMPOSIUM Molecular Control of Organogenesis May 19 - 20, 2000 Ann Arbor, Michigan USA

Keynote

Francis Collins, National Human Genome Research Institute

Speakers

Uta Francke, Stanford University School of Medicine, Department of Genetics and Howard Hughes Medical Institute Stuart Orkin, Children's Hospital, Department of Pediatrics, Harvard Medical School and Howard Hughes Medical Institute Frank Rauscher, III, The Molecular Genetics Program, The Wistar Institute, University of Pennsylvania Janet Rossant, Mount Sinai Hospital, Samuel Lunenfeld Research Institute, and University of Toronto, Department of Medical Genetics and Microbiology Bruce Spiegelman, Dana Farber Cancer Institute and Department of Cell Biology, Harvard Medical School

For registration information contact: Michelle Shukait, Center for Organogenesis, University of Michigan, Ann Arbor, Michigan 48109-0616 USA mshukait@umich.edu Tel: 734-936-2499 Fax: 734-647-9559

http://www.med.umich.edu/medschool/organo/

The University of Michigan School Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The University of Michigan Medical School takes responsibility for the content, quality, and scientific integrity of this CME activity. The University of Michigan Medical School designates this educational activity for a maximum of 6 hours in category I towards the AMA Physician's Recognition Award. Each physician schould claim only those hours of credit that he/she actually spent in the educational activity.

COLUMBIA UNIVERSITY Department of Biomedical Engineering

The Department of Biomedical Engineering in the Fu Foundation School of Engineering and Applied Science at Columbia University is seeking to fill a tenure-track faculty position at the Assistant or Associate Professor level in the area of cellular or tissue engineering. Cellular and tissue engineering is one of the three major themes in this new Department, which has been established with the support of a Whitaker Foundation Development Award. Cellular and tissue engineering is considered to be the use of engineering methodologies to characterize the cellular and tissue properties or behaviors, or the engineering modifications of cells and tissues to solve biomedical problems. Applicants should have a Doctorate in biomedical engineering or a closely related discipline, and should be prepared to establish a vigorous and independent program of high quality research. Close collaboration with the faculty and staff of the College of Physicians and Surgeons is expected, and qualified individuals may receive joint appointments.

Applicants should send a complete curriculum vitae, three publication reprints, a statement of research interests, and names of five references to: Professor Van C. Mow (Chair of Cellular and Tissue Engineering Search), CEPSR 416, Code 8904, 530 W. 120 Street, Columbia University, New York, NY 10027, by Janurary 15, 2000. *Columbia University is an equal opportunity/affirmative action employer. Minorities and women are encouraged to apply.*

Scientist/Sr. Scientist Clinical Sciences

Digene Corporation develops, manufactures and markets DNA and RNA tests for the detection, screening and monitoring of human diseases. We seek a Scientist who can join us now in our Beltsville location. Because of our continued growth, we will be moving January 2000 to new state-of-the-art facilities in **Gaithersburg, MD**.

Key individual needed to work as part of a newly formed multidisciplinary team to evaluate, develop and implement novel approaches for high throughput clinical and research assay systems for gene analysis and gene expression profiling using DNA/RNA/Protein assay technologies. This individual will evaluate all aspects of potential new technologies, including molecular biology, chemistry and automation.

Qualifications include M.S. Ph.D. in Molecular Biology, Biochemistry, Chemistry or Biology, a minimum of 3 years post-doctoral experience in gene discovery, pharmacogenomics, drug discovery, and a proven ability to perform and direct independent advanced technology assessment, research and development. Must have highly technical skills in gene target and signal amplification methods, cloning, nucleic acid probe design and synthesis, SNP analysis, micro arrays, gene expression analysis, and DNA/RNA detection techniques.

We offer a competitive salary and benefits package. Please send resume and salary history to: Digene Corporation, HR - Job #8640, 9000 Virginia Manor Road, Beltsville, MD 20705. Fax: (301) 470-6498. E-mail: Indept@digene.com. We are an equal opportunity employer.

Visit www.digene.com for more information.



ENVIRONMENTAL AND REPRODUCTIVE BIOLOGISTS

The Department of Biological Sciences at Wichita State University invites applications for one or more tenure-eligible faculty positions with the rank of AS-SISTANT or ASSOCIATE PROFESSOR. We seek individuals whose expertise complements existing departmental research programs in reproductive and environmental biology. Existing research programs include environmental toxicology, reproductive toxicology, endocrine disruption, hormonal carcinogenesis, and reproductive endocrinology. Applicants must have: an earned doctorate; a strong record of scholarly achievement, including publications; skills and enthusiasm for teaching at both the undergraduate and graduate level; capability of conducting independently-directed research activities; good communication skills (oral and written), and the ability to interact collegially with faculty and students as evidenced by prior experience. Furthermore, appointment at the Associate level requires a significant record of funded research activity. Generous laboratory space is available and start-up funds will be provided.

The deadline for application is November 30, 1999. To apply, send a letter of interest, curriculum vitae, a statement of research goals (including plans for obtaining extramural research funding), a statement of teaching philosophy and interests, and contact information for three references to: Faculty Search Committee, Department of Biological Sciences, Wichita State University, 1845 Fairmount, Box #26, Wichita, KS, USA 67260-0026. Wichita State University is an Affirmative Action/Equal Opportunity Employer.

TENURE-TRACK ASSISTANT PROFESSOR

The Department of Zoology at Miami University has an opening for a broadly trained Biologist, with the expertise to introduce molecular genetic techniques into the introductory courses on its campus in Hamilton, Ohio. The successful applicant will be expected to teach undergraduate courses in zoology, establish and maintain an active research program (specific area of research is open), and actively participate in university and community service. The Hamilton Campus is an open admission commuter campus with an enrollment of 2,600 students, located 16 miles from the main campus in Oxford, Ohio. Faculty on the Hamilton Campus are full members of the Department of Zoology, which is composed of 35 faculty, over 50 Ph.D./M.S. students, and approximately 1,000 majors. The successful candidate will have access to state-of-the-art facilities for molecular, cellular and whole organism research located on the Oxford Campus. Send letter of application, curriculum vitae, statement of teaching and research interests, and three letters of recommendation to: Dr. Ann Rypstra, Department of Zoology, Miami University, Oxford, OH 45056. Review of applications will begin on 1 December 1999, and continue until the position is filled. Ph.D. required. Position will begin August 2000. Telephone: 513-529-3100; e-mail: rypstral@muohio.edu; websites: http://zoology. muohio.edu/and http://www.ham.muohio.edu/ for more information. Miami University offers Equal Opportunity in Employment and Education.

RESEARCH SPECIALIST: available immediately to study genes that regulate apoptosis and develop genetic approaches to gene discovery. Strong research background in cell culture and molecular biol ogy techniques including transfections, PCR, cloning, Northern and Western analyses is essential. Candidates must have at least a Bachelor of Arts/ Bachelor of Science in biology or an equivalent degree, a valid U.S. work visa and excellent communication skills. Please send curriculum vitae, a summary of research experience, names and contact information of three references to: Dr. Louis Deiss, Department of Molecular Genetics (M/C 669), University of Illinois at Chicago, Chicago, IL 60607. E-mail: Ideiss@uic.edu; FAX: 312-355-0474. University of Illinois at Chicago is an Affimative Action/Equal Opportunity Employer.

POSITIONS OPEN

ECOLOGIST/ EVOLUTIONARY BIOLOGIST

The Department of Biological Sciences, University of Maryland, Baltimore County (UMBC) seeks an outstanding Scientist who combines field study with molecular, biochemical, or genetic approaches to investigate basic questions in ecology and/or evolution. This tenure-track ASSISTANT PROFESSOR position is in a department that has core research groups in ecology, developmental biology, molecular biology, plant biology, and neurobiology, offering doctoral degrees in biological sciences, environmental science, neuroscience, and molecular/cellular biology (www. umbc.edu/biosci). Salaries, start-up funds, and facilities are competitive. UMBC is a mid-sized university in the Baltimore/Washington, D.C. area, which offers a great diversity of potential research sites, and we host a National Science Foundation LTER center. The successful candidate will be expected to develop an independent research program and to contribute to undergraduate and graduate courses in ecology and evolution. Applicants must have a Ph.D. degree, postdoctoral experience, and a strong publication record. Applications should include curriculum vitae, summary of current and future research interests, and contact information for three references. Submit applications by December 15, 1999 to: Thomas W. Cronin, Chair, Search Committee, Department of Biological Sciences, UMBC, 1000 Hilltop Circle, Baltimore, MD 21250. UMBC is an Affinnative Action/Equal Opportunity Employer.

TENURE-TRACK POSITION IMMUNOLOGY Department of Pathobiology University of Pennsylvania School of Veterinary Medicine

The Department of Pathobiology at the University of Pennsylvania School of Veterinary Medicine is ini tiating a search for a tenure-track ASSISTANT PROFESSOR. Candidates should have a Ph.D. and/or a D.V.M. or equivalent (preference will be given to dual-degree candidates) and several years of postdoctoral research experience with a record of significant accomplishment. The successful candidate will be expected to participate in the teaching of graduate and veterinary courses in immunology and pathology and to establish an independently-funded research program, preferably in the area of T cell activation and/or signaling. Applicants should submit a curriculum vitae and the names of three references by Dec. 15, 1999, to: Chair, Immunology Search Committee, Department of Pathobiology, School of Veterinary Medicine, University of Pennsylvania, 3800 Spruce Street, Philadelphia, PA 19104. The University of Pennsylvania is an Equal Opportunity/ Affirmative Action Employer and strongly encourages applications by women and minorities

DEVELOPMENTAL BIOLOGIST

ASSISTANT PROFESSOR, tenure-track, Ph.D. required, beginning September 2000. The candidate is expected to involve undergraduates in research and to teach introductory and upper-level courses in developmental biology and physiology/anatomy. Preference will be given to candidates with a focus on whole organism research. The department has an array of multi-user facilities including: a SEM/TEM/ light microscopy suite, a tissue culture room, and an imaging facility. Start-up funds and dedicated research space are available to establish an active research program. Knox is a highly selective liberal arts college, with a third of our students majoring in the sciences. Biology majors are required to do research, and most present their work at professional meetings. Candidates should submit a curriculum vitae, statements of research interests and teaching philosophy, and three letters of recommendation to: Dr. Mark Brodl, Chair, Department of Biology, Knox College, Galesburg, IL 61401-4999. Applications will be reviewed beginning December 15, 1999. In keeping with its 162-year commitment to equal rights, Knox College particularly welcomes applications from women and members of underrepresented groups

POSITIONS OPEN

POPULATION ECOLOGY UNIVERSITY OF CALIFORNIA, RIVERSIDE

The Department of Biology invites applications for a position in population ecology at the Junior (ten-ure-track ASSISTANT PROFESSOR) or Senior (tenured ASSOCIATE or FULL PROFESSOR) level. We seek an individual who studies natural populations from an evolutionary perspective, using both theoretical and empirical approaches. Areas of expertise include metapopulation dynamics, invasion ecology, or conservation biology; use of population or quantitative genetics in modeling and/or empirical studies is desirable. The successful candidate will establish a vigorous research program, contribute to undergraduate and graduate training, and participate in our interdepartmental graduate research units in genetics and in evolution and ecology; participation in our new Center for Conservation Biology is also encouraged. All applicants must have a Ph.D. degree, two or more years of postdoctoral training, and a strong record of research accomplishment. Senior applicants must also have an excellent teaching record. A curriculum vitae, statement of research interests, and at least three letters of reference (as well as names and addresses of references for senior applicants) should be sent to: Chair, Population Ecology Search Committee, Department of Biology, University of California, Riverside, CA 92521 by January 21, 2000. The University of California is an Equal Opportunity/ Affirmative Action Employer.

EVOLUTIONARY BIOLOGIST UNIVERSITY OF CALIFORNIA RIVERSIDE

The Department of Biology invites applications for a faculty position at the Junior (tenure-track ASSIST-ANT PROFESSOR) or Senior (tenured ASSOCI-ATE or FULL PROFESSOR) level. We seek an evolutionary biologist working at the interface between the individual and the environment; relevant areas of interest include evolutionary physiology, functional morphology, and ecological genetics. The successful candidate will establish a vigorous research program, contribute to undergraduate and graduate training, and participate in our interdepartmental graduate research unit in evolution and ecology. Applicants must have a Ph.D. degree and a strong record of research accomplishment. Junior-level applicants must have two or more years of postdoctoral training; senior applicants must have an excellent research and teaching record. A curriculum vitae, statement of research interests, and three to five letters (as well as names and addresses of references for senior applicants) should be sent to: Chair, Evolution Search Committee, Department of Biology, University of California, Riverside, CA 92521. Review of applications will begin January 21, 2000. The University of California is an Equal Opportunity/Affirmative Action Employer.

The Biology and Microbiology Department at the University of Wisconsin Oshkosh seeks two tenuretrack ASSISTANT PROFESSORS: (1) Specialty in cell biology and electron microscopy. Responsibilities: Teach electron microscopy; share teaching cellular and molecular biology, introductory biology; develop a research program in cell biology; run and maintain well-equipped electron microscope facility (SEM and TEM); (2) Specialty in aquatic vascular plant ecology. Responsibilities: Share in teaching advanced ecology, botany, and introductory biology courses; develop a research program in aquatic ecology. Both positions begin 1 September 2000, and successful candidates will be expected to pursue extramural funding and supervise M.S. theses. Ph.D. required; postdoctoral and teaching experience desirable. Send letter of application, statements of teaching philosophy and research interests, curriculum vitae, reprints, three letters of recommendation, and transcripts to: Chair, Department of Biology and Microbiology, University of Wisconsin Oshkosh, Oshkosh, WI 54901 by 10 January 2000. For additional information, see website: http://www.uwosh.edu/ departments/biology/. The University of Wisconsin Oshkosh is an Affirmative Action/Equal Opportunity Employer.







15th & 16th November 1999

Organised by **Professor John S. Oxford** (Retroscreen Virology and Department of Medical Microbiology, St. Bartholomew's and The Royal London School of Medicine and Dentistry); **Dr Robert Webster** and **Sir John Skehel** (National Institute of Medical Research). Individual speakers will include:

Dr R Webster, St. Jude Children's Hospital, USA

Dr F Hayden, University of Virginia, USA

Dr A Reid, Armed Forces Institute, Washington, USA

Dr R Daniels, National Institute of Medical Research, UK

Dr P Palese, Mount Sinai Medical Centre, USA

Sir John Skehel, National Institute of Medical Research. UK

Dr D Lavanchy, World Health Organisation

Dr Y Kawaoka, School of Veterinary Medicine, Wisconsin, USA

Dr G Schild, National Institute of Biological Standards and Control, UK

Dr A Hay, National Institute of Medical Research, UK

Dr P Colman, CSIRO, Australia

Dr C Scholtissek, Linden, German

For further details please visit: www.retroscreen.com/conference. htm. Alternatively you can contact the Conference Organisers on: ++44 (0)207-375-2498 ext 2012/ 2011 or fax: ++44 (0)207-375-2597.

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BIOLOGY FACULTY POSITIONS San Diego State University

Two tenure track appointments at the Assistant Professor level are offered in the Biology Department to begin Fall 2000. Ph.D. and post-doctoral experience required. Successful applicants will be expected to establish externally funded research programs involving B.S., M.S. and Ph.D. students.

Developmental Cell and Molecular Biologist. Desirable research interests include analyses and identification of developmentally regulated genes, cell cycle regulation in development, structure/function analyses of proteins and/or nucleic acids involved in development. While the model system used is not of primary importance, individuals employing systems coordinate with or complementary to those of present faculty (muscle, neuronal, immune, *Drosophila* and mouse systems) are preferred. Position responsibilities include teamteaching in cell and molecular biology courses at both the undergraduate and graduate levels and an upper division developmental biology course.

