NEW PRODUCTS

LIQUID ACRYLAMIDES

Liquid Acrylamides are a safe, simple alternative to hazardous and messy powdered

Amresco For more information call 800-227-9997 or circle 147 on the Reader Service Card acrylamide. These Liquid Acrylamides are highperformance liquid chromatography-tested for correct ratio and purity and made with >99.9% purity acrylamide. All solutions are microfiltered

prior to packaging. These solutions can be used with many automated sequencers.

THERMO-START DNA POLYMERASE

Patent-pending Thermo-Start DNA Polymerase for hot start polymerase chain reac-

tion (PCR) is designed to be enzymatically inactive until "switched on" by high temperature incubation. This eliminates nonspecific priming and amplification before the tart DNA Poly ABgene For more information call +44 (0) 1372 723456 or circle 148 on the Reader Service Card PCR, avoiding the formation of nonspecific products. As the enzyme is present in an inactive state, reactions can be prepared at room temperature.

LOW-LIGHT IMAGING SYSTEM

The FluorChem low-light imaging system continues to increase its imaging application breadth with macroarray capability in addition to its fluorescence, chemiluminescence, and visible imaging cap-

acity. Imaging applications include chemiluminescent blots, macroarrays, gel electrophoresis, colony/plate analysis, and much more. The FluorChem is designed around several key performance criteria: high

Alpha

sensitivity for chemiluminescence, 1.3million pixel resolution, long exposure capability through deep charge-coupled device sensor cooling, and a broad linear dynamic range of 0 to 65,536.

LITERATURE

The Complete Guide to Protein Labelling and Detection details a comprehensive product offering, from electrophoresis to image documentation and analysis

via blotting and detection with an enhanced chemiluminescence substrate. The guide also includes numerous selection tables to aid in choosing the best equipment, reagents, membranes, films, and imaging systems for protein blotting applications.

Amersham Pharmacia Biotech For more information call +44 20 7255 1100 or circle 150 on the Reader Service Card

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



Gordon Research Conferences

2001 Winter and Spring Meetings

VISIT THE frontiers of science GO TO A GORDON CONFERENCE

2001 WINTER / SPRING CONFERENCE FEES

		Conferee			Adult Gue	st
	Single	Double	Off-Site	Single	Double	Off-Site
California	\$810	\$715	\$580	\$640	\$545	\$410
California, 3-Day	\$400	\$345	\$265	\$400	\$345	\$265
Il Ciocco, Italy	\$850	\$740	\$590	\$680	\$570	\$420

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The 2001 Winter a	and Spring Gordon Research
Conferences will be I	held in Ventura, California and II
Ciocco, Barga, Italy.	
	ted - it is recommended that applicants
apply immediately for	r early consideration by the Chair.
DIRECTOR	DIRECTOR EMERITUS

Conferees attending both Metals in Biology and the 3-day Graduate Research Seminar should add \$308 to the 5-day single room rate or \$270 to the 5-day double room rate.

System

Genomics

Adrenal Gland and Heart

Human Renin Angiotensin

System: Bench to Bedside

Renin Angiotensin System and

Angiotensin System

ANTIMICROBIAL PEPTIDES

HARBORTOWN RESORT

Robert Hancock, Co-Chairs

Margherita Zanetti, Co-Vice-Chairs

Membrane Interactions

Biology and Regulation Novel Methodology and Structure

The Bugs Fight Back

Activities and Function

Pathogenesis:

Peptides

Peptides

Activities and Mechanisms:

Mechanisms of Innate Immunity

New Perspectives on Biological

Controversies in Antimicrobial

Practical Uses for Antimicrobial

VENTURA, CA

MAR 18-23, 2001

Charles Bevins &

Willem Broekaert &

The Role of Sex in the Renin

DIRECTOR EMERITUS Alexander M. Cruickshank

The Gordon Research Conferences web site at http://www.grc.uri.edu/ contains the most up-to-date information we have for any given Conference. Be sure to take a look at the scientific program, the conference schedule or any other information that has been posted. Certain Conferences, as noted below, have created their own web sites as well.

Applications to any Conference can be submitted via our web site at http://www.grc.uri.edu/, or feel free to copy the blank application form. You may also request more forms or additional information from:

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The international Gordon Research Conferences were established with the continuing support of the Ares-Serono Foundation.