Microbial Ecologist. Research addressing plant/soil interactions with possible specialization in ecosystem function, restoration/conservation ecology, and/or global change. Consideration will include the candidate's match to our programmatic strengths in research emphases (ecosystem/ global change, conservation/restoration ecology), in teaching innovation and quality, and in student mentoring. Expectations include interaction with a diverse student body and 13 fulltime ecology faculty members. Teaching responsibilities are participation in a team-taught majors ecology course and upper division graduate/undergraduate courses in ecology, including microbial ecology.

More information on both positions available on Internet at http://www.sci.sdsu.edu/facrecruitment. Review of applications will begin December 13, 1999. Applicants for either position should send curriculum vitae, statement of research and teaching interests, up to 3 representative publications, and arrange to have 3 letters of recommendation to Developmental Biology Search Committee or Microbial Ecology Search Committee, Department of Biology, San Diego State University, San Diego, CA 92182-4614. SDSU is an Equal Opportunity Employer and does not discriminate against persons on the basis of race, religion, national origin, sexual orientation, gender, marital status, age or disability. Women, ethnic minorities and persons with disabilities are encouraged to apply.

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Application Scientists (Job Code AS-1099-SCI)

This position requires utilization of existing and emerging technologies to provide product development and technical support for our microplate business. Qualified candidates will possess a Ph.D. in chemistry, biochemistry, molecular biology, or a related field. A broad range of experience is desired, including assay development, familiarity with analytical methods, and use of state of the art instrumentation. High Throughput Screening experience is strongly desired. Additional requirements are strong interpersonal and organizational skills and the ability to work on multidisciplinary teams.

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Immediate opening for a bench scientist with a minimum of 3 years experience working in a research laboratory setting. Qualified candidates will be skilled in a variety of scientific methods (PCR, ELISA, cell culture, etc.), have familiarity with laboratory instrumentation, and possess the ability to work with minimum supervision. A bachelor's degree is required, M.S. preferred.

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For more information about the Science Products Division of Corning, please visit our website: www.scienceproducts.corning.com.

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GEOMICROBIOLOGIST-The Department of Geology, University of Illinois at Urbana-Champaign, invites applications for a full-time (nine month) tenure-track faculty position beginning fall semester 2000. This position is sponsored in part by the campus Environmental Council. We seek an outstanding candidate in microbial geoscience concerned with the activities and significance of microbes in Earth systems, ancient or modern. Specific areas of interest might include (but are not limited to) environmental microbiology, biomineralogy, biogeochemistry, and molecular microbiology. The candidate is expected to develop and maintain an active program of research and teaching at the graduate and undergraduate levels. We expect to fill this position at the Assistant Professor level. Salary will be commensurate with qualifications. An earned Ph.D. degree is required.

The University of Illinois maintains a broad and active program in geomicrobiology through the Departments of Geology, Microbiology, Civil and Environmental Engineering, and Natural Resources and Environmental Sciences, and the State Geological and Water Surveys. Fully-staffed analytical and sequencing facilities exist on campus.

For equal consideration, an interested individual should by January 1, 2000, submit his or her curriculum vitae, list of publications, statement of research and teaching interests, and the names and addresses of references to be sent directly to the Search Committee. All materials should be addressed to: **Prof. Craig Bethke, Search Committee Chair, Department of Geology, University of Illinois, 1301 West Green Street, Urbana, IL 61801 USA. Telephone: 1-217-333-3369; e-mail: c-bethke@uiuc.edu. Women and minority candidates are encouraged to apply.**

University of Illinois is an Equal Opportunity/Affirmative Action Employer.

MEDICAL PHYSICIST or equivalent: The National Foundation for Functional Brain Imaging (NFFBI) is looking for a Ph.D. Medical Physicist or equivalent to be in charge of and do research on a high field fMRI facility of 3 or 4 T field strength. The Foundation is a newly formed non-profit foundation for integrating magneto encephalography (MEG) and fMRI for neuroimaging applications relative to mental illness problems. Headquarters are in Albu-querque, New Mexico, where the position will be located, and affiliate partners are at the CMRR facility at the University of Minnesota and the NMR group at Massachusetts General Hospital. The position will involve operation of the fMRI facility, working on collaborative and personal research projects with this facility and a 155 channel MEG device, relevant software and hardware development, and grant generating activities. The foundation supports a variety of neuroimaging and mental illness research programs, and this position will be directly involved with many researchers as collaborative partners. NFFBI maintains a close relationship with the University of New Mexico, and a joint appointment there may be possible. Salary commensurate with scientific experience and background; normal benefit package. Send résumé and a letter of interest to: A. Burst, NFFBI, 801 University Boulevard SE, Suite 200, Albuquerque, NM 87106. E-mail: aburst@unm.edu.

As part of our commitment to the development of environmental science at Saint Anselm College, the Department of Biology invites applicants for a nontenure-track position beginning in August 2000 at **ASSISTANT PROFESSOR** rank with a commitment to teaching and undergraduate research. Preference given to applicant experienced in teaching and research in freshwater aquatic systems with emphasis on plants. Teaching duties include environmental biology of plants, environmental science, and introductory biology. The successful candidate will support the college's Catholic liberal arts mission. Send curriculum vitae, statement on teaching and research plans, and three letters of recommendation no later than December 24, 1999, to: Dr. Daniel J. Lavoie, Chairperson, Biology Department, Saint Anselm College, 100 Saint Anselm Drive, Manchester, NH 03102-1310.

POSITIONS OPEN

ASSOCIATE PROFESSOR OR PROFESSOR NEUROSCIENTIST Stanford University School of Medicine

The Department of Comparative Medicine is seeking a tenure-track basic science faculty member at the Associate Professor or Professor level in the area of neuroscience. The successful candidate will be an outstanding researcher and an effective scientific leader. The Department of Comparative Medicine has close ties with the Departments of Neurobiology and Neurology and Neurological Sciences.

The mission of the Department of Comparative Medicine is to make significant contributions to our knowledge of vertebrate biology and pathobiology through independent and multidisciplinary research.

The Department of Comparative Medicine also has a university-wide mission to use its diverse veterinary expertise to provide excellent quality humane care for laboratory animals.

Interested candidates should send a letter containing a description of their career goals and research interests, their curriculum vitae, and names and addresses of five references, to: Linda C. Cork, D.V.M., Ph.D., Professor and Chairman, Department of Comparative Medicine, MSOB X347, Stanford University School of Medicine, Stanford, CA 94305-5415. Applications will be reviewed upon receipt and searches will be continued until the position is filled. Stanford University is committed to increasing representation of women and members of minority groups on its faculty, and particularly encourages applications from such candidates.

ASSISTANT PROFESSOR DEPARTMENT OF BIOLOGY BALL STATE UNIVERSITY Muncie, Indiana

Tenure-track position available August 18, 2000. Responsibilities: teaching introductory biology, introductory microbiology, and medical microbiology courses; conducting and promoting student involvement in research specialty; being an active member of the academic community; commitment to excellence in teaching; competency in current approaches in microbiology. Minimum qualifications: earned doctorate in a biological science by August 1, 2000; 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 and teaching ability, transcripts, and three letters of reference to: **Chair, Search and Se**lection Committee, Department of Biology, Ball State University, Muncie, IN 47306. Review of applications will begin November 15, 1999, and will continue until the position is filled. Website: www. bsu.edu. Ball State University is an Equal Opportunity, Affirmative Action Employer and is strongly and actively committed to diversity within its community

TENURE-TRACK FACULTY POSITION at Stanford University School of Medicine in the Division of Medical Oncology. We are searching for a Physician Scientist to develop a laboratory-based investigative program in cancer research. This position will be at the rank of Assistant or Associate Professor in the University Tenure Line. Preference will be given to candidates who have already obtained peer-reviewed grant funding. The specific scientific areas could include immunology, genetics, virology, pharmacology or other areas of cancer biology. Newly constructed laboratory space and generous start-up funds are available at the Palo Alto Medical Research Foundation. Participation in teaching and in clinical service at Stanford University Medical Center will be expected. Please send curriculum vitae, a statement of career plans, and three names of references to: Ronald Levy, M.D., Chief, Division of Oncology, Stanford University School of Medicine, SUMC M211, Stanford, CA 94305-5115. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

lished department with a long-standing record in extramural support and teaching excellence. An individual is sought who has an established research program addressing fundamental questions in pharmacology, cellular and/or molecular biology. A commitment to excellence in teaching is essential. The current research interests in the department include gene expression and regulation, cellular signal transduction, neurobiology/neuropharmacology and free radical biochemistry that exists in an environment with extensive interdisciplinary and programatic interactions in neurobiology and neurogenetics, as well as at the Cancer and Liver Centers. A research emphasis on neurobiology and neurodegenerative diseases is highly desirable. Excellent space and facilities are available. Applicants should send a description of current research and future plans, curriculum vitae, and the names, addresses, and telephone numbers of three references to: Dr. Alex Sevanian, Search Committee Chair, University of Southern California, PSC 612, 1985 Zonal Avenue, Los Angeles, CA 90089-9121. Email: asevan@hsc.usc.edu. Equal Opportunity Employer/Minority/Female/Disabled.

TOXICOLOGIC PATHOLOGIST

The Department of Anatomy, Pathology, and Pharmacology, College of Veterinary Medicine, Oklaho-ma State University invites applications for a tenuretrack position in toxicologic pathology at the rank of ASSISTANT or ASSOCIATE PROFESSOR. Qualifications for the position include the D.V.M. or equivalent degree, appropriate training in veterinary anatomic pathology, and a Ph.D. degree. Responsibilities include teaching pathology to veterinary students, mentoring graduate students, providing necropsy and biopsy service, and developing/maintaining an extramurally funded research program in toxicology or toxicologic pathology. The starting date for the toxicologic pathologist position is June 2000. Interested applicants should send a letter stating professional goals and research interests, curriculum vitae, and three letters of reference to: Dr. Ken Clinkenbeard, Department of Anatomy, Pathology and Pharmacology, 250 Veterinary Medicine, Oklahoma State University, Stillwater, OK 74078-2007. Applications should be received by November 30, 1999, to receive full consideration.

Oklahoma State University is an Equal Opportunity/Affirmative Action Employer that encourages applications from members of minority groups.

IMMUNOLOGY FACULTY POSITIONS

Applications are invited for tenure-track faculty positions at the ASSISTANT, ASSOCIATE or FULL PROFESSOR level. Candidates are sought with research interests in immunology to complement a growing immunobiology research program including Drs. Kenneth Rock, Ray Welsh, Leslie Berg, Cynthia Chambers, and Joonsoo Kang. Specific research areas include, but are not limited to, immunobiology of receptors, signal transduction and gene regulation; cell biology of accessory cells; tolerance and autoimmunity; and tumor immunobiology. Selection will be based on excellence in research and the potential to maintain an outstanding research program.

Applicants should send a curriculum vitae, description of research accomplishments and future objectives, and names and addresses of three references to: Dr. Kenneth L. Rock, Chairman, Department of Pathology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer and encourages applications from female and minority candidates.

POSITIONS OPEN ASSOCIATE/FULL PROFESSOR



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In this role, you will design in vitro/in vivo programs to evaluate and characterize the resistance of bacteria toward animal health antimicrobial drug candidates. Your PhD or equivalent background in Bacteriology, Microbiology, Veterinary Medicine, or Molecular Biology should be supported by extensive microbiology expertise focused on the investigation of antimicrobial resistance at the cellular and/or molecular levels. Post-doctoral work or pharmaceutical industry experience, particularly in an animal We encourage all candidates to apply online through our web site at www.pfizer.com. You may also mail your resume to: Pfizer Inc, Job Code 9928540SCI, Central Research, c/o Aon Consulting, P.O. Box 25, Findlay, OH 45839. Pfizer is an equal opportunity employer.

health-related field, is highly desirable.

Familiarity with GLPs and GCPs helpful.



University of California, Riverside Faculty Position in Bioengineering or Biomedical Engineering

The Marlan and Rosemary Bourns College of Engineering at the University of California, Riverside invites applications for a senior, tenured position to establish a Bioengineering or Biomedical Engineering program. The College currently consists of approximately 35 faculty members in four departments: Computer Science and Engineering, Electrical Engineering, Chemical and Environmental Engineering, and Mechanical Engineering.

The rapidly growing Bourns College of Engineering has a student enrollment of about 1,100. The College currently has resource commitments to hire more than 30 junior and senior faculty members over the next three years. Undergraduate enrollment is expected to increase to nearly 1,500 over this time frame. External research funding for the College in 1998 was in excess of nine million dollars. (http://engr.ucr.edu/)

The successful applicant should be prepared to plan, coordinate, develop, and lead a vigorous, high-quality research program in Bioengineering or Biomedical Engineering. Although all areas of research will be considered, areas of special interest are those that can be linked collaboratively with the current faculty, as well as those in the Biomedical Sciences program.

Applicants should have a Ph.D. in an appropriate field, or an M.D. Candidates must have established a significant record of achievement in research and teaching, and demonstrated leadership abilities.

Applicants should send their curriculum vitae with names and addresses of at least three references, and statements of research and program objectives to: **Bioengineering Search Committee, Bourns College of Engineering, University of California, Riverside, CA 92521**. To receive full consideration, applications must be received by January 10, 2000.

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You will be responsible for the design and construction of vectors, cDNA libraries and other essential tools. This position requires a Ph.D. in Life Sciences with a minimum of 5 additional years of research experience. Applicants must possess a solid technical proficiency in cDNA cloning with an emphasis in subtraction and normalization of the cDNA libraries. Expertise in retroviral vector design or modification is a plus. Strong computing skills are required, while a basic knowledge of bioinformatics is a plus.

Molecular Oncology Program:

You will be responsible for the design, development and implementation of experiments within an interactive research team. This position requires a Ph.D. in Life Sciences with a minimum of 3 additional years of research experience. Applicants should have a solid background in cell cycle and checkpoint control, apoptosis, or tumor supressor genes as demonstrated through peer-reviewed publications or extensive industry experience.



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ASSISTANT PROFESSOR DEPARTMENT OF NEUROSCIENCE University of California, Riverside

A TENURE-TRACK POSITION available beginning July 1, 2000, in the Department of Neuroscience, University of California, Riverside. We seek an outstanding individual using cellular/molecular/ genetic approaches to address basic questions in the broad area of neuroscience, particularly but not limited to developmental questions. Ph.D. or equivalent required; postdoctoral experience strongly preferred. It is expected that the successful candidate will establish an independent, externally funded research program, participate in the Interdepartmental Graduate Programs in Neuroscience and Cell, Molecular, and Developmental Biology, and teach neuroscience courses at graduate and undergraduate levels. Application deadline: December 10, 1999. Send curriculum vitae, copies of publications, statements of research and teaching interests, and name, address. phone and FAX numbers for at least three potential references to: Chair, Faculty Search Committee, Department of Neuroscience, University of California, Riverside, CA 92521. The University of California is an Equal Opportunity/Affirmative Action Employer.

MICROBIOLOGIST-ASSISTANT PROFES-SOR, tenure-track, Ph.D., September 2000; teach bacteriology, graduate courses in area of specialty, microbiology for health science students, and lower level biology courses. The candidate's potential as a teacher and as a director of undergraduate and graduate research are essential criteria. Preference given to individuals with research background in microbiology and a record of publication in refereed journals. Application deadline: January 15, 2000. Midwestern State University is a liberal arts university with an enrollment of 5,800 students. The Biology Department offers both the Bachelor's of Science and Master's of Science degrees in biology. Submit curriculum vitae, summary of past research, and statement of proposed research, a copy of transcripts, a statement of educational philosophy, and a list of three references with their addresses and telephone numbers who are familiar with your teaching and research to: Dr. William Cook, Chair, Biology Program, Faculty Search Committee, Midwestern State University, 3410 Taft, Wichita Falls, TX 76308-2099. Equal Opportunity/Affirmative Action Employer.

ORGANIC CHEMIST-ASSISTANT PROFES-SOR, tenure-track, Ph.D., September 1, 2000; teach general chemistry and organic chemistry. The candidate's potential as a teacher and researcher for an undergraduate program is essential. Preference given to individuals with research background and resultant publication in refereed journals. Application deadline is January 15, 2000. Midwestern State University is a liberal arts university with an enrollment of 5,800 students. The Chemistry Department is American Chemical Society certified offering the Bachelor's of Science in chemistry and Bachelor's of Science in environmental chemical technology. Submit curriculum vitae, description of proposed research, a statement of educational philosophy and three letters of recommendation to: Dr. Rodney Cate, Chemistry Program Chair, Midwestern State University, 3410 Taft, Wichita Falls, TX 76308-2099. Equal Opportunity/Affirmative Action Employer

MD'S and Ph.D's

Looking for a warm place to Teach? Sint Eustatius University, School of Medicine has openings in the Departments of Anatomy and Physiology for the semester starting January 10, 2000. Sint Eustatius University is located on the Island of Sint Eustatius in the Dutch Caribbean. We are purely a teaching institution. We have no research facilities. Interested persons should apply with curriculum vitae including teaching experience and references to: C. Frank Chambers, M.D. Chairman, Search Committee, P.O. Box 527668, Miami, FL 33152-7668. Email jobean@sintmaarten.net; FAX: 011 599 4 62638. Website: eustatiusmed.org. We are an Equal Opportunity Employer.

POSITIONS OPEN

U.S. DEPARTMENT OF VETERANS AFFAIRS DEPUTY DIRECTOR MEDICAL RESEARCH SERVICE

Medical Research Service, Department of Veterans Affairs (VA) is recruiting for the position of deputy director, located at VA Headquarters, Washington, D.C. The deputy director will be responsible to the director, Medical Research Service for management of the Medical Research program of the Department of Veterans Affairs. Candidates must be physicians with a medical research background. Candidates must currently be or have recently been principal investigators in nationally peer-reviewed research. Accommodation for ongoing research activities concurrent with administrative duties may be negotiated. Experience in research proposal writing and evaluation is required. Experience working within a large intramural biomedical research program is helpful. Applications will only be accepted from U.S. citizens. Candidates must be physicians and possess an active and current licence to practice in their respective disciplines. Salary up to \$110,700 not including special pay for physicians. Benefits package and relocation assistance is available. Applicants should send recent curriculum vitae and a letter summarizing research and administrative experience to: Director, Medical Research Service (121), VA Headquarters, 810 Vermont Avenue NW, Washington, DC 20420. Applications will be accepted until December 1, 1999. For further information, contact: Sara Clark, telephone: 202-408-3605, e-mail: sara.clark@mail.va.gov. Equal Opportunity Employer

PHYSIOLOGY

The Department of Zoology is seeking to fill a tenure-track ASSISTANT PROFESSOR position in the area of physiology. The successful applicant will be expected to maintain an active research program, seek extramural funding, supervise student research, and participate in teaching graduate and undergraduate courses. The Department has state-of-the-art facilities for using molecular, cellular or whole organism techniques and offers competitive start-up funds. The Department has 35 faculty, over 50 Ph.D./M.S. students, and approximately 1,000 majors: website: http://zoology.muohio.edu Miami University (enrollment 21,000) is rated nationally as a highly selective public university. Send letter of application, curriculum vitae, statement of teaching and research interests, and three letters of recommendation to: Dr. Douglas Meikle, Chair, Department of Zoology, Miami University, Oxford, OH 45056. Review of applications will begin on 1 December 1999 and continue until the position is filled. Ph.D. required. Position will begin August 2000. Telephone: 513-529-3100 or e-mail: meikled@muohio.edu for more information. Miami University offers Equal Opportunity in Employment and Education.

YALE UNIVERSITY SCHOOL OF MEDICINE Department of Genetics and Center for Human Genetics

The Yale University Medical School Department of Genetics and the newly established Yale Center for Human Genetics are seeking outstanding candidates to fill a tenure-track position at the ASSISTANT PROFESSOR level. The successful applicant will be provided generous start-up funds and will establish strong independent research program broadly relevant to the genetics of human disease. Approaches employing human and model systems are encouraged. Applications should include a curriculum vitae, a statement of research plans, and three letters of recommendation. Application materials should be sent to: Richard P. Lifton, Chairman, Department of Genetics, Yale University School of Medicine, P.O. Box 208005, New Haven, CT 06520-8005. An Equal Opportunity/Affirmative Action Employer. We strongly encourage applications from women and minority candidates.

THE UNIVERSITY OF TEXAS AT EL PASO PATHOGENIC MICROBIOLOGIST

POSITIONS OPEN

DEPARTMENT OF BIOLOGICAL SCIENCES The University of Texas at El Paso's Department of Biological Sciences seeks to fill a tenure-track position at the ASSISTANT PROFESSOR level. Candidates should have a Ph.D., have postdoctoral experience, and a record of research productivity that demonstrates the potential to establish an externally funded research program in the area of pathogenic microorganisms. Candidates with a strong background in bacterial or viral pathogenesis are especially welcome. Applicants should have a strong commitment to teaching at both the undergraduate and graduate level, and are expected to participate in the Ph.D. program in pathobiology. Salary and start-up funds are competitive. Send résumé, statement of research interests, selected publications, teaching philosophy, and a list of three references (names, addresses, telephone and e-mail) to: Dr. Siddartha Das, Search Committee Chair, University of Texas at El Paso, Department of Biological Sciences, El Paso, TX 79968-0519. The University of Texas at El Paso does not discriminate on the basis of race, color, national origin, sex, religion, age, disability, or sexual orientation in employment or the provision of services.

MITOCHONDRIAL GENETICS mDNA AND AGING

The Geriatrics Research Education and Clinical Center (GRECC) at the Louis Stokes Cleveland Department of Veterans Affairs Medical Center and the Case Western Reserve University Center for Inherited Disorders of Energy Metabolism (CIDEM) are seeking a PHYSICIAN/SCIENTIST or NON-CLIN-ICAL SCIENTIST at the Assistant or Associate Professor level (tenure-track position). The major focus of the GRECC is the influence of aging on ischemicreperfusion injury in the heart with a component directed at mitochondrial DNA alterations and novel therapeutic strategies. CIDEM evaluates about 250 patients per year with suspected mitochondrial cytopathies. In addition, isolated skeletal muscle mitochondria are prepared from about 60 patients and evaluated each year.

Interested applicants should send a letter of interest, a curriculum vitae, and three references to: Jerome Kowal, M.D., Director, Geriatric Research, Education and Clinical Center 11(W), Louis Stokes Cleveland Department of Veterans Affairs Medical Center, 10701 East Boulevard, Cleveland, OH 44106. Telephone: 216-791-3800, extension 5642. Women and minority candidates are encouraged to apply.

COMPARATIVE/EVOLUTIONARY PHYSIOLOGY

The Department of Zoology invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**.

Areas of research is open (including physiological ecology, functional morphology, endocrinology, comparative biochemistry, and molecular biology), but relevance to organismal function and an evolutionary framework are expected. Teaching will include participation in introductory biology and an undergraduate lecture and laboratory course in comparative physiology. Information on the Department can be found at website: http://www.wisc.edu/zoology.

Please send curriculum vitae, statement of research and teaching interests, copies of publications, and have three letters of recommendation sent to: Dr. Theodore Garland, Jr., Chair, Search Committee, Department of Zoology, 430 Lincoln Drive, University of Wisconsin-Madison, Madison, WI 53706. Telephone: 608-262-4437; FAX: 608-265-6320; E-mail: tgarland@facstaff.wisc.edu. Only applications submitted by mail will be accepted. Review of applications will begin 3 January 2000. An Equal Opportunity/Affirmative Action Employer.

ES/BIOLOGY POSITION IN ECOLOGY Tenure-Track Position Bowdoin College

Bowdoin College invites applications for a tenure-track position in community or ecosystem ecology at the **Assistant Professor** level. The position will be in the Department of Biology, with a joint appointment in the Environmental Studies Program. The successful candidate should hold a Ph.D. degree with demonstrated interest in field-based research on multi-species interactions or on interactions between biological communities and the environment, with applications to environmental problems. Postdoctoral experience is strongly preferred.

The normal teaching responsibility at Bowdoin is two courses per semester (with reductions if labs are involved). Possible courses include environmental science, participation in a team taught introductory environmental studies course, and mid-level and advanced courses in the candidate's field of specialization (e.g., pattern and process in terrestrial and/or marine ecosystems, community structure and function, environmental applications of GIS).

Bowdoin College is a selective liberal arts college on the Maine coast. Facilities include the Bowdoin Scientific Station on Kent Island, New Brunswick, and the Coastal Studies Center on nearby Orr's Island, where collaborative research is encouraged involving undergraduates and environmental researchers from a variety of disciplines.

Please send a curriculum vitae, statement of teaching and research interests, and three letters of recommendation addressed to **Professors Nathaniel Wheelwright** and Amy Johnson, Dept. Biology, 6500 College Station, Bowdoin College, Brunswick, ME 04011. Review of applications will begin on November 20, 1999. For further information, consult our website, www.bowdoin.edu.

Bowdoin College is committed to Equal Opportunity through Affirmative Action. Women and minorities are encouraged to apply



Senior Scientist and Oceans Program Manager

ENVIRONMENTAL DEFENSE FUND

The Environmental Defense Fund, a not-for-profit research and advocacy organization,

seeks a senior scientist to head its Oceans Program. EDF has identified "safeguarding the world's oceans from pollution, overfishing, and habitat loss and degradation" as one of its four strategic goals. The organization has assembled a strong staff of scientists, economists, and attorneys who are already working on a range of marine research and policy issues. They now seek a program leader with the strategic and managerial ability to help build the program into a signature effort for EDF.

EDF prefers a Ph.D. scientist working in oceans issues who has significant exposure to and/or interest in public policy. Applications will also be considered from those with less research experience but who have a distinguished background in public policy related to marine issues. The position involves public representation, fund raising, and administrative responsibilities in addition to the opportunity to continue a selective research agenda. Preferred location is New York or Washington, DC, although a base at one of EDF's five other offices is possible.

Applications and inquiries in confidence to Karen Wilcox, Isaacson, Miller (search firm), 334 Boylston Street, Boston, MA 02116. fax: 617-262-6509. Email: kwilcox@imsearch.com.



Post-Doctoral Opportunities

Mount Sinai School of Medicine is a leader in medical education and research. We have the following opportunities available for experienced research professionals.

MOUNT SINAI SCHOOL OF MEDICINE

Department of Medicine

A position is available immediately to investigate molecular mechanisms underlying retinoic acid signaling in mouse development and gene-knockout strategy of novel retinoid target genes. Candidates should have a Ph.D. and experience in molecular or developmental biology. Reply with C.V. and three letters of recommendation to: Dr. Reshma Taneja, Samuel Bronsman Department of Medicine, Box 1178; Fax: 212-996-5787; E-mail: Taneja@msvax.mssm.edu

Cardiovascular Institute

A three year post-doctoral position is available Spring 2000 for studies in the cell and molecular biology of lipoprotein assembly and secretion (e.g., see Mitchell et. al. PNAS, 95: 14733, 1998). A recent Ph.D. in Cell and Molecular Biology preferred. Reply with C.V. and names of references to: **Dr. Edward A. Fisher, Professor of Medicine, Zena & Michael A. Wiener Cardiovascular Institute, Box 1030; Fax: 212-348-6583; E-mail:** edmd-phd.fisher@mssm.edu

Department of Neurology

A position is available to join a program studying the molecular mechanism action of serotonergic hallucinogens in knock-out and receptor mutant knock-in mice. In situ hybridization will be utilized to quantify the expression of specific genes that have been identified using gene microarray technology in response to serotonin 5-HT2A agonists. The significance of the transcriptional modulation monitored will be evaluated in the context of this multi-laboratory program studying serotonin receptor structure-function in vitro and computationally the behavior responses to these agents in vivo. Expertise in neuroanatomy, microscopy and in situ hybridization required. Reply with C.V. and three references to: Stuart C. Sealfon, M.D., Estelle & Daniel Maggin Department of Neurology, Box 1137; Fax: 212-348-1310; E-mail: sealfs01@doc.mssm.edu

For consideration, send C.V., following "Reply to" information for position of interest, to: **Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** We are an equal opportunity employer fostering diversity in the workplace.

The US Army Medical Research Institute of Chemical Defense (ÚSAMRICD) is the lead laboratory in the Department of Defense for research on the development of antidotes against chemical warfare threats. The institute currently has an opening for a PRIN-CIPAL INVESTIGATOR and team leader with a background in biochemistry or molecular biology. Applicants should be able to provide evidence of experience in the following: (1) the ability to design and conduct original research involving the application of molecular biology techniques/strategies in the development of mutant recombinant human proteins, (2) the ability to communicate orally to defend scientific programs and ideas to peers and upper-level management, and (3) the ability to interpret, summarize, and express findings in scientific papers, technical reports, and in recommendations to upper level management. Knowledge regarding transgenic animal development, inducible expression systems, experience involving the identification, cloning, and expression of wild type or site-directed mutant genes, and experience working with proteins that are postulated to have a therapeutic effect in vivo against a xenobiotic compound is highly desirable. A Ph.D. is preferred; U.S. citizenship is required. The USAMRICD is located near Baltimore, Maryland at the head of the Chesapeake Bay. In addition to a strong intramural program, the USAMRICD currently has in place numerous collaborative research efforts with national and international laboratories. Salary is commensurate with experience (\$48,796 to \$63,436). Interested applicants should send their résumé to: Civilian Personnel Operations Center, Northeast Region, 314 Johnson Street, Attn: Division 1, Branch B, Aberdeen Proving Ground, MD 21005-5283.

The Department of Biology at The University of West Florida (website: www.uwf.edu) invites applications for a CHAIRPERSON at the level of AS-SISTANT or PROFESSOR (tenure-track) beginning August 2000. The Department offers both Bachelor's and Master's programs in general biology, marine biology, microbiology, molecular biology, plant science and medical technology. We are seeking a chair whose interests will complement those of existing faculty and continue a tradition of interactive research and teaching. Biologists from all fields are invited to apply, but the emphasis will be on biochemistry, physiology, and/or marine biology. The successful candidate will establish and maintain an active research program and contribute to undergraduate/ graduate teaching. The position comes with a com-petitive salary and start-up package commensurate with experience. The deadline for receipt of applications is December 31, 1999. Send a letter outlining teaching and research interests and administrative goals with a curriculum vitae and five letters of reference to: Chair, Search Committee, Department of Biology, University of West Florida, 11000 University Parkway, Pensacola, FL 32514-5750. Email: vsharma@uwf.edu. The University of West Florida is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR BIOLOGY

California State Polytechnic University, Pomona Tenure-track position starting fall 2000 in physiology or comparative physiology. The successful candidate will show potential for excellence in undergraduate teaching and research. Teaching responsibilities will include components of ongoing courses in cell and comparative physiology and development of two upper-division/graduate courses. Area of research specialty is open. Ph.D. required. Teaching and postdoctoral research experience preferred. More information at website: www.csupomona.edu/~biology.