AGRICULTURAL SCIENCE CLARION VENTURA BEACH HOTEL VENTURA, CA FEB 11-16, 2001 Bruce D. Hammock &

Mark A. Stidham, Co-Chairs Sarjeet S. Gill & John A. Ryals, Co-Vice-Chairs

- Diversity in Opinion of the Safety of GMO's
- New Chemistries and Targets
- Signal Perception
- Diversity in Tools and Approaches Diversity in Traits and Platforms

ANGIOTENSIN

CLARION VENTURA BEACH HOTEL VENTURA, CA MAR 11-16, 2001 Bradford C. Berk, Chair Allessandro M. Capponi, Vice-Chair

- Proteomics/Genomics and the Renin Angiotensin System
- AT1R Signal Transduction: Intracellular Pathways
- AT1R Signal Transduction: **Oxidative Stress**
- Vascular Remodeling and the Renin Angiotensin System Type 2 Angiotensin II Receptor
- (AT2R) Signal Transduction and Biology
- Lessons Regarding the Renin Angiotensin System from Transgenic Experiments
- Cardiac Renin Angiotensin System

Vascular Renin Angiotensin CAE IN POLYMER PROCESSING HOLIDAY INN Intrarenal Angiotensin: VENTURA, CA Generation, Regulation and Action Angiotensin II and Aldosterone:

MAR 4-9, 2001 Charles L. Tucker, Chair Andres A. Garcia-Rejon, Vice-Chair

- Flow-Induced Crystallization Numerical Methods for Free and Moving Boundaries
- Instabilities in Processing Flows Reactive Processing and
- Functionalized Polymers
- Simulation of Viscoelastic Fluid Flow
- Control of Microstructures in Mixina
- Processing for Microscale Structures
- Processing for Nanoscale
- Structures
- Process Monitoring and Control

CAROTENOIDS

CLARION VENTURA BEACH HOTEL VENTURA, CA JAN 14-19, 2001 Helmut Sies, Chair Harry A. Frank, Vice-Chair

- Carotenoid Genetics
- Carotenoids in Disease Prevention I (Lycopene, B-Carotene)
- Carotenoids in Disease Prevention II (Lutein, Zeaxanthin)
- Cleavage of B-Carotene to Retinal Biological Effects of Carotenoids: Signalling

Carotenoids in Nutrition

- Carotenoid Chemistry Carotenoids in Photosynthesis

CHEMICAL REACTIONS AT SUBFACES

HARBORTOWN RESORT VENTURA, CA FEB 18-23, 2001 John C. Hemminger, Chair Hans-Joachim Freund, Vice-Chair

- Special Opportunities for
- the Future Molecular Electronics
- Liquid/Solid and
- Liquid/Vapor Interfaces
- Chemistry on Metals
- Theory
- Semiconductor Surface Chemistry
- Surface Chemistry and Catalysis
- Metal Oxide Surfaces and Ultrathin Films
- Dynamics of Surface Structure and Reactivity

CHEMICAL SENSORS & INTERFACIAL DESIGN

IL CIOCCO BARGA, ITALY MAY 6-11, 2001 Deborah H. Charych, Chair Hank Wohltjen, Vice-Chair

- Single Molecule Detection and Microfluidics Nanostructured Materials as
- Sensors Microstructured Materials as Sensors
- Polymer and Biopolymer-based Sensory Systems
- Optical Systems and Biosensors Self-assembly, Molecular
- Recognition and Biological Interfaces Novel Materials and Interfaces
- Environmental Sensors

COMPUTATIONAL ASPECTS -BIOMOLECULAR NMR

IL CIOCCO BARGA, ITALY MAY 6-11, 2001 Michael Nilges, Chair David A. Case, Vice-Chair

- **Experimental Frontiers**
- New Approaches I, II
- Data Analysis/Structure
- Refinement I. II
- Folding and Dynamics
- NMR and Genomics Molecular Interactions

ELECTROCHEMISTRY HOLIDAY INN VENTURA, CA JAN 14-19, 2001 Debra R. Rolison, Chair Henry White, Vice-Chair

- Energy Transduction via **Biological Charge in Motion**
- 'Field' Day
- Electrochemistry/Materials New Efforts in Electrochemical
- Power Sources
- Nanoelectronics and
- Electrochemistry Electrochemistry in Unusual Media

EXCITATORY AMINO ACIDS &

BRAIN FUNCTION IL CIOCCO BARGA, ITALY MAY 20-25, 2001 Peter H. Seeburg, Chair Richard L. Huganir, Vice-Chair