Applicants must send letter of intent, completed application form, curriculum vitae, three recent letters of reference, and two additional referees (with telephone numbers for all) to: Physiology Search Committee, Biological Sciences Department, California State Polytechnic University, Pomona, CA 91768-4032. E-mail: dfhoyt@csupomona.edu. Initial review of applicants will begin January 15, 2000, and continue until position is filled. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR OF THE RESEARCH INSTITUTE FOR CHILDREN New Orleans

The Louisiana State University of Medicine and the Children's Hospital, New Orleans seek outstanding candidates for the Directorship of the Research Insti tute for Children. Candidates should hold a M.D. and/or Ph.D., should have an established career in a field of research pertaining to children's illnesses and a proven track record in obtaining extramural funding. The successful candidate will be expected to continue this research, as well as facilitate the research of other members of the faculty at the School of Medicine who are interested in research pertaining to children and pediatric diseases. A new 60,000-square-foot research tower building to house the research institute, including a vivarium for small animals, will be completed on the campus of the Children's Hospital, New Orleans within two years to replace the current temporary facility. The position will carry a faculty appointment as Vice Chairman for Research of the Department of Pediatrics at the Louisiana State University School of Medicine. Administrative and financial support is provided by the hospital for the Research Institute.

Applicants interested in being considered for this challenging and exciting opportunity should submit a copy of their curriculum vitae to: Dr. Alan M. Robson, Senior Vice President-Medical Director, Children's Hospital, 200 Henry Clay Avenue, New Orleans, LA 70118. FAX: 504-896-9707; e-mail: jhendric@chnola.org.

MOLECULAR DEVELOPMENTAL BIOLOGY

The Biology Department at George Mason University seeks applicants for a tenure-track ASSISTANT PROFESSOR to begin August 2000. We encourage applications from individuals doing research on the development of one of the model organisms (plant or animal). The sucessful candidate will have a record of publication and a research program capable of attracting external funding; postdoctoral experience is preferred. Teaching at the undergraduate and graduate level is expected. Salary and start-up funds are nationally competitive. George Mason University is a state university in northern Virginia and is located in the metropolitan Washington D.C., area. See the website for information on GMU: http://www.gmu.edu and the Biology Department website: http://www. gmu.edu/departments/Biology. Send letter of application, curriculum vitae, statement of teaching and research interests, and three letters of reference to: Chair, Molecular Biology Search Committee, De-partment of Biology, MSN3E1, George Mason University, Fairfax, VA 22030-4444. Evaluation will begin on 21 January 2000.

George Mason University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR

The Department of Biology at the University of North Carolina at Chapel Hill has conditional approval to seek an outstanding candidate for a tenuretrack position at the Assistant Professor level to join an interactive plant biology group. This individual will use state-of-the-art genetic, molecular, biochemical, and/or cellular approaches to address fundamental questions in plant cellular and/or developmental biology. Candidates must have a Ph.D. and significant successful postdoctoral experience. Applications should include a curriculum vitae, a concise description of current and future research interests, and a statement of teaching philosophy. Applicants should provide these items, and arrange for four letters of recommendation to: Chair, Plant Biology Search Committee, Department of Biology, CB#3280, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3280. We will begin reviewing applications on December 10, 1999. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.

POSITIONS OPEN

PROFESSOR/ENTOMOLOGIST (Open Rank): Molecular Population Genetics, Department of Entomology, University of California, Riverside. Tenure-track position available July 1, 2000, 11 month, 25 percent teaching, 75 percent research. Appointment level and salary commensurate with re-search/teaching experience. Ph.D. in entomology, genetics, or related discipline is required with graduate training or postdoctoral experience emphasizing the utilization of modern genetic and molecular techniques in research on population genetics, population dynamics, and/or invasion biology of arthropods. Supervise graduate students and participate in the department's teaching program in genetics and population biology. Applicants should send curriculum vitae, transcripts, statement of research interests, reprints and manuscripts in press, and names and addresses of five references to: Dr. J. Daniel Hare, Search Committee Chair, Department of Entomology, University of California, Riverside, Riverside, California 92521. E-mail: harejd@citrus.ucr.edu. Applications will be accepted until December 15, 1999, or until a suitable candidate is found. Information about the department can be found at website: http://cnas. ucr.edu/~ento/index.html. The University of California is an Equal Opportunity/Affirmative Action Employer.

HEAD, IMMUNOLOGY UNIT MALARIA VACCINE DEVELOPMENT UNIT

The National Institute of Allergy and Infectious Diseases (NIAID), NIH seeks an individual to serve as the Head of the Immunology Unit in the Malaria Vaccine Development Unit of the Laboratory of Parasitic Diseases. This position requires an individual with a Ph.D. or M.D. to lead the immunology program for malaria vaccine development. A demonstrated knowledge of malaria biology and basic immunology is required. Space, technical and postdoctoral fellow support as well as an ample supply budget are committed. Salary will range from \$110,000 to \$120,000. A curriculum vitae, bibliography, four letters of reference, a detailed statement of research interests and five copies of five selected publications must be postmarked by November 26, 1999 to: Ms. Audrey Davis, Office of Human Resources Management, NIAID, Building 31, Room 7A27, 31 Center Drive, MSC 2520, Bethesda, MD 20892-2520. Please reference vacancy announcement number AI-99-119. U.S. citizenship is not required.

NIH is an Equal Opportunity Employer.

TENURE-TRACK POSITION NEUROSCIENCE

Indiana University School of Medicine, Northwest Center for Medical Éducation is seeking applicants for a tenure-track position as ASSISTANT/ASSOCI-ATE PROFESSOR. Successful candidate will participate in teaching, research, and service missions of the Center. Strong commitment to medical student teaching in a problem-based curriculum in neuroscience and pharmacology is required. Candidate will be expected to develop and maintain an innovative, externally-funded research program. Preference will be given to candidates with ability to attract extramural funding and whose research expertise complement ongoing programs. Applicants must have a Ph.D. and/or M.D. or equivalent degree. Send curriculum vitae, a description of research, statement of teaching philosophy, and three letters of reference to: **William** Baldwin, Ph.D., Assistant Dean and Director, Indiana University School of Medicine, 3400 Broadway, Gary, IN 46408. Equal Opportunity/Affirmative Action Employer, Minorities/Female/Disabled.

Department of Physics and Astronomy at Clemson University invites applications for two tenure-track positions, to begin in the academic year 2000-2001. Our expectation is that the positions will be filled at the **ASSISTANT PROFESSOR** level, but the search is not restricted to such candidates. Further details about the positions may be obtained at the **website:** http://physicsnt.clemson.edu or by e-mail: phys_job_search-L@clemson.edu.



UNIVERSITY OF BRISTOL

Professor of Veterinary Infection and Immunity

This is a newly created full-time University post, to develop an internationally recognised centre of excellence in Veterinary Microbiology in the Department of Clinical Veterinary Science at Langford. You will exploit the existing areas of excellence in immunology within the Veterinary School and the wider Faculty of Medicine.

You will be an outstanding Microbiologist (but you need not necessarily hold a veterinary qualification) wishing to lead world class research as well as developing innovative solutions to the scientific training of veterinary undergraduates and postgraduates.

Informat enquiries can be made to Professor Avril Waterman-Pearson on +44 (0) 117 928 9400 or E:Mail A.E.Waterman-Pearson@bristol.ac.uk

For further details telephone (0117) 954 6947, minicom (0117) 928 8894 or E-Mail Recruitment@bris.ac.uk (stating postal address ONLY) quoting reference 5914.

The closing date for applications 15th December 1999.

www.bris.ac.uk

AN EQUAL OPPORTUNITIES EMPLOYER



UNIVERSITY OF BRISTOL

Professor of Virology



www.bris.ac.uk

This is a newly created full-time University post designed to compliment the University's strength in infection and immunity. You will be based in the Department of Pathology and Microbiology which has wide ranging expertise in Cancer, Immunology, Virology and Microbiology with research links to hospitals in the Bristol area and the Veterinary School.

You will be an outstanding virologist wishing to lead world class research within the integrated Faculty of Medicine.

Informal enquiries can be made to Professor David Wraith on #44 (0) 117 928 7883, E-Mail d.c.wraith@bristol.ac.uk or Professor Timothy Hirst on +44 (0) 117 928 7538, E-Mail t.r.hirst@bristol.ac.uk. Further details of the department on: http://www.pam.bris.ac.uk.

For further details telephone (0117) 954 6947, minicom (0117) 928 8894 or E-Mail Recruitment@bris.ac.uk (stating postal address ONLY) quoting reference 5915.

The closing date for applications is 15th December 1999.

AN EOUAL OPPORTUNITIES EMPLOYER

THE FACULTY OF SCIENCE AT THE UNIVERSITY OF NIJMEGEN HAS A POSITION AVAILABLE

is

The University of Nijmegen - the only comprehensive university in the eastern and southern regions of the Netherlands - provides a broad academic education for its 13,000 students. The university has eight faculties, including a science faculty and a medical faculty with a teaching hospital.

FULL PROFESSOR M/F ECOLOGICAL MICROBIOLOGY

The Faculty of Science at the University of Nijmegen carries out research and teaching in Physics, Chemistry, Biology, Environmental Science, Mathematics and Informatics. The Department of Microbiology is one of the departments within Biology and is part of the Nijmegen Institute of Microbiology, Ecology and Plant Science (NIMEP). Within the department there is now vacant the position of full professor in Ecological Microbiology.

Position: Microorganisms have an important function in regulating fluxes of elements within many ecosystems due to their large metabolic diversity and high activity. Ecological Microbiology focuses on biodiversity and activity of microorganisms in their natural environment, both in space and time, and on their survival strategies. Interactions play a determining role in their functioning. The candidate will be expected to perform research into the structure and functioning of microbial assemblages in the freshwater environment, with an emphasis on dynamic interphases. This research fits into the Nijmegen Priority Programme "Freshwater Biology". The qualified candidate will also be asked to participate in teaching undergraduate and graduate students in the first and second phase of the Biology programme. We expect that the candidate will be able to take part in administrative and organisational duties both within and outside the department.

Profile: For this position we are looking for a microbiologist with a broad knowledge of the eco(physio)logy of microorganisms with an emphasis on microorganisms from the freshwater environment. You have a broad experience in carrying out scientific research, as appears from publications in high-ranking journals, and in leading a research group. Besides excellent teaching qualities you have the disposal over a sound record of obtaining financial funding.

The faculty is making an effort to increase the number of women in academic positions. Women are, therefore, strongly encouraged to apply for this position.

Application and information: Within a period of two weeks, a written application with curriculum vitae and list of publications should be addressed to the University of Nijmegen, Faculty of Science, Mathematics and Informatics, Personnel Department, Toernooiveld 1, NL-6525 ED Nijmegen, The Netherlands, quoting the number 99.57.

Those who may require additional information about the position should contact Dr. H.J.M. Op den Camp, Secretary to the Search Committee, tel. +31 24 3652657, e-mail: huubcamp@sci.kun.nl or Prof. Dr. J.M. van Groenendael, Chairman of the Search Committee, tel. +31 24 3652414, e-mail: jvgroen@sci.kun.nl.

Information: www.kun.nl

MEMBRANE BIOPHYSICS AND ALCOHOLISM

The Division of Intramural Clinical and Biological Research of the National Institute on Alcohol Abuse and Alcoholism invites applications to apply for a tenure-track position in the Section of Fluorescence Studies (SFS) of the Laboratory of Membrane Biochemistry and Biophysics (LMBB). The mission of the LMBB includes an elucidation of the underlying mechanisms associated with the modulation of membrane function induced by changes in membrane polyunsaturated fatty acid composition and/or alcohol exposure. The SFS utilizes a variety of biophysical techniques, with an emphasis on the use of fluorescence techniques to investigate lipid-protein and lipid-lipid interactions. The goal of these studies is to provide an explanation of the alterations in membrane structure and function observed upon alcohol exposure and/or changes in lipid composition. The successful candidate will be expected to establish an independent research program, utilizing a combined biophysical and biochemical approach to study the mechanisms whereby changes in membrane lipid composition or exposure to ethanol alters membrane function. These studies should be conducted on both natural and reconstituted membrane systems. Significant experience in the area of optical spectroscopy and the reconstitution of integral membrane proteins is desirable. The proposed research should, in part, have a goal of interfacing with ongoing studies in the LMBB, which utilize a variety of animal models to study the in vivo effects of polyunsaturated fatty acid deficiency and alcohol consumption on organ/organism function.

Applicants must have a Ph.D. and/or M.D. and should submit a curriculum vitae, bibliography, names of three references, and a three-page statement of research interests and goals. All submittals must be postmarked no later than November 26, 1999 and addressed to:

Ms. Kathleen Hanratty (SFS) NIH, NIAAA, Building 31, Room 1B58 31 Center Drive MSC 2088 Bethesda, MD 20892-2088

NIH is an Equal Opportunity Employer. Applications from women, minorities, and persons with disability are strongly encouraged. The Division of Intramural Clinical and Biological Research of the National Institute on Alcohol Abuse and Alcoholism is a smoke-free environment.

ILLINOIS INSTITUTE OF TECHNOLOGY Director

Pritzker Institute of Medical Engineering The Pritzker Institute is an endowed research center within Illinois Institute of Technology. Its goal is to bring engineering expertise into the solution of important health problems by forming research partnerships between engineering faculty and graduate students at Illinois Institute of Technology and physicians and scientists at Chicago area medical centers. In the past the Pritzker Institute has operated strictly as a research institute. However, in 1999, as part of a significant expansion, a new academic program with a Ph.D. in biomedical engineering was introduced. For more information about the position and the university, please visit our **website: www.iit.edu**.

The successful candidate will have an established reputation in biomedical engineering research and education, and be qualified for an appointment at the rank of Professor in one of Illinois Institute of Technology's engineering or science departments. Applicants should send a curriculum vitae and the names of at least three references to:

> Ali Cinar, Search Committee Chair Illinois Institute of Technology 10 West 33rd Street, Room 127 PH, Chicago, IL 60616 FAX: 312-567-8874 E-mail: cinar@iit.edu

Illinois Institute of Technology is an Affirmative Action/ Equal Opportunity Employer.

POSITIONS OPEN

The University of Utah is seeking candidates for the position of DIRECTOR, INSTITUTIONAL RE-VIEW BOARD. This position requires a Bachelor's Degree in a related field or equivalency; five years of directly related responsible management experience; and demonstrated human relations and effective communication skills. Previous experience with an institutional review board, and the ability to interpret and apply federal and state agency regulations regarding research on human subjects is also required. Master's degree preferred. Must be familar with research ethics; medical terminology; and information technology. The Institutional Review Board (IRB) director has overall responsibility for managing the functions and personnel, as well as the scientific and budgetary aspects of the IRBs. When necessary the Director will liaison with the University General Council and Office of Sponsored Projects. Specific tasks of the director include; 1) support for the IRB chairs; 2) coordination of the review process for research protocols on human subjects in strict compliance with Food and Drug Administration, NIH, Department of Education, Department of Defense, Department of Education, Veterans Administration and Health and Human Services guidelines; 3) oversight of training and assurance programs for IRB committee members as well as principal investigators and program study coordinators; 4) implementation and data maintenance of the IRB web page, database, and a system for electronic submission of protocols; 5) supervisory responsibility for the functioning of all health sciences IRBs as well as campus-wide and affiliated Salt Lake City Veterans Administration Hospital implementation, facilitation, and maintenance of IRB policies and procedures. Submit résumé and letter of professional interest summarizing qualifications and experience, names, addresses, and telephone numbers of four references familiar with your work experience (include e-mail address, if available) to: University of Utah, Human Resources, 101 Annex, Salt Lake City, Utah 84112-9350; FAX: 801-581-8462. This position will remain open until filled. The University of Utah is an Equal Opportunity Employer.