- GluRs: Evolution, Structure GluRs: Excitatory Synapse: Physiology
- Excitatory Synapse: Ultrastructure, Spines
- GluR Interactors,
- Synaptic Targeting, PSD Kainate Receptors
- Excitatory Synapse: Plasticity
- Genetic Approaches
- Excitotoxicity
- Imaging

FIBRONECTIN, INTEGRINS &

RELATED MOLECULES CLARION VENTURA BEACH HOTEL VENTURA, CA FEB 4-9, 2001 Eric J. Brown, Chair Martin J. Humphries, Vice-Chair

- ECM: Organization and Signaling
- Integrin Signaling Molecular Basis of Integrin
- Effector Functions Integrins in Angiogenesis and
- Development Structural Basis of Integrin
- Activation and Signaling
- Integrin Adhesion and
- Cell Activation
- Integrins, Cytoskeleton and Cell Migration
- Integrins in Pathogenesis

GASEOUS IONS: STRUCTURES.

ENERGETICS & REACTIONS CLARION VENTURA BEACH HOTEL VENTURA, CA FEB 25 - MAR 2, 2001 Peter Armentrout, Chair Terrance B. McMahon, Vice-Chair

- lons in Nanodroplets
- Organometallic Ion Chemistry Environment and Aerosols
- Analytical Mass Spectrometry Clusters
- Organic lons
- Noncovalent Ion Interactions
- Ion Spectroscopy

GLYCOBIOLOGY

HARBORTOWN RESORT VENTURA, CA MAR 4-9, 2001 Anne Dell, Chair Richard D. Cummings, Vice-Chair

- New Frontiers in Glycobiology Structural Glycobiology
- Glycosyltransferases
- Gene Knockouts
- Siglecs
 - Glyco-immunology
- Proteoglycans, Growth and Development
- Glycobiology and Disease Glycobiology in the Post Genomics Era

GRADUATE RESEARCH SEMINAR: **BIOINORGANIC CHEMISTRY***

HARBORTOWN RESORT VENTURA, CA JAN 25-28, 2001 Seth M. Cohen, Chair Ernest Maynard, Vice-Chair

- Synthetic Active-Site Mimics
- Spectroscopy of Metals in Biology
- The Role of Metals in Medicine and Nucleic Acids
- Metalloprotein Structure and
- Function Metal Regulation, Storage and Transport in Biology

*Cosponsored by the Kenan Institute for Engineering, Science and Technology.

HYDROCARBON RESOURCES HOLIDAY INN VENTURA, CA JAN 7-12, 2001

Akira Tomita, Chair Ripudaman Malhotra, Vice-Chair

- Biotechnology for Materials and Energy
- Organic Chemistry of Heavy Hydrocarbons
- Design of Advanced Catalyst New Carbon Material and
- Application
- New Characterization Techniques for Complex Molecules
- Non-fuel Uses of
- Hydrocarbon Resources
- Advanced Energy Production and Use
- Upgrading of Heavy Hydrocarbons

IMMUNOCHEMISTRY & IMMUNOBIOLOGY

CLARION VENTURA BEACH HOTEL VENTURA, CA FEB 18-23, 2001 John Kappler, Chair Marc K. Jenkins, Vice-Chair

- The Immunological Synapse Lymphocyte Fate During
- Development
- Structural Insights into
- Immunological Mechanisms Lymphocyte Fate: Homeostasis
- Recognition by Non-rearranging Receptors
- Lymphocyte Fate:
- Interactions with Antigen Vesicle Trafficking

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

www.sciencemag.org SCIENCE VOL 290 6 OCTOBER 2000

- Control of Ig Gene Expression T Cell Regulation:
- Suppression Revisited

INNOVATIONS IN COLLEGE

CHEMISTRY TEACHING CLARION VENTURA BEACH HOTEL VENTURA, CA JAN 6-11, 2001 Robert L. Lichter, Chair Melanie M. Cooper, Vice-Chair http://chemed.eng.clemson.edu/ chemedgordon/index.html

- Science Communication
- Distance and Cooperative
- Learning Uses and Implications of
- Technology

Research on

INORGANIC REACTION

HARBORTOWN RESORT

James M. Mayer, Vice-Chair

Mechanistic Methods

Organometallic Reactions

Homogeneous Catalysis

Excited State Reactions

Formation and Activation

Heme Proteins

and in Proteins

LIGAND RECOGNITION &

MOLECULAR GATING

VENTURA, CA JAN 28 - FEB 2, 2001

Bioinorganic Mechanisms -

Redox Reactions in Solution

CLARION VENTURA BEACH HOTEL

Ion Channel Structure and Gating

Ligand Recognition and Gating in

Molecular Dynamics Simulations

Structure and Conformational Changes of 7 TM Receptors

Ligand-gated Channels

of Membrane Proteins

Structure and Gating of

Transport Mechanisms

Dimerization

Structures

Mechanosensitive Channels

G Protein-Coupled Receptor

Aquaporins and Other ? Barrel

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Assembly and Insertion of

Membrane Proteins

Diane M. Papazian, Chair Gebhard F. Schertler, Vice-Chair

Charge Transfer at Surfaces

Bioinorganic Mechanisms - O

MECHANISMS

VENTURA, CA FEB 25 - MAR 2, 2001 Peter C. Ford, Chair

Gender and Ethnicity Issues in Science Education Undergraduate Research Teaching and Learning in

Teaching and Learning

Non-standard Settings Preparation of Teaching Assistants

MAMMALIAN DNA REPAIR

CLARION VENTURA BEACH HOTEL VENTURA, CA JAN 21-26, 2001 Samuel H. Wilson, Chair Richard D. Wood, Vice-Chair

- Mouse Models and DNA Repair Defects
- Cellular Responses to Genotoxic Stress
- Mechanisms of Recombinational and Double-Strand Break
- Mechanisms and Pathways in Bulky Lesion Repair
- Postreplication Repair of Mismatches and Loops
- Lesion Bypass and Novel DNA Polymerases
- Pathway Coordination in Repair of Oxidatively Damaged DNA and Repair of Mitochondrial DNA
- Initiation and Coordination of Endogenous Lesion Repair

MATRIX METALLOPROTEINASES IL CIOCCO

BARGA, ITALY MAY 13-18, 2001 Henning Birkedal-Hansen, Chair Chris M. Overall, Vice-Chair

- Metalloproteinases -Novel Concepts and **Emerging Paradigms**
- Gene Targeting Approaches to Matrix Metalloproteinase Function Novel Matrix Metalloproteinase
- Substrates TIMP Structure and TIMP Function
- Metalloproteinase Inhibitors in Human Clinical Trials
- Metalloproteinases in
- Vascular Biology Biologic Role of ADAM/ADAM-TS and 'Shed'ases

METALS IN BIOLOGY

HARBORTOWN RESORT VENTURA, CA JAN 21-26, 2001 Barbara K. Burgess, Chair Thomas V. O'Halloran, Vice-Chair

- Metalloenzyme
- Structure/Function Design
- Coupled Electron Transfer
- Metalloenzyme Mechanism Metalloregulatory Proteins and
- **Nucleotide Interactions** Metals in Medicine
- Metal Uptake and Chaperones
- Active Site Assembly Metalloenzymes in Metabolism

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Bioinorganic Chemistry of Molybdenum and Tungsten: Oxotransferases

MODERN DEVELOPMENTS IN

THERMODYNAMICS HOLIDAY INN VENTURA, CA MAR 11-16, 2001 R. Stephen Berry, Chair Enrico Sciubba, Vice-Chair

- Thermodynamics of Quantum Systems and Very Low Temperatures Biothermodynamics Thermodynamics of
 - Nonequilibrium.
 - Nonlinear Systems
- Thermodynamics of Gravitational and Cosmological Systems Efficient and Stable
- Thermodynamics;
- Computer-Based
- Knowledge Systems New Choices of Control Variables
- in Engineering Thermodynamics
- Thermodynamics of Radiation Thermodynamics and Economics
- Thermodynamics of the Environment

MOLECULAR ENERGY TRANSFER HARBORTOWN RESORT VENTURA, CA JAN 14-19, 2001

Joel Bowman & Hanna Reisler, Co-Chairs

- Spectroscopy and Reactivity in Clusters
- Unimolecular Reactions
- Photodissociation in Complexes
- Photodissociation Dynamics He Nanodroplets
- **Bimolecular Reactions**
- Single-molecule Studies of
- Energy Transfer Energy Transfer in the Condensed Phase New Trends in Molecular
- Energy Transfer