CONSERVATION BIOLOGIST California State University, Hayward

Applications are invited for a tenure-track ASSIST-ANT PROFESSOR position to begin September 2000. We seek an organismal biologist with teaching and research interests in conservation biology using modern approaches to address field-based questions. Teaching responsibilities include courses in the introductory biology series for majors, conservation biology, and the candidate's area of expertise. Specific research interests are open. The individual is expected to develop an externally funded research program, involving graduate (Master's of Science) and undergraduate students. A Ph.D. is required; postdoctoral and teaching experience are preferred. Send curriculum vitae, statements of research and teaching interests, copies of recent publications, and three letters of recommendation to: Conservation Search Committee, Department of Biological Sciences, California State University, Hayward, CA 94542. E-mail: sopp@csuhayward.edu. Application review begins November 19, 1999, and will remain open until the position is filled. California State University, Hayward is an Equal Opportunity Employer and does not discriminate on the basis of age, race, color, national origin, sex, sexual orientation or disability.

TWO ASSISTANT PROFESSORSHIPS

The Department of Earth Sciences at the University of California, Santa Cruz. Tenure-track openings effective July 1, 2000, in water and surface processes (closes November 30, 1999) and planetary sciences (closes December 31, 1999). For full details, see our website: http://www.cs.ucsc.edu/ or contact Roxanne Woodling for the full ad by Telephone: 831-459-4478, or e-mail: roxanne@es.ucsc.cdu.

POSITIONS OPEN

DIRECTOR CHINA CENTER UNIVERSITY OF MINNESOTA

The University of Minnesota China Center is seeking applicants for the position of Director. Responsibilities include: maintaining significant University relationships with Chinese higher education institutions, strengthening institutional, faculty, student, and scholar exchanges between the University and the People's Republic of China, Hong Kong, and Taiwan; providing supervision of the China Center's support staff; and providing budgetary oversight.

Essential qualifications include a Ph.D. or equivalent terminal degree and knowledge of Chinese and English. Preferred candidates will possess a record of strong professional and/or academic accomplishments including: experience in developing international exchange or research projects; excellent public relations and cross-cultural skills; knowledge of Chinese culture and protocol; and knowledge of the issues in a variety of disciplines, including those in business, the sciences, and engineering where the China Center has fostered substantial academic initiatives.

Applications should include a résumé, names and addresses of three references, and a one-page statement that indicates why the applicant is interested in being Director of the China Center. This position offers attractive university benefits and a competitive salary. Further inquiries about the position and applications should be sent to the attention of: Ms. Joan Brzezinski, Acting Director, University of Minnesota China Center, Room 130 Heller Hall, 271 19th Avenue, South, Minneapolis, MN 55455 or by e-mail: brzez001@tc.umn.edu.

The University of Minnesota is an Equal Opportunity Educator and Employer.

EVOLUTIONARY GENETICS UNIVERSITY OF CALIFORNIA RIVERSIDE

The Department of Biology invites applications for a position in evolutionary genetics at the Junior (ten-ure-track ASSISTANT PROFESSOR) level. We seek an individual working on fundamental mechanisms of evolution using contemporary molecular approaches and related technologies; relevant areas of interest include evolutionary aspects of development, speciation, molecular adaptation, or experimental analyses of evolutionary processes. The successful candidate will establish a vigorous research program, contribute to undergraduate and graduate training, and participate in our interdepartmental graduate research units in genetics and in evolution and ecology. Applicants must have a Ph.D. degree with two or more years of postdoctoral training and a strong record of research accomplishment. A curriculum vitae, statement of research interests, and at least three letters of reference should be sent to: Chair, Evolutionary Genetics Search Committee, Department of Biology, University of California, Riverside, CA 92521. Review of applications will begin January 21, 2000. The University of California is an Equal Opportunity/Affirmative Action Employer.

SUPERVISOR, MICROSCOPY FACILITY

Northwestern University seeks a manager for the Medical School's Cell Imaging Facility. The Facility serves 75 PIs and houses 2 TEMs, 2 confocal, and other digital light microscopes. This position will be responsible for coordinating and training students, faculty, and staff; providing microscopy support services; and developing new techniques. Qualifications: Bachelor's degree or equivalent training; expertise in the biological applications of microscopy; familiarity with computers; and two to five years of relevant experience. Good interpersonal skills are essential. Send letter, résumé, and names of three references to: Dr. Ed Kuczmarski, Cell and Molecular Biology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611. FAX: 312-503-0954; e-mail: e-kuczmarski@nwu.edu.

Northwestern University is an Equal Opportunity, Affirmative Action Educator and Employer.

FACULTY POSITIONS MOLECULAR NEUROSCIENCE THE UNIVERSITY OF IOWA

The Department of Physiology and Biophysics at The University of Iowa invites applications for one or more tenure-track faculty positions in the area of molecular neuroscience. Applicants with interests in the areas of neurodevelopment, neurogenetics, and neuroendocrinology that complement current departmental strengths in signal transduction, gene regulation, and membrane trafficking are encouraged to apply. Although applications will be considered for positions at all levels, preference will be given to those for Assistant Professor. Applicants should have a Ph.D. and/or M.D. degree, at least two years of relevant postdoctoral training, and a strong record of research accomplishment supported by publication. Excellent salary and start-up support is provided. The Department has broad strengths in molecular, cellular and integrative physiology and participates in many productive interdisciplinary research activities throughout the University. For more information, visit our website at www.physiology.uiowa.edu.

To apply, please send a curriculum vitae, a statement of research plans, representative publications, and names of three or more references to: Neuroscience Search Committee, Department of Physiology and Biophysics, The University of Iowa College of Medicine, Iowa City, IA 52242.

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

CELL AND MOLECULAR BIOLOGY Tenure Track Faculty Position Bowdoin College

The Biology Department of Bowdoin College seeks to fill a tenure track position in Cell and Molecular Biology at the **Assistant or Associate Professor** level beginning Fall 2000. The position carries a joint appointment in Biology and Biochemistry. The teaching load is two courses per semester (with adjustments if labs are involved). Teaching responsibilities include one semester of a twosemester Biochemistry course, participation in a Biochemistry lab course, a course in Cell and Molecular Biology and an upper level course in the candidate's area of specialization. The successful applicant is expected to maintain an active research program which includes undergraduates.

Review of applications will begin November 15, 1999. Please send a CV, a letter of intent which includes a description of your research interests and teaching philosophy and the names, email addresses and phone numbers of three references to: Carey Phillips, Chair, Biology Department, 6500 College Station, Bowdoin College, Brunswick, ME 04011-8465. For further information about the department and the college, see our website: www.bowdoin.edu

Bowdoin College is committed to Equal Opportunity through Affirmative Action. Women and minorities are encouraged to apply.

THE INTERNATIONAL VACCINE INSTITUTE

The International Vaccine Institute is a non-profit independent international organization concerned with research and development of new and improved vaccines for use primarily in developing countries. It also provides technical assistance and training for vaccine production and regulatory control. The Institute's headquarters are in Seoul, Korea. The headquarters building will include a pilot plant that will be used for production of human vaccines to be used in clinical trials or for other research purposes. To assist in the management of this facility and to participate in training programs the Institute is seeking candidates for the following positions.

Quality Assurance Manager

This person will manage: a) the pilot plant GMP compliance program, b) the plant validation program, c) metrology activities, and d) the plant auditing/ inspection activities. In addition this person will e) serve as a coordinator for the Institute's activities to participate in regulatory agency inspections and f) train vaccine manufacturers and national control authority /laboratory personnel of developing countries in quality assurance.

Applicants should have, at minimum, a BS degree, or, preferably, a PhD in microbiology or related field. In addition, he/she should have 10 years experience in biopharmaceutical GMP industry with at least 5 years in a quality assurance supervisory role, extensive hands-on experience in equipment and process validation, and be familiar with GMPs and related regulations /guidelines. Applicants should be able to supervise 5-10 individuals, be familiar with validation /GMP compliance principles, possess good English writing and communication skills and possess good interpersonal skills.

Pilot Plant Production Manager

This person will manage a) cell culture and storage, b) vaccine production, purification, formulation, filling, freeze-drying, labeling and packaging, and production support activities including media and glassware preparation, and will c) train developing country vaccine manufacturers' personnel.

The applicant should have a Ph.D. in Microbiology or related field, with 10 years experience in GMP production of human vaccines (both viral and bacterial) with at least 5 years in a production supervisory role. He/she should be familiar with cell culture and upstream and downstream processes of vaccine production including filling and freeze-drying and be familiar with GMPs and related regulations/guidelines. Applicants should be able to supervise approximately 10 individuals, be familiar with GMP compliance principles, possess good English writing and communication skills, and possess good interpersonal skills.

Quality Control Manager

This person will manage in vitro and in vivo tests for vaccines & related materials as well as validation of testing procedures, and will train vaccine manufacturers and national control authority/laboratory personnel of developing countries.

Applicants should have a Ph.D. degree or equivalent in Microbiology or related field with 10 years in human vaccine industry with at least 5 years in a Quality Control supervisory role, extensive hands-on experience in various testings of vaccines and related materials, and should be familiar with GMPs and related regulations/guidelines. The applicants should also be able to supervise 8-10 individuals, be familiar with regulatory requirements for testings, possess good English writing and communication skills, and possess good interpersonal skills.

The Institute makes term appointments. Because of the nature of this assignment, it is expected the first appointment for each of these positions will be for four or five years, renewable. Salary will be internationally competitive. The Institute provides appropriate fringe benefits including a housing allowance, home leave, and income tax reimbursement.

Applications along with a current curriculum vitae and three references should be addressed to:

Mr. Hong-ki Jong Senior Administrative Officer International Vaccine Institute PO Box 14 Kwanak Seoul, Korea

Absolute confidentiality will be respected.

TWO TENURE-TRACK ASSISTANT PROFESSORS TEXAS A&M UNIVERSITY-COMMERCE

Biogeochemist–Ph.D. in geoscience, biogeochemistry or related discipline. Will teach geomorphology, sedimentology, environmental geochemistry and geology, and participate in earth and environmental science curriculum. Prefer experience in teaching, attracting external research funds, and GIS. Apply to: Dr. Don R. Lee, Chair of Search Committee, at address below.

Biologist–Earned Doctoral degree. Will teach freshman biology for majors and non-majors; other biology courses; will develop a wellness course. Must have experience in student and curriculum assessment and teacher certification. Prefer potential to attract external funding and experience in health and wellness education. Apply to: **Dr. J. G. Kopachena, Chair of Search Committee**, at address below.

Appropriate to both Positions are: Starting Date: August 24, 2000; Responsibilities: Teaching, research, student advisement, service; Required Documents: Application letter, curriculum vitae, résumé, transcripts of all degrees, research agenda, teaching philosophy, three letters of reference; Deadline: December 10, 1999.

Department of Biological and Earth Sciences Texas A&M University-Commerce P.O. Box 3011 Commerce, TX 75429-3011

FREELANCE MEDICAL AND SCIENCE WRITERS INTERNET PUBLISHING COMPANY

Internet publishing company seeks freelance writers to draft clinical protocols for consumer medical website. Work involves reviewing medical research on the most common and most acute diseases and crafting guidelines of the highest quality and accuracy. Requisite experience and attributes include excellent writing and editing skills, proven ability to interpret and synthesize clinical material, and ability to work independently. Strongly prefer candidates with graduate degrees and exceptional academic records in the sciences. Please forward cover letter, résumé and writing sample to: DGB Enterprises, Recruiting Box 7, 600 New Hampshire Avenue NW, Washington, DC 20037. FAX: 202-672-5700. Or e-mail résumé and writing sample to e-mail: dgb@advisory.com. Equal Opportunity Employer.

Receptor Biology, Inc., is a young, dynamic firm located in suburban Washington D.C., that discovers, manufactures, and sells targets for High Throughput Screening. We seek a Senior-level Ph.D. to lead our new products team. Requirements for the job include at least three years of postdoctoral work, industry experience, extensive molecular biological expertise, including bioinformatics, and experience in target de velopment and validation. Preference will be given to candidates with specific expertise in orphan GPCRs and/or ion channels. Please send your résumé to: New Products, Receptor Biology, Inc., 10,000 Virginia Manor Road, Beltsville, MD 20817 or FAX: 301-210-6266.

POSTDOCTORAL POSITION

Available at The Johns Hopkins University School of Medicine to study paracellular ion and fluid transport in intestinal epithelia by means of confocal and nulti-photon confocal microscopy combining fluorescence microscopy, molecular biology and epithelial physiology. Applicants must have a Ph.D. and experience in biophysics and cell biology, and *must be a U.S. citizen or a permanent resident.* Please send curriculum vitae and two letters of reference to: Dr. Olga Kovbasnjuk, The Johns Hopkins University School of Medicine, 925 Ross Rescarch Building, 720 Rutland Avenue, Baltimore, MD 21205-2195. FAX: 410-955-9677. Equal Opportunity Employer.

POSITIONS OPEN

A LIFE'S CALLING Can you hear it? SENIOR RESEARCH TECHNICIAN

In this position, you will be a key member of a research team developing novel cancer vaccines. We seek an investigator with experience in gene manipulation/analysis, including cloning, PCR, restriction enzyme digestion, Southern blotting, and SSCP. In addition, experience with basic immunological techniques (such as ELISA and cell separations), tissue culture, and animal handling is highly desirable.

Candidates with a B.S. or M.S. in biology or chemistry with at least two years of relevant experience will be considered. **Job Code #99207.1R.**

RESEARCH TECHNICIANS

Must have a B.S. degree and one to two years of experience. Job Code #99224.1R.

Openings are available in biology, cellular biology, genetics, microbiology, and molecular biology.

We offer a competitive salary and comprehensive benefits, including 100 percent tuition reimbursement. Please forward your résumé and salary requirements, indicating appropriate Job Code to: Employment Department, Memorial Sloan-Kettering Cancer Center, 633 Third Avenue, 5th Floor, New York, NY 10017. Equal Opportunity Employer/ Affirmative Action.

> Memorial Sloan-Kettering Cancer Center The Best Cancer Care. Anywhere

REPRODUCTIVE BIOLOGIST

Applications are invited for a tenure-track faculty position to start on July 1, 2000 at the Assistant or Associate Professor in the Department of Cell Biology at Georgetown University School of Medicine. Candidates should have a strong background in molecular reproductive biology; we would also welcome applications from individuals interested in molecular genetic effects of teratogens. Applicants should have postdoctoral experience, a record of high quality research, and a commitment to research and graduate education. The successful candidate is expected to establish an independent research program with extramural support. Candidates will be required to participate in the department's medical school teaching program. A curriculum vitae, representative publica-tions, and the names of three referees should be sent to:

Martin Dym, Ph.D. Department of Cell Biology Georgetown University School of Medicine 3900 Reservoir Road, NW Washington, DC 20007

Application Deadline: December 31, 1999. Georgetown University is an Equal Opportunity/Affirmative Action Employer.

TRANSGENIC MICROINJECTION SPECIALIST

The University of Louisville seeks a Transgenic Microinjection Specialist to operate a new state-of-theart facility. Requires Master's degree in related field and two years experience with pronuclear microinjection, surgery, and maintenance of mouse colonies. The individual should have excellent organizational and communication skills and be familiar with ES cell culture and gene targeting. Possibility for involvement in cryopreservation program and other research activities. Highly competitive salary commensurate with experience. All qualified applicants before December 31, 1999 will be considered.

Send résumé to: Human Resources, University of Louisville, 1980 Arthur Street, Louisville, KY 40208-2770. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN POSTDOCTORAL POSITION IN DIABETES RESEARCH

A position is available immediately to work with an interdisciplinary team on a NIH-funded project investigating the role of NF-kB in the deveopment of diabetes in the NOD mouse. Candidates must have a Ph.D., M.D., or equivalent degree with training and relevant research experience in immunology and cellular and molecular biology. Position contingent upon grant funding. Send curriculum vitae, names and addresses of three references, and a one-page summary of your research interests to: Dr. Kevin Breuel, Department of Obstetrics/Gynecology, Box 70569, East Tennessee State University, Johnson City, TN 37614-0569. E-mail: breuel@ etsu.edu. East Tennessee State University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION VIRGINIA COMMONWEALTH UNIVERSITY'S MEDICAL COLLEGE OF VIRGINIA

Position available to work in the laboratory of Dr. John Nestler. Research will focus on inositol glycan mediators of insulin action, especially on their role in the polycystic ovary syndrome and insulin-resistant states. Candidates must have demonstrated experience in biochemistry and molecular biology. Letters of interest and curriculum vitae should be sent to John E. Nestler, M.D., Chairman, Division of Endocrinology and Metabolism, Virginia Common, wealth University/Medical College of Virginia, P.O. Box 980111, Richmond, VA 23298-0111. (E-mail: nestler@hsc.vcu.edu.)