MOLECULAR PHARMACOLOGY

HARBORTOWN RESORT VENTURA, CA FEB 11-16, 2001 Brian K. Kobilka, Chair Diane L. Barber, Vice-Chair

- G Protein Coupled
- **Receptor Dimerization** G Protein Coupled Receptor
- Trafficking and Regulation G Protein Coupled Receptor
- Structure and Activation
- Heterotrimeric G Proteins
- Low Molecular Weight GTPases Effector Systems
- G Protein Coupled Receptor
- Signaling in Development Olfaction and Taste
 - Pharmacogenomics -Impact of the Human Genome Data Base on Basic
 - Research and Drug Development

MYOGENESIS

IL CIOCCO BARGA, ITALY APR 29 - MAY 4, 2001 Barbara Wold, Chair Giulio Cossu, Vice-Chair

Stem cells

- Somitogenesis and Myogenic Specification
- Muscle Gene Expression
- Cardiogenesis and Heart Specification Genomics and Muscle
- Regulatory Circuitry Myogenic Induction and Specification
- Adult Muscle
 - Signal Transduction and Muscle Patterning
 - Muscle Diseases and Therapies

NITRIC OXIDE

HARBORTOWN RESORT VENTURA, CA FEB 4-9, 2001 Joseph S. Beckman, Chair Steven S. Gross, Vice-Chair

- New Aspects of the Biological Chemistry of Nitric Oxide Advances in Understanding
- Nitric Oxide Synthesis Cellular Consequences of
- Nitrosative and Nitrative Stress Heme Proteins, Superoxide and
- **Reactive Nitrogen Species**
- Nitric Oxide and Apoptosis
- Nitric Oxide and Hemoglobin
- Peroxidases and Peroxynitrite Targets of Reactive Nitrogen
- Species in Pathophysiology

OXIDATIVE STRESS AND DISEASE (NEW)

CLARION VENTURA BEACH HOTEL VENTURA, CA MAR 18-23, 2001 Simon L. Melov, Chair

- Cellular Models of Oxidative
- Stress Oxidative Stress and
- Neurodegeneration
- **Oxidative Stress and Apoptosis** Oxidative Stress and the
- Cardiovascular and
- Pulmonary sytems Oxidative Stress and
- Alzheimers Disease

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- Oxidative Stress and Metabolic Disease
- Mouse Models of Oxidative Stress
- Aging and Oxidative Stress
- **Oxidative Stress and Therapeutics**

PLANT HERBIVORE INTERACTION HOLIDAY INN VENTURA, CA FEB 25 - MAR 2, 2001 Jack Schultz, Chair

Plant-Herbivore Ecology in the

Action at the Plant-Insect Interface

Crosstalk in Responses to

Pathogens and Insects

Endophytes as Mediators

Multitrophic Cascades Large Spatial Scales Evolution

Risks of Deploying GM

Insect-resistant Plants

POLAR MARINE SCIENCE

Robin D. Muench, Vice-Chair

Marine Production System Dynamics Structuring

POLYMERS (WEST)

VENTURA, CA

JAN 7-12, 2001

GENOMICS

HOLIDAY INN

VENTURA, CA

FEB 18-23, 2001

Steven J. Knapp, Chair

Bruce Walsh, Vice-Chair

Adaptation and

The Analysis of Complex Traits in Animals The Analysis of Complex Traits in Plants Bioinformatics

Networks

Genetics

Eric J. Amis, Chair

HARBORTOWN RESORT

Thomas P. Russell, Vice-Chair

Biomaterials

Nanocomposites

Electronics Materials

Polymer Processing

Combinatorial and High-throughput Methods

Measurement Methods

QUANTITATIVE GENETICS AND

Quantitative Trait Loci

Long-term Selection

The Analysis of Biochemical

Statistical Methods in Human

Complex Genetic Phenomena

Patterning and Recognition

Air-Sea Ice-Ocean Interactions

Biogeochemistry and Physical

Processes in the Upper Ocean

Physical-Biological Control of

Community Assemblages

HARBORTOWN RESORT

Barbara Prezelin, Chair

VENTURA, CA

MAR 11-16, 2001

Ellen L. Simms, Vice-Chair

Molecular Age Induced Defenses

Communities and

RADIATION ONCOLOGY HOLIDAY INN VENTURA, CA JAN 28 - FEB 2, 2001 Jack Little, Chair Zvi Fuks & Elizabeth L. Travis, Co-Vice-Chairs

- Recombinational Processes in Radiation Response
- Damage Recognition Pathways
- · Oxidative Stress
- · Damage Response Pathways
- Radiation-induced
- Genomic Instability

 Mechanisms of
- Mammalian Cell Death
- New Radiation Models
- Translational Models
- · Bystander Effects

RNA EDITING HOLIDAY INN VENTURA, CA JAN 21-26, 2001 Larry Simpson & Ronald Emeson, Co-Chairs Brenda L. Bass & Michael W. Gray, Co-Vice-Chairs

- Evolution of RNA Editing
- C-to-U Editing of Apolipoprotein B
- C-to-U Editing in Plants A-to-I Editing I, II
- Guided and Unguided Nucleotide
- Modifications of tRNA and rRNA tRNA Editing
- Uridine Insertion Editing
- Uridine and Cytidine
 - Insertion and Viral Editing

SALIVARY GLANDS & SALIVA HOLIDAY INN VENTURA, CA FEB 11-16, 2001 David O. Quissell, Chair David Castle, Vice-Chair

- Salt and Water Transport
 Exocytosis -
- Vesicle Formation and Dynamics Glandular Development
- Receptor and Intracellular Signaling Pathways Assembly of Signaling Complexes
- in Cellular Microdomains
- Cell Growth and Differentiation Sjogren's Syndrome and
- Apoptosis
 - Functional Genomics

TEMPERATURE STRESS IN PLANTS HARBORTOWN RESORT VENTURA, CA JAN 28 - FEB 2, 2001 Thomas D. Sharkey & Norio Murata, Co-Chairs Anne M. Johnson-Flanagan & Mary Walker-Simmons, Co-Vice-Chairs

- Functional Genomics and
- Plant Temperature Responses
- Temperature Stress Effects on
- Photosynthesis
- Ecophysiology
- Freezing/Cryoprotectants Temperature and Timing
- Membrane/Protein Interactions
- Temperature Signal Transduction
- Heat Shock Proteins

Gordon Research Conferences 2001 Summer and Fall Meetings

The following Conferences are scheduled to meet in the summer and fall of 2001. These meetings will take place in New Hampshire, Rhode Island, Connecticut, Massachusetts and Oxford in the UK. Please visit the GRC web site for more information on these upcoming meetings.

AGING, BIOLOGY OF	JUL 22-27	ION-CONTAINING POLYMERS	JUL 15-20
ANALYTICAL CHEMISTRY	JUN 24-29	LASER DIAGNOSTICS IN COMBUSTION	JUL 1-6
ANGIOGENESIS & MICROCIRCULATION	AUG 12-17	LIPIDS, MOLECULAR & CELLULAR BIOLOGY OF	JUL 15-20
APPLIED & ENVIRONMENTAL MICROBIOLOGY	JUL 22-27	LIQUID CRYSTALS	JUN 24-29
ARCHAEA: ECOLOGY, METABOLISM & MOLECULAR BIOLOGY	AUG 5-10	LIQUIDS, CHEMISTRY & PHYSICS OF	AUG 5-10
ATHEROSCLEROSIS	JUN 24-29	MAGNETIC RESONANCE	JUN 17-22
ATMOSPHERIC CHEMISTRY	JUN 17-22	MALARIA	AUG 5-10
ATOMIC PHYSICS	JUN 17-22 AUG 5-10	MAMMARY GLAND BIOLOGY MATERIALS PROCESSES FAR FROM EQUILIBRIUM	JUN 3-8
BARRIER FUNCTION OF MAMMALIAN SKIN BIODEGRADABLE POLYMERS	JUL 8-13	MECHANISMS OF CELL SIGNALLING	JUL 1-6 AUG 12-17
BIOENERGETICS	JUN 17-22	MECHANISMS OF CELL SIGNALLING MECHANISMS OF MEMBRANE TRANSPORT	JUN 17-22
BIOINFORMATICS: FROM INFERENCE TO PREDICTIVE MODELS	AUG 19-24	MEDICINAL CHEMISTRY	AUG 5-10
BIOMATERIALS: BIOCOMPATIBILITY/TISSUE ENGINEERING	JUL 22-27	METAMORPHOSIS	JUL 1-6
BIOORGANIC CHEMISTRY	JUN 17-22	MICROBIAL POPULATION BIOLOGY	JUL 29-AUG 3
BONES & TEETH	AUG 19-24	MICROFLUIDICS, PHYSICS AND CHEMISTRY OF	JUL 29-AUG 3
CAG TRIPLET EXPANSION DISORDERS	JUL 15-20	MOLECULAR CELL BIOLOGY	JUN 10-15
CALCIUM SIGNALLING	SEP 2-7	MOLECULAR MECHANISMS OF MICROBIAL ADHESION	JUL 29-AUG 3
CANCER	JUL 29-AUG 3	MOLECULAR MEMBRANE BIOLOGY	JUL 15-20
CARBOHYDRATES	JUN 17-22	MOLYBDENUM & TUNGSTEN ENZYMES	JUL 1-6
CATECHOLAMINES	JUL 8-13	MOTILE & CONTRACTILE SYSTEMS	JUN 10-15
CELL CONTACT & ADHESION	JUN 10-15	MYCOTOXINS & PHYCOTOXINS	JUN 24-29
CELL DEATH	JUL 15-20	NATURAL PRODUCTS	JUL 29-AUG 3
CELL PROLIFERATION, MOLECULAR & GENETIC BASIS OF	JUL 1-6	NEURAL PLASTICITY	JUL 15-20
CELLULASES & CELLULOSOMES	JUL 29-AUG 3	NEUROTROPHINS	JUN 10-15
CERAMICS, SOLID STATE STUDIES IN	AUG 12-17	NEUROVIROLOGY	AUG 26-31
CHEMICAL OCEANOGRAPHY	AUG 12-17	NON-ANTIBIOTIC PROPERTIES OF TETRACYCLINES	JUL 1-6
CHEMICAL SENSES: TASTE & SMELL	JUL 1-6	NONLINEAR OPTICS & LASERS	JUL 29-AUG 3
CHEMOTHERAPY OF EXPERIMENTAL/CLINICAL CANCER	JUL 15-20		JUN 17-22
CHRONOBIOLOGY CLUSTERS, NANOCRYSTALS & NANOSTRUCTURES	AUG 5-10 JUL 29-AUG 3	NUCLEAR CHEMISTRY NUCLEAR PHYSICS	JUN 17-22 JUL 22-27
COASTAL OCEAN CIRCULATION	JUN 10-15	NUCLEIC ACIDS	JUN 24-29
COASTAL OCEAN CIRCULATION COATINGS & FILMS	JUL 15-20	ORGANIC PHOTOCHEMISTRY	JUL 15-20
COLLAGEN	JUL 29-AUG 3	ORGANIC REACTIONS & PROCESSES	JUL 22-27
COMBINATORIAL CHEMISTRY	JUL 15-20	ORGANIC THIN FILMS	JUN 24-29
COMPARATIVE HEMATOPOIESIS	AUG 12-17	ORGANOMETALLIC CHEMISTRY	JUL 22-27
CONDENSED MATTER PHYSICS	JUN 17-22	ORIGINS OF SOLAR SYSTEMS	JUN 17-22
DEVELOPMENTAL BIOLOGY	JUN 24-29	PHAGOCYTES	JUN 10-15
DRUG METABOLISM	JUL 8-13	PHOTOACOUSTIC & PHOTOTHERMAL PHENOMENA	AUG 19-24
DYNAMICS AT SURFACES	AUG 12-17	PHOTOIONS, PHOTOIONIZATION & PHOTODETACHMENT	JUL 8-13
ELASTIN & ELASTIC FIBERS	JUL 29-AUG 3	PHYSICAL ORGANIC CHEMISTRY	JUL 1-6
ELASTOMERS	AUG 5-10	PLASMID & CHROMOSOME DYNAMICS	JUL 22-27
ELECTRON DISTRIBUTION & CHEMICAL BONDING	JUL 8-13	POLYAMINES	JUN 24-29
ELECTRONIC MATERIALS, CHEMISTRY OF	JUL 15-20	POLYMER COLLOIDS	JUL 1-6
ENZYMES, COENZYMES & METABOLIC PATHWAYS	JUL 22-27	POLYMERS (EAST)	JUL 8-13
EPIGENETICS	AUG 12-17	POLYSACCHARIDES, CHEMISTRY OF	JUL 22-27
EPITHELIAL DIFFERENTIATION & KERATINIZATION	JUL 8-13	PROTEINS	JUN 24-29
FERTILIZATION & ACTIVATION OF DEVELOPMENT	JUL 29-AUG 3	PURINES, PYRIMIDINES & RELATED SUBSTANCE	JUL 1-6
FORESTED CATCHMENTS, HYDRO/GEO/BIO PROCESSES	JUL 22-27	QUANTITATIVE STRUCTURE ACTIVITY RELATIONSHIPS	AUG 5-10
FREE RADICAL REACTIONS	JUL 15-20	QUANTUM CONTROL OF ATOMIC & MOLECULAR MOTION	JUL 29-AUG 3
FUEL CELLS GENETIC TOXICOLOGY	JUL 29-AUG 3 AUG 12-17	RED CELLS	JUL 22-27
GENETIC TOXICOLOGY GRAVITATIONAL EFFECTS IN PHYSICO-CHEMICAL SYSTEMS	AUG 12-17 JUL 8-13	SCIENCE EDUCATION & VISUALIZATION: INTERNATIONAL	AUG 5-10
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Stephen Jay Gould, Board Chairman, AAAS Alexander Agassiz Professor of Zoology, Harvard University