BIOINFORMATICS PARASITE GENOMICS

POSTDOCTORAL POSITIONS are available immediately to participate in two NIH-funded protozoan parasite (*Leishmania major* and *Trypanosoma cruzi*) genome sequencing projects. Experience in molecular biology and computing is essential. Please send curriculum vitae, summary of research interests, and contact information for three references to: Drs. Peter Myler and Ken Stuart, Scattle Biomedical Research Institute, 99-18, 4 Nickerson Street, Seattle, WA 98109-1651. FAX: 206-284-0313; e-mail: mylerpj@sbri.org.

The Department of Cardiology at The Cleveland Clinic Foundation at Cleveland, Ohio seeks a fulltime, **POSTDOCTORAL CLINICAL RE-SEARCHER** with strong background in the area of three-dimensional echocardiography research. Applicants must have more than two years of research experience in this field. Medical training (M.D. degree) and ability to work independently is essential. Compensation will be commensurate with experience. Applicants should submit a letter and curriculum vitae to: Takahiro Shiota, M.D., Ph.D. E-mail: shiotat@ ccf.org, FAX: 216-445-4419.

POSTDOCTORAL POSITIONS are available immediately to study: 1. cellular immune responses during primary HIV-1 and SIV infection and vaccination; 2. the evolution of HIV-1 drug resistance; 3. superinfection in highly exposed subjects; 4. molecular epidemiology of HCV. Experience in virology, cellular immunology or nucleic acid manipulation required. Send curriculum vitae to: Eric Delwart, University of California, San Francisco, Blood Centers of the Pacific, 270 Masonic Avenue, San Francisco, CA 94118. E-mail: delwarte@medicine. ucsf.edu.

Two **POSTDOCTORAL POSITIONS** are available immediately to study (1) oxidative stress-induced signal transduction, (2) targeted gene therapy. Prefer recent Ph.D. with experience in biochemical and molecular biology techniques. Send curriculum vitae and names of three references to: **Yong J. Lee, Ph.D., University of Pittsburgh, Department of Pharma**cology, W628 MUH, 200 Lothrop Street, Pittsburgh, PA 15213. E-mail: leeyj@msx.upmc.edu.

EUROPEAN OPPORTUNITIES



Max-Planck-Institut für Molekulare Genetik Berlin

The Max Planck Institute of Molecular Genetics, one of the leading centers in genome research and human genetics, has an opening for the position of a

Department Director

in early 2000. This position is equivalent to a full professorship (C4) at a German University

In this context the Max Planck Institute of Molecular Genetics and the search committee of the Max Planck Society organize a

two-day-Symposium in Berlin, in the third week of January 2000,

> on novel aspects of **Theoretical Genomics**

> > and

Mammalian Functional Genetics.

Scientists interested in this position and distinguished by an outstanding internationally recognized research profile in or near these fields with experience in leading a research group of their own are invited to apply for participation in this symposium. Applicants are asked to submit a title and abstract of their scheduled presentation, a summary of their future research plans. a CV, and the list of publications before December 1st to

Professor H. Lehrach MPI für Molekulare Genetik Ihnestr. 73, D-14195 Berlin, Germany.

Successful applicants will be notified before December 31* 1999.

FELLOWSHIPS



MAX PLANCK INSTITUTE FOR CHEMICAL ECOLOGY

Postdoctoral Fellowships

Five postdoctoral fellowships are available at the Max Planck Institute for Chemical Ecology to study anti-herbivore defences in Arabidopsis, tobacco and related species. Research in the Department of Genetics and Evolution will use functional genomics and QLT mapping to study insect resistance. Research in the Department of Plant Biochemistry and Molecular Biology emphasizes the molecular regulation of glucosinolate and terpenoid metabolism. The institute is international in character, with English the daily language. Additional information can be found at http://www.ice.mpg.de/. Review of applications will begin 26 November, 1999. Please send CV, statement of research interests, addresses and phone numbers of three references to Molecular Biology Search, Max Planck Institute for Chemical Ecology, Tatzendpromenade 1a, 07745 Jena, Germany. Contacts: Thomas Mitchell-Olds (Genetics & Evolution) Phone: +49-3641-643657; e-mail: tmo@ice.mpg.de; Jonathan Gershenzon (Plant Biochemistry & Molecular Biology) Phone: +49-3641-643661; e-mail: gershenzon@ice.mpg.de.

GLOBAL OPPORTUNITIES

CSIRO Wildlife and Ecology, Canberra Australia

Chief

CSIRO Australia is seeking to appoint a person with an internationally recognised record of research leadership, management experience, scientific and technological achievement and research application to the position of Chief of CSIRO Wildlife and Ecology. CSIRO is Australia's largest and most diverse scientific and industrial research organisation.



Our purpose is to serve the Australian community through research outcomes that provide social, economic and environmental benefits. Our mission is to be a world-class research organisation vital to Australia's future

CSIRO Wildlife and Ecology is one of 23 divisions in CSIRO. The Division delivers outcomes based on its research in conservation and production systems. With specialist skills in a broad range of biological disciplines orientated towards terrestrial ecology and biodiversity studies, it tackles national, regional and local resource management issues that need a strategic research foundation. Current research priorities include vertebrate pest management, the role of biodiversity in ecosystem sustainability, developing Australia's capacity to predict and respond appropriately to future environmental change, and producing tools to assist policy makers and land managers to integrate the often competing values of production and conservation. The Division also manages the Australian National Wildlife Collection.

The Division has some 240 staff as well as a number of fellows, visiting scientists and students. It has an annual operating budget of the order of \$22 million, of which about \$6 million is earned from external sources. It operates from five sites, with headquarters in Canberra, and laboratories in Western Australia, Queensland and the Northern Territory. Many Divisional projects require collaboration with other research providers, funders and the community.

The Chief is accountable to the Deputy Chief Executive, Environment and Natural Resources for the performance and The conter is accountable to the Deputy Chief Executive, Environment and Natural Resources for the performance and strategic direction of the Division. Responsibilities include: leadership of the Division's research; management of the Division's staff, financial resources and other assets; strategic planning; customer and stakeholder relations; and commercial and business development. These responsibilities will be discharged with a significant degree of freedom, but in accordance with CSIRO's corporate policies and as negotiated with the Deputy Chief Executive. The Chief will represent CSIRO and interact nationally and internationally with Government, industry and the community.

The appointee will have outstanding research leadership, vision and management skills; highly developed research management and strategic planning skills; an international reputation for scientific accomplishment in a relevant field; a record of achievement in working with Government and industry in developing research partnerships and delivering valuable outcomes; and excellent communication skills.

The appointment will be for five years and will involve an annual performance contract with the Deputy Chief Executive. The remuneration package will be highly competitive. Assistance with relocation will be provided if necessary

More information about CSIRO is available at www.csiro.au, and further details on this position are available from Mr Graham Thompson, Principal Adviser, Resources tel: (61 2) 6246 4558; fax (61 2) 6246 4564; email: graham.thompson@exec.csiro.au. Interested potential applicants are invited to discuss the position with Dr Paul Wellings, Deputy Chief Executive tel: (61 2) 6246 4551; fax (61 2) 6246 4564; email: paul.wellings@exec.csiro.au.

Written applications addressing the selection criteria should be sent to Dr Paul Wellings, Deputy Chief Executive, CSIRO Environment and Natural Resources, GPO Box 2697, Canberra Australia ACT 2601 by Monday 29th November, 1999 S13045

Australian Science, Australia's Future

GLOBAL OPPORTUNITIES

The AJ Parker Cooperative **Research Centre for Hydrometallurgy Chief Executive Officer**

Package \$150,000 + Perth, Western Australia

The AJ Parker CRC for Hydrometallurgy is the world's leading hydrometallurgy R&D centre with an annual budget of approximately S14M. Through its CRC Program the Commonwealth Government support for the Centre of around \$3M pa has recently been renewed for a further 7 years. The Centre is undertaking leading edge research for the alumina, gold and base metals industries with a focus on the optimisation of existing plant performance. A major objective over the next \neg years is to position the Centre so that it can continue to add value for the industry independent of Government support.

The Foundation Director of the Centre, Professor Ian Ritchie, retires in mid 2000. The Board of the Centre is seeking to appoint an outstanding individual to develop the strategic direction of the Centre, maintain and strengthen the Centre's customer base, develop and lead the Centre's management and consultative processes and provide overall scientific leadership to the Centre

The Position:

- · To provide leadership and direction to a team of high profile scientists, engineers and educators.
- To ensure the R&D and educational programs meet the specific needs of the Centre' customers and participants.
- · To develop, with the Board, strategies to ensure that the Centre becomes financially independent of the Government funding within 7 years.
- To establish and maintain appropriate processes to ensure compliance with the legal agreements on which the Centre is founded

Further details on the position may be obtained from Dr J R May, Chairman of the Board, on (03) 9853 ++97 or contact by email on jmay@bigpond.net.au.

Any further information and a copy of the position description and selection criteria can be obtained by telephoning Mrs Betty Bright, Centre's Business Manager, on (08) 9360 6600 or email on bright@central.murdoch.edu.au or enter the Centre's Website http://www.parkercentre.crc.org.au

Written applications by 30 November 1999 should be forwarded to Dr J R May, C/- AJ Parker CRC for Hydrometallurgy, Veterinary Biology Building, Murdoch University, Murdoch, WA 6150

The Requirements:

- · Demonstrated skills and experience that will inspire the continued enthusiasm and support of the Centre's key researchers and its customers.
- Experience in managing a complex multi faceted. technology focussed organisation.
- Strong leadership qualities, good business acumen, innovative, and ability to plan and think strategically, good communication and interpersonal skills.
- Tertiary qualifications in an appropriate field of science or engineering with some management training and business experience being important advantages



513616

DORIS DUKE CHARITABLE FOUNDATION PROGRAM OFFICER FOR MEDICAL RESEARCH

The Doris Duke Charitable Foundation (DDCF), located in New York City, is seeking an outstanding individual to work in its Medical Research Program.

The Foundation, created in 1996, is a non-profit, philanthropic organization with assets of \$1.5 billion. DDCF has three grantmaking programs in the performing arts, environment, and medical research.

The mission of the DDCF Medical Research Program is to support the prevention and cure of human disease by funding medical research. Currently the award program's main focus is on clinical research.

The Medical Research Program is seeking a Program Officer to manage ongoing programs and plan future initiatives. The individual should possess a background (and preferably an advanced degree) in biomedical sciences or in public health. Ability to work as part of a team, and excellent writing, oral, and management skills are essential.

Forward curriculum vitae, the names and addresses of three references, salary requirements, and a brief statement indicating your career objectives to: Doris Duke Charitable Foundation, 650 Fifth Avenue, 19th Floor, New York, NY 10019, Attn: Medical Research Job Search.

SMITHSONIAN INSTITUTION FELLOWSHIP PROGRAM

GRADUATE STUDENT, PREDOCTORAL, POSTDOCTORAL, and SENIOR FELLOW-SHIPS in animal behavior, ecology, and environmental science; including an emphasis on the tropics; earth sciences and paleobiology; evolutionary and systematic biology; history of science and technology. Tenable in residence at the Smithsonian facilities. Stipends and tenure vary. Deadline: January 15 annually. Contact: Office of

Deadline: January 15 annually. Contact: Office of Fellowships and Grants, Smithsonian Institution, Desk S, Washington, DC 20560-0902. Telephone: 202-287-3271. E-mail: siofg@ofg.si.edu. Website: www.si.edu/research+study. An Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately. The focus of the laboratory is the study of the genetics of human germ cell development with special emphasis on male infertility. The successful applicant must have a Ph.D. or M.D.; experience in genetics, molecular biology, or biochemistry is preferred. Please send curriculum vitae and the names, addresses, and telephone numbers of three references to:

Dr. Rence A. Reijo Pera Box 0720 University of California at San Francisco San Francisco, CA 94143-0720 E-mail: reijo@itsa.ucsf.edu

Applications sought for *in vitro* screening of vaginal microbicides.

The Contraceptive Research and Development (CONRAD) Program is seeking applications to evaluate the *in vitro* anti-HIV activity of approximately 180 agents per year supplied by CONRAD. Methods should follow or improve upon an existing CONRAD screening algorithm. Application deadline is January 14, 2000. For information, contact: Lee E. Claypool, Ph.D., CONRAD Program, 1611 North Kent Street, Suite 806, Arlington, VA 22209. Telephone: 703-276-3901; FAX: 703-524-4770; e-mail: lclaypool@conrad.org.

A POSTDOCTORAL POSITION is available immediately to study RNA-protein interactions and structure-function relationships involved in hepatitis delta virus RNA editing. Experience in molecular biology desired. Send curriculum vitae and names of three references to: John Casey, Division of Molecular Virology and Immunology, Georgetown University, 5640 Fishers Lane, Rockville, MD 20852. E-mail: caseyj@gusun.georgetown.edu. Georgetown University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

BIOLOGY POSITIONS VERTEBRATE ZOOLOGIST BIOLOGIST/EDUCATION SPECIALIST

The Department of Biological Sciences of Northern Kentucky University seeks highly motivated individuals for two tenure-track faculty positions at the assistant professor level. Ph.D. and teaching experience are required. Successful candidates will be involved in activities of a recently funded Center for Integrative Natural Science and Mathematics. Duties begin August 15, 2000.

VERTEBRATE ZOOLOGIST. Teaching responsibilities include vertebrate anatomy and physiology, participation in an introoductory course for majors, a course in biometry, and advanced courses in the applicant's area of expertise, preferably ichthyology or mammalogy. The successful candidate will show potential for developing a research program involving undergraduates and addressing modern questions in vertebrate zoology. Research areas might include physiology, evolution, ecology, toxicology, or conservation.

BIOLOGIST/EDUCATION SPECIALIST: A Ph.D. in the biological sciences is required. Teaching responsibilities will include participation in the teaching of an introductory course for majors, a general biology course for non-majors, a methods course for future teachers, and the development of courses in an area of expertise that will enhance the curriculum. The successful candidate will have had experience in high school and post-secondary teaching, will serve as a liaison with the education faculty, and will develop outreach activities with local teachers. Advising of biology education majors and developing of a research program involving undergraduate students are also expected.

Send letter of application; brief statement of professional goals; curriculum vitae; transcripts; and names, addresses, phone numbers, and e-mail addresses of three references by December 15, 1999, to: Vertebrate Zoologist Search Committee or Biologist/ Education Specialist Search Committee; Department of Biological Sciences; Northern Kentucky University; Highland Heights, KY 41099. FAX: 606-572-5639. Northern Kentucky University is an Affimative Action/Equal Opportunity Employer.

POSTDOCTORAL AND GRADUATE OPPORTUNITIES IN ANIMAL BEHAVIOR Indiana University

The Program in Animal Behavior at Indiana University seeks outstanding candidates for training in animal behavior that combines approaches from biology, neuroscience, and psychology. Postdoctoral candidates should apply by March 1, 2000, for a one-year position (renewable) contingent on federal funding. Predoctoral candidates should apply by January 15, 1999 for fall 2000. Inquiries to: CISAB, 402 North Park Avenue, Indiana University, Bloomington, IN 47405. Telephone: 812-855-9663; FAX: 812-855-0411; e-mail: lisummer@indiana.edu; website: http:// www.indiana.edu/~animal/academics/CISAB_ postdoc.html Applications by minorities and women are encouraged. Affirmative Action/Equal Opportunity Employer. U.S. ditzenship is not required.