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EUROPEAN COUNTRY REPORT: UNITED KINGDOM

Holding on to



First Place by Peter Gwynne

Despite strong competition, the United Kingdom continues to lead the rest of Europe in commercializing life science with increased funding, improved facilities, and plans to create new research posts. The main challenge facing the biotechnology and pharmaceutical communities is explaining their work to a sometimes suspicious general public.





Gendaq, Ltd. Pfizer Central Research and Development Roche Products Limited Science Foundation Ireland University College London Britain has a long tradition of excellence in life science research. In recent years, it has also played a major role in the biology business. In the mid-1990s it became the first European nation to stimulate a strong biotechnology industry. While Germany has overtaken it in terms of the absolute number of life science companies, the United Kingdom has maintained its lead in revenues from industrial biology. According to *Evolution,* this year's annual report on European life sciences by consulting firm Ernst & Young, British companies have produced three-quarters of the 60 drug products from public European biotechnology companies in late stage clinical trials.

The picture has not been entirely bright. In the past five years the country has had to cope with the association of bovine spongiform encephalopathy (mad cow disease) and Creutzfeldt-Jakob Disease. Activists have tried to destroy fields sown with genetically modified crops and have broken into laboratories that use animals for medical experiments. The general public has expressed some discontent with scientific activities in those and other areas of life science. And academic scientists have complained loudly about the government's reluctance to spend money on research facilities.

However, the U.K. government has given its backing to the country's life science community. It has expressed strong verbal support for research in controversial areas of life science. And in July 2000 it responded to the academics' complaints by announcing a new Science Research Investment Fund to upgrade the nation's scientific infrastructure. In partnership with the Wellcome Trust, a charitable organization for biomedical research, the government will invest £1 billion (\$1.4 billion) to build new laboratories, refurbish old ones, and provide new equipment for university science departments of all types. The government will also spend £250 million to encourage the growth of new fields of research, including genomics and bioengineering. It will increase the basic financial support for postgraduate

A former science editor of Newsweek, Peter Gwynne writes about science and technology from his base on Cape Cod, Massachusetts, U.S.A. CONTINUED >>

advertising supplement

research students. And in partnership with the Wolfson Foundation and the Royal Society it will launch an effort to recruit up to 50 top researchers to permit the country to compete in the world market for the best academics.

The government has added further encouragement to the biotechnology industry by setting up what it calls the Genome Valley Steering Group. Based on a report on British biotechnology completed last December, the group has the goal of attracting major investments in biotechnology to the U.K.

Here, representatives of a university and four companies discuss the opportunities that the U.K. offers in life science, as well as some of the

drawbacks. In the accompanying box we discuss the efforts of the U.K.'s close neighbor, Ireland, to become a significant player in the global life science business.

• • LONDON: "Despite problems with funding, Britain is maintaining guite a sound research base in the life sciences," says John Foreman, dean of students and professor of immunopharmacology at University College London. "We have plenty of employment opportunities for graduate life scientists, especially those who want to go into research. We're becoming more international in all University College London levels in attracting students. We have a very large number of new biotechnology companies centered around Cambridge. And there has been an explosion of venture capital going into biotechnology." The broad picture of academic research reveals some challenges.

"Universities are certainly strapped for cash," Foreman points out. "The increase in the number of students hasn't been met by an increase in public funds. There's also a big problem in securing long-term positions for young scientists," he continues. "The very best get jobs