POSTDOCTORAL POSITION available immediately to study the dynamics of intracellular Ca²⁺ in renal epithelium and smooth muscle using videomicroscopy and confocal fluorescence microscopy. Background in epithelial transport or smooth muscle will be advantageous. Send curriculum vitae and the names of three references to: Dr. K. P. Yip, Department of Physiology and Biophysics, University of South Florida, MDC 8, 12901 Bruce B. Downs Boulevard, Tampa, FL 33612. E-mail: dyip@ com1.med.usf.edu. Website: http://www.med. usf.edu/physio/physiol.ht.ml. University of South Florida is an Equal Opportunity Association/Affirmative Action/EA. Disability accommodations, contact Dr. Yip at telephone: 813-974-7111/TDD 813-974-2218 a minimum of five working days in advance.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Positions available (Ph.D. or M.D.) for research in an NIH-sponsored training program at the Cardeza Foundation for Hematologic Research, Thomas Jefferson University. Areas of interest include: angiogenesis, cytoskeletal structure and the role of the filamins, gene expression by endothelial and smooth muscle cells, biology of the platelet and endothelial GpIb complexes, megakaryopoiesis, oxygen-regulated gene expression, and lipid-binding proteins in thrombosis. Please send curriculum vitae and three letters of recommendation to:

Dr. Sandor S. Shapiro Cardeza Foundation for Hematologic Research 1015 Walnut Street Philadelphia, PA 19107-5099 or e-mail to: sanantol@jeflin.tju.edu

U.S. citizenship or permanent residency required. Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study mammalian mRNA turnover processes. Candidates with a strong background in biochemistry and molecular biology are encouraged to apply. Send cover letter, curriculum vitae, and names of three references to: Gary Brewer, Ph.D., Department of Molecular Genetics and Microbiology, University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854. E-mail: brewerga@umdnj.edu. FAX: 732-235-5223. Visit our website at: http://www.umdnj.edu. University of Medicine and Dentistry of New Jersey is an Affirmative Action/Equal Opportunity Employer, Minorities/Fenales/ Disabled/Veterans, and a member of the University Health System of New Jersey.

POSTDOCTORAL POSITIONS: To study transcriptional regulation of genes involved in lipid biosynthesis and process of adipocyte differentiation. Research area includes 1) mode of action and regulation of factors that control adipocyte differentiation, including pref-1, 2) mechanisms underlying transcriptional activation of lipogenic genes by insulin. Send curriculum vitae and names of three references to: Dr. Hei Sook Sul, Department of Nutritional Sciences, University of California, Berkeley, CA 94720-3104. FAX: 510-642-0535. e-mail: hsul@ nature.berkeley.edu. The University of California is an Equal Opportunity Affiniative Action Employer.

POSTDOCTORAL POSITION available immediately to study mechanisms of neuropathic pain in biopsy, surgical and autopsy tissues from pain patients. Experience with anatomic and molecular techniques preferred. Please send letter, curriculum vitae, and names of three references to: Anne Louise Oaklander, M.D., Ph.D., Departments of Anesthesiology and Neurology, Massachusetts General Hospital, 55 Fruit Street/Clinics 3, Boston, MA 02114. FAX: 617-726-5845, E-mail: oaklander@ partners.org.

POSTDOCTORAL POSITION in neurophysiology is available to study opioid actions in the hippocampus. Ph.D. or M.D. and good communication skills are required. Experience using electrophysiological and/or fluorescent imaging techniques is desirable. Send curriculum vitae and contact information for two references to: **Dr. John J. Wagner, Department of Pharmaccutical Sciences, North Dakota State University, Fargo, ND 58105**. Application review begins December 10, 1999. North Dakota State University is an Equal Opportunity Institution.

A **POSTDOCTORAL POSITION** is available in the Department of Psychiatry for the study of the psychobiology of human developmental processes. Duration of support is from one to three years. The emphasis of the proposed work should be on issues potentially relevant to human psychopathology. Send a letter specifying research interests and a curriculum vitae to: **Dr. Robert Cancro, Department of Psychiatry, New York University School of Medicine, 550 First Avenue, New York, NY 10016.** Equal Opportunity Employer.

Serono Pharmaceutical Research Institute

THE ARES-SERONO CROUP	

The Institute is an affiliate of The Ares-Serono Group which has its Executive Headquarters in Geneva and is a leading multinational engaged in research, development and marketing of products in the biotechnology field. The Institute is a state-of-the-art centre of scientific excellence. Its research is directed towards the identification of novel molecular mechanisms underlying disease and the discovery of new drugs.

A challenging and exciting opportunity exists for a

HEAD OF CELLULAR BIOCHEMISTRY

We are looking for a world class cellular biochemist, with interest in receptors and molecular signalling events, to lead a department of over 20 people. The group's current responsibilities involve finding new therapeutic targets in a variety of signal transduction pathways. The department has research and drug discovery activities in diseases involving neuronal cell death, inflammation and autoimmunity.

The candidate should have a Ph.D. or M.D./Ph.D. and an extensive knowledge of biochemistry, cellular pharmacology and cell biology. A strong record of publications, innovation and leadership is essential. Experience in the pharmaceutical or biotechnology industries would be an added advantage.

Working closely with our molecular biology, in vivo pharmacology, lead discovery and chemistry departments, the candidate will contribute actively to the discovery of new therapeutics and play a key role in shaping the future of the Institute. He/She will report to Dr Tim Wells, Director of the Institute.

Further information can be obtained informally from Dr Tim Wells by e-mail tim.wells@serono.com, or by visiting our web site at www.spri.serono.com.

If you are interested, please send your curriculum vitae with a list of publications and the names of three referees to the Personnel Department of the Institute.

Serono Pharmaceutical Research Institute

Ares-Serono International S.A.

14, chemin des Aulx 1228 Plan-les-Ouates Geneva /Switzerland

Telephone +41 22 706 96 66

Telefax

+41 22 794 69 65

E-Mail

spri.jobs@serono.com

Serono Pharmaceutical Research Institute



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A POSTDOCTORAL FELLOWSHIP

Is available in the Department of Molecular Biology to work with the Multiple Sclerosis Research Team studying molecular mechanisms controlling myelination.

Within the Multiple Sclerosis Group the successful postdoctoral fellow will work on the key molecular questions relating to intra- and extracellular signalling mechanisms controlling myelination. The candidate must have a strong background in neurobiology, cell biology and/or biochemistry. Experience in the Notch signal transduction pathway would be an added advantage. Applicants must have a Ph.D, M.D. or Ph.D./M.D. The successful candidate will be expected to publish papers.

Informal enquiries concerning the position can be directed by e-mail to georg.feger@serono.com, or by visiting our web site at www.spri.serono.com.

If you are interested, please send your curriculum vitae with a list of publications and the names of three referees to the Personnel Department of the Institute.

Serono Pharmaceutical Research Institute

Ares-Serono International S.A.

14. chemin des Aulx 1228 Plan-les-Ouates Geneva /Switzerland

Telephone Telefax E-Mail +41 22 706 96 66 +41 22 794 69 65 spri.jobs@serono.com

POSTDOCTORAL POSITION DEVELOPMENTAL NEUROBIOLOGY

A postdoctoral position is available to study how distinct classes of manimalian sensory neurons are formed and how these neurons innervate to specific targets. Projects include roles of pioneer neurons and transcription factors in controlling axon pathfinding. (For reference see: Genes Dev. 13:1717, 1999; Neuron 20:469, 1998; Cell 87:43, 1996.) Website: http:// neuro.med.harvard.edu/http/ma/ma.html. Qualified candidates should have experience in molecular and/or developmental biology. Please send curriculum vitae and three letters of reference to: Qiufu Ma, SM1022, Dana-Farber Cancer Institute, Department of Neurobiology, Harvard Medical School, 44 Binney Street, Boston, MA 02115. E-mail: Qiufu_Ma@dfci.harvard.edu.

POSTDOCTORAL POSITIONS

Postdoctoral positions are available immediately for studies investigating the mechanism of RNA localization in the yeast *S. cerevisiae*. Current projects are focused on characterizing the functional relationships between the various *cis* and *trans*-acting factors required for *ASHI* mRNA localization as well as the identification of novel cytoplasmically localized mRNAs in yeast. Experience with the characterization of RNA-protein interactions and/or *S. cerevisiae* molecular genetics would be beneficial but is not required. send, FAX or e-mail curriculum vitae and the names of three references to: Roy M. Long, Medical College of Wisconsin, Department of Microbiology and Molecular Genetics, 8701 Watertown Plank Road, Milwaukee, WI 53226-0509; FAX: 414-456-6535; e-mail: rlong@mcw.edu, http://

POSTDOCTORAL SENIOR RESEARCH ASSOCIATE POSITION(S) MOLECULAR NEUROBIOLOGY

Are available to researchers interested in a multidisciplinary approach including molecular biological, electrophysiological, cell biological, and behavioral techniques. Identification of transcription factors, DNA elements, MAP kinase signaling, and steroid modulation of receptor function in learning and memory. Receptor systems under investigation include the glutamate, GABA-A and GABA-B receptors. Send curriculum vitae and references to: Dr. David Farb, Chairman, Department of Pharmacology, Boston University School of Medicine, 715 Albany Street, Boston, MA 02118. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION: to examine the role of the winged helix transcription factor HFH-8 in lung morphogenesis and endothelial differentiation through embryonic analysis of an available HFH8 knockout mice [See: Peterson et al. (1997) Mech. Dev. 69:53-69; website: http://www.uic.edu/depts/ mcgn/fac/cos.html]. Please send curriculum vitae, names and telephone numbers of three references to: Dr. Robert H. Costa, University of Illinois at Chicago, Department of Molecular Genetics (M/C 669), 900 South Ashland Avenue, Chicago, IL 60607. FAX: 312-355-4010. E-mail: Robcosta@ uic.edu

POSTDOCTORAL POSITION

A postdoctoral research position is open immediately in the Division of Infectious Diseases to study mechanisms of rotavirus immunity. Applicants must have a Ph.D. or M.D. degree and should have experience in viral immunology. Experience in handling animals would be advantageous. Send curriculum vitae, bibliography, description of research experience, and the names and e-mail addresses of three references to:

John L. VanCott or Richard L. Ward Children's Hospital Medical Center, NRB 5025 3333 Burnet Avenue Cincinnati, OH 45229-3039 E-mail: vancj0@chmcc.org

POSITIONS OPEN

POSTDOCTORAL POSITION-Signal Detection in Visual Cortex—Cellular Mechanisms of Nitric Oxide Action. Experience with in vivo electrophysiology, microiontophoresis, computer-based visual stimulation and data acquisition. Project addresses ability of nitric oxide to enhance signal detection by individual cortical neurons and nitric oxide's role in binocular interactions. Well-equipped, NIH-supported laboratory in extremely dynamic young Department of Neurobiology in leading medical school. Position start available between January 1, 2000, and October 1, 2000. Salary range is \$28,000 to \$38,000 annually. Please have curriculum vitae and names of three references sent to: Michael Friedlander, Ph.D., De-partment of Neurobiology, 1719 6th Avenue South, 516 CIRC, University of Alabama at Birmingham School of Medicine, Birmingham, AL 35294-0021. FAX: 205-934-6571; e-mail: mjf@ **nrc.uab.edu.** University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.

NIH-funded POSTDOCTORAL POSITION is immediately available to study the etiology of viral antigens in systemic autoimmunity. Research experience in molecular biology and immunology required. Strong background in recombinant DNA techniques including RT-PCR, site directed mutagenesis, gel shift assays, and transfection into mammalian cells. Experience with mouse immunizations, ELISA's western blots, and DNA-based vaccines encouraged. Send curriculum vitae, names, addresses, and telephone numbers of three references by November 19, 1999, to: Dr. Linda Spatz and Dr. Paul Gottlieb, the Department of Microbiology/Immunology, The Sophie Davis School of Biomedical Education, City University of New York, 138th Street and Convent Avenue, New York, NY 10031. An Affirmative Action/Equal Opportunity Employer/Minorities/ Females/Disabled/Veterans.

POSTDOCTORAL POSITIONS are available immediately to study antigen processing and presentation, T cell repertoire, and autoimmunity. One position is to study self-tolerance and T cell repertoire directed against a model antigen. Another position is to investigate the pathogenesis of autoimmune arthritis using a rodent model. Applicants should have a Ph.D. and/or M.D. and experience in cellular immunology and/or molecular biology. Prior animal research experience is desired. Please send curriculum vitae and a brief description of previous research experience, and have three letters of recommendation sent to: Dr. Kamal D. Moudgil, M.D., Ph.D., Associate Professor, Department of Microbiology and Immunology, BRB 13-019, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201. FAX: 410-706-2129; e-mail: kmoud001@umaryland.edu>.

POSTDOCTORAL RESEARCH POSITIONS IN MICROBIOLOGY

American Society for Microbiology/ National Center for Infectious Diseases

Positions are available for Postdoctoral Scientists to conduct novel research with the overall objective of developing practical applications of microbiology, immunology, and epideniology for diagnosis and prevention of infectious diseases. Associates will perform research in residence at the National Center for Infectious Diseases, which is headquartered at the Centers for Diseases Control and Prevention in Atlanta, Georgia.

Deadline for applications is November 15, 1999. Website: http://www.asmusa.org/edusrc/edu23e. htm; e-mail: fellowships-careersinformation@asmusa. org.

POSTDOCTORAL POSITIONS in plant molecular biology (experience with transgenic plants is preferred), immunology, or virology immediately available for vaccine development. Interested candidates should send applications to: Dr. Qiao, Department of Microbiology and Immunology, Loyola University Chicago (Medical Center), 2160 South First Avenue, Maywood, IL 60153, USA. E-mail: Iqiao@luc.edu; FAX: 708-216-1196.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP IN AUTOIMMUNE DISEASE Washington University School of Medicine, St. Louis, Missouri

A NIH-funded position to study immune cell trafficking in autoimmune disease of the eye using micro-PET technology for in vivo imaging is available immediately in the Department of Ophthalmology and Visual Sciences. The laboratory is engaged in the basic research of autoimmune uveitis and clinical studies related to autoimmune diseases. The aim of the current project is to develop novel radioligands for cell and antibody labeling, to allow study of the pathogenesis of a rodent model of autoimmune uveitis with microPET in vivo imaging. Applicant should have working knowledge of current techniques in cellular and molecular immunology. Applicants should submit a current curriculum vitae and names of three references to: Nalini S. Bora, Ph.D., Department of Ophthalmology and Visual Sciences, Washington University School of Medicine, 660 South Euclid, St. Louis, MO 63110. E-mail: Bora@am.seer. wustl.edu; FAX: 314-747-4211.

POSTDOCTORAL POSITION-Developmental Regulation of Synaptic Plasticity in Visual Cortex. Project involves in vitro brain slice electrophysiology with sharp and whole cell microelectrode recording and intracellular calcium imaging. Fellow will evaluate role of metabotropic glutamate receptors and developmental control of signaling pathways. Electrophysiology experience is essential. Well-equipped NIHsupported laboratory in extremely dynamic young department of neurobiology in leading medical school. Position start available between January 1, 2000, and July 1, 2000. Salary range is \$28,000 to \$38,000 annually. Please have curriculum vitae and names of three references sent to: Michael Friedlander, Ph.D., Department of Neurobiology, 1719 6th Avenue South, 516 CIRC, University of Alabama at Birmingham School of Medicine, Birmingham, AL 35294-0021. FAX: 205-934-6571; e-mail: mjf@nrc.uab.edu. University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION BIOMATERIALS AND TISSUE ENGINEERING

A TWO-YEAR POSITION is available to initiate development of porous scaffolds in tissue engineering. This is a joint project between National Science Foundation Éngineering Research Centers at the University of Washington Engineered Biomaterials (Seattle) and the Georgia Tech/Emory Center for The Engineering of Living Tissues (Atlanta). The applicant would be expected to spend substantial time at both sites. A Ph.D. and strong experience in biomedical polymers and/or tissue engineering with excellent communication skills are required. Submit names of references with a curriculum vitae to: Prof. Buddy D. Ratner, University of Washington Engineered Biomaterials, University of Washington, Box 351720, Seattle, WA 98195-1720. Both institutions are Equal Opportunity Employers.

The Gazes Cardiac Research Institute and the Charleston VA Medical Center at the Medical University of South Carolina has POSTDOCTORAL **POSITIONS** newly available for projects with several investigators in a collaborative research group examining the causes and consequences of cardiac hypertrophy. Areas of study include molecular biology, cell physiology, gene expression, protein structure-func-tion relationships, and cell signalling processes. M.D./Ph.D., American citizenship/permanent resi-dency required. VERY COMPETITIVE SALARIES. Please send a letter of inquiry, to: George Cooper, IV, M.D., Medical University of South Carolina, Gazes Cardiac Research Institute, Room 232, 114 Doughty Street, Charleston, SC 29403. Tele-phone: 843-953-6474; FAX: 843-953-6473; email: gallient@musc.edu. Medical University of South Carolina is an Equal Opportunity Employer, Supporting Work Place Diversity. Minorities/Female/Veterans/Disabled

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EUROPEAN OPPORTUNITIES

UNIVERSITY of GLASGOW

Institute of Biomedical & Life Sciences REGIUS CHAIR OF BOTANY

The University intends to proceed to make an appointment to the Regius Chair of Botany, following the retirement of Professor Malcolm Wilkins, FRSE. As part of the process, applications are invited from outstanding scientists with research interests in any area of plant science. Applications will be particularly welcome from those whose research uses biochemical, physiological, molecular or genetic approaches to investigate fundamental problems. While the person appointed will be expected to contribute to all aspects of University life, this is a research based appointment forming a key component in the University's research strategy. Strong support, including two academic posts, will be provided.

Professor Richard Cogdell (R.Cogdell@bio.gla.ac.uk) and Professor Hugh Nimmo (H.Nimmo@bio.gla.ac.uk) will be glad to answer informal enquiries.

A summary of the Plant Research Group is available at http://www.gla.ac.uk/Acad/IBLS/research/PlantMolSci/plant-mol.html; further information about the Institute is available at http://www.gla.ac.uk/departments/ibls/

The appointment is tenable from 1 October 2000 or such other date as may be arranged.

Salary will be within the professorial range and is subject to negotiation.

For an application pack please see our website at WWW.gla.aC.Uk or write quoting

Ref: 531/99CJ/SC to the Director of Personnel Services, University of Glasgow, Glasgow G12 8QQ.

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medicine@natureny.com), to arrive as soon as possible and **no** later than 30 November 1999.



Nature America, Inc. 345 Park Ave. South New York, NY 10010

POSTDOCTORAL POSITION PATHOGEN DETECTION

A Postdoctoral position is immediately available for participation in developing pathogen detection technologies using MEMS (micro-electrical-mechanical systems)-based engineering approaches. The emerging MEMS enables us to perform efficient lab-on-chip scale sample preparation schemes. The successful postdoctoral candidate will have extensive experience with microbiological and molecular biological techniques, including RNA/DNA preparation, amplification, and analysis. Biochemistry background in reagent development, handling with bacteria, and mono-clonocal antibody experiences are also necessary. This is an interdisciplinary project, which com-bines molecular biology, MEMS, and microfluidics. The candidate therefore has the opportunity to develop an understanding of state-of-the-art engineering technologies and their applications in molecular biology.

Please send curriculum vitae and three letters of reference to: Ms. Kelli Yang, University of California, Los Angeles, MAE Department, Box 951597, 38-137C, Engi. IV., Los Angeles, CA 90095; email: kelli@ea.ucla.edu.

NIH-funded positions of RESEARCH ASSO-CIATE and POSTDOCTORAL RESEARCH TRAINEE are available to participate in several multidisciplinary research projects involved in mapping and characterization of susceptibility genes for nicotine dependence and other mental disorders in humans. Experience in molecular biology, genome mapping, linkage, and association analysis would be advantageous, but other highly motivated individuals are encouraged to apply. Requirements: For Postdoctoral Fellow, a Ph.D. in molecular biology, statistical genetics, or related fields is desired; for Research Associate, Ph.D. with three or more years of research experience in statistical genetics, molecular biology, or related fields is desired. Send curriculum vitae and the names of three references to: Dr. Ming Li, Department of Pharmacology, The University of Tennessee, 874 Union Avenue, Memphis, TN 38163. E-mail: mdli@utmem. edu. FAX: 901-448-7206.

University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ ADA/ADEA Employer.

POSTDOCTORAL POSITION to study biological metals in intestinal disease: (i) post-transcriptional gene regulation in inflammation and mitosis or (ii) metal transport. Molecular biology experience essential. Must provide eligibility to work in the United States.

Please send curriculum vitae, research interests, and three reference letters to: Dr. Mark T. Worthington, Digestive Health Research Center, University of Virginia, Charlottesville, VA 22908. FAX: 804-243-6169.

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

POSTDOCTORAL POSITIONS are available for studying membrane targeting of RAS and other CAAX proteins (see *Cell* **98**:69–80, 1999). Salaries are competitive. Candidates with a recent Ph.D. degree and a strong background in molecular/cellular biology are desired. Send by FAX or e-mail a curriculum vitae and names of three references to: Mark R. Philips, M.D., New York University School of Medicine, FAX: **212-263-8804**; e-mail: philim01@ med.nyu.edu; website: http://www.med.nyu.edu/ sackler/postdoc/mark_philips.htm.

Laboratory at the Boston Biomedical Research Institute is seeking a postdoctoral candidate with experience in biochemistry to study the role of heat shock proteins in inhibition of apoptosis and regulation of stress-activated protein kinases. Information about our research can be found at: website: www.bbri. org/bbri_stuff/faculty/sherman/sherman.html. Please e-mail your curriculum vitae to Michael Sherman at e-mail: sherman@alpha.bbri.org. Telephone: 617-912-0312; FAX: 617-912-0308.

POSITIONS OPEN

POSTDOCTORAL POSITIONS JOHNS HOPKINS ONCOLOGY CENTER

POSTDOCTORAL FELLOWSHIP/RE-SEARCH ASSOCIATE positions available immediately to investigate novel approaches to augment the immune response to tumor antigens. Studies include targeting tumor antigens to the MHC class II antigen processing pathway, modification of peptide epitopes, and development of vaccine strategies post bone marrow transplantation. Experience in molecular biology, biochemistry, or cellular immunology preferred. Send curriculum vitae and names of three references to: Dr. Allan D. Hess, Division of Immunology/Hematopoiesis, Oncology Center, The Johns Hopkins University, 600 North Wolfe Street, Room 3-127, Baltimore, MD 21287. E-mail: adhess@ ihmi.edu.

POSTDOCTORAL POSITION IN LIPID/LIPOPROTEIN METABOLISM THE UNIVERSITY OF TENNESSEE

Postdoctoral position available to study cellular and molecular mechanisms by which insulin regulates lipid synthesis in the liver. Position provides broad training in study of metabolic and molecular regulation of lipid and lipoprotein metabolism. Projects involve cloning of lipogenic enzyme(s) and study of signal transduction pathways that mediate effects of insulin on hepatic lipid and lipoprotein metabolism. Successful candidates should have demonstrated experience in standard molecular biology and cell biology techniques. Prior experience in study of signal transduction desirable but not essential. Send curriculum vitae and names of three references to: Marshall Elam, Ph.D., M.D., Department of Pharmacology, University of Tennessee Health Sciences Center, 874 Union Avenue, Memphis, TN 38163. FAX: 901-448-7206. E-mail: melam@utmem.edu.

University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ ADA/ADEA Employer.

POSTDOCTORAL POSITION IN MOLECULAR MECHANISMS OF ONCOGENESIS BY HER-2/NEU

Postdoctoral position immediately available to investigate structure and mechanism of action of herstatin, a secreted autoinhibitor of the HER-2/neu receptor tyrosine kinase, recently discovered and cloned in the Clinton laboratory (See: Doherty et al., *Proc. Natl. Acad. Sci.* 96:10869–10874, 1999). A preference will be given to applicants who have recently received their Ph.D. and have a strong background in protein chemistry and/or molecular biology. Please send curriculum vitae and three references to: Dr. Gail M. Clinton, Department of Biochemistry and Molecular Biology, L224, Oregon Health Sciences University, Portland, OR 97201. E-mail: clinton@ohsu.edu.

RESEARCH ASSISTANT PROFESSOR and POSTDOCTORAL POSITIONS available for highly motivated candidates to join a multidisciplinary group studying RNA-protein interactions in volved in HIV-1 replication. (1) Bio-organic/Biophysical Chemist: projects involve combinatorial synthesis of peptides and fluorescence spectroscopy to analyze the structures of RNA-protein complexes. (2) Molecular/Cell Biologist: Strong background in cell biology is required and prior experience in gene expression at the cellular level is essential. Send curriculum vitae and names of three references to: Dr. Tariq M. Rana, Department of Pharmacology, Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854. E-mail: rana@umdnj.edu. Website: http://lifesci.rutgers.edu/~molbiosci/ professors/rana.html.

POSITIONS OPEN POSTDOCTORAL POSITIONS

MCLAUGHLIN RESEARCH INSTITUTE

(I) To study the role of Casein Kinase II in spermatogenesis (*Nat. Genet.* **23**:118–121), including identification of the CK2 target protein and epistatic analysis with other candidate genes under **Dr. Xin Xu**. Previous experience in protein-protein interaction, kinase signaling, and knockout and transgenic mouse analysis would be helpful.

(II) To study the role of Eyes Absent (Eya) genes during mammalian development and organogenesis under Dr. Pin-Xian Xu. Previous work established that Eya1 gene is required for development of several organs. (Nat. Genet. 23:113-117). Current efforts are focused on using Eyal-deficient mice to understand the developmental and molecular pathogenesis of organ defects that occur in Brancio-Oto-Renal syndrome, a human Eyal -deficiency. Molecular technologies are being used to dissect the genetic regulatory hierarchies that are required for auditory and other organ development. Candidates should have a strong molecular biology background. A good basic knowledge of embryology and mammalian genetics and experience in handling mice and mouse embryos is desirable.

To apply: please send a summary of prior research accomplishments and current research interests, a curriculum, vitae, recent reprints/preprints, and names, telephone numbers, and e-mail addresses of three references to: Dr. Pin-Xian Xu, (Auditory System Development, e-mail: pxu@po.mri.montana.edu) or Dr. Xin Xu, (Spermatogenesis, e-mail: xxu@po.mri. montana.edu) McLaughlin Research Institute, 1520 23rd Street South, Great Falls, MT 59405. FAX: 406-454-6019. Website: www.montana.edu/ wwwmri.

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POSTDOCTORAL POSITION IN THE DEPARTMENT OF MOLECULAR PHYSIOLOGY AND BIOPHYSICS Vanderbilt University Medical School

A postdoctoral fellowship position is available to apply site-directed spin labeling to study protein structure and conformational dynamics. The current focus in the laboratory is the lens protein α A-crystallin and related small heat shock proteins from various organisms. Candidates should have a Ph.D. in biochemistry or biophysics, with expertise in either EPR spectroscopy, fluorescence spectroscopy, or computational biology. Applicants with a background in EPR spectroscopy are especially encouraged to apply.

Send a curriculum vitae, a brief description of research interests, and three letters of reference to:

Hassane S. Mchaourab, Ph.D. c/o John Jacobs Department of Molecular Physiology and Biophysics Vanderbilt University Medical School 702 Light Hall Nashville, TN 37232-0615 E-mail: hassane@mcw.edu

EUROPEAN OPPORTUNITIES

LECTURESHIP, MOLECULAR ECOLOGY The University of Sheffield Department of Animal & Plant Sciences

Required to augment the department's research and teaching strengths in molecular ecology and evolutionary biology. Applicants should have a proven record of the successful application of a molecular approach in ecology or evolution (including population or quantitative genetics and/or behaviour). Salary £17,238-£30,065 pa. Closing date for applications: 22 November 1999. (Ref: R1838). For details of this post, E-mail: jobs@sheffield.ac.uk or Telephone: 0114-222 1631 (24 hr). Please quote the post reference in all enquiries. Vacancy website: http://www.shef.ac.uk/jobs/. An Equal Opportunity Employer.

Postdoctoral Fellow (two-year) in Fisheries Biology/Fisheries Oceanography at Marine Conservation Biology Institute (nonprofit), Redmond WA, USA, to develop emerging issues in marine conservation 'and related tasks. \$35,000 plus health insurance. Required: Ph.D. in fisheries biology, fisheries oceanography, or allied field, outstanding writing and quantitative skills, ability to work in a closeknit team at science/policy interface. Full information at website: www.mcbi.org. Women, minorities encouraged.

GLOBAL OPPORTUNITIES

FACULTY POSITION NATIONAL TAIWAN NORMAL UNIVERSITY

The Department of Biology has an opening for one or two positions in the level of ASSISTANT, ASSO-CIATE or FULL PROFESSOR level starting August 2000. Candidates with disciplines in physiology, biochemistry, ecology, morphology, biotechnology, systematic biology or biology science education are invited to apply. Applicants must have Ph.D. degree and postdoctoral experience and be fluent in Mandarin. The appointee(s) will be expected to teach at both undergraduate and graduate level and conduct a vigorous research program. Applicants should send curriculum vitae with publication list, research plan, photocopies of diploma of the highest degree, and arrange for three reference letters before February 28, 2000 to: Professor Shong Huang, Chairman, Department of Biology, National Taiwan Normal University, 88, Sect. 4, Ting-Chou Road Taipei 117, Taiwan. FAX: 886-2-29312904, E-mail: bio@deps.ntnu.edu.tw.

ANNOUNCEMENTS

U.S. POSTAL SERVICE

Statement required by the Act of 12 August 1970, Section 3685, Title 39, United States Code, showing the ownership, management, and circulation of:

1-9. Science, Publication No. 0036-8075, is published weekly on Friday, except the last week in December, at 1200 New York Ave., NW, Washington, DC 20005. Date of filing: 7 October 1999. This is also the address of the publisher, the editor, and the managing editor, who are, respectively, Richard S. Nicholson, Floyd Bloom, and Monica M. Bradford.

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l certify that the statements made by me above are correct and complete. (**signed**) *Marlene Zendell*, Deputy Director, Membership/Circulation.

GLOBAL OPPORTUNITIES

AMERICAN UNIVERSITY OF BEIRUT FACULTY OF ARTS AND SCIENCES

Faculty Positions in the Department of Chemistry available starting October 2000. Applicants sought in the field of analytical chemistry, with preference for separations and/or environmental chemistry. Ph.D. degree, teaching, and research experience required. Positions are at the **ASSISTANT PROFESSOR** level but higher ranks may be considered depending on qualifications. Appointments are generally for an initial period of three years. Visiting positions at all levels may be considered for all vacancies. Sabbatical visitors are welcome in all fields. All interested applicants may send a letter of application and arrange for three letters of reference addressed to:

Dean, Faculty of Arts and Sciences American University of Beirut c/o New York Office 850 Third Avenue, 18th floor New York, NY 10022-6297

Electronic submission may be sent to: Hyperlink mail to: AS_Dean@aub.edu.lb. All applications and letters of reference should be received by January 15, 2000. The American University of Beirut is an Equal Opportunity Employer.

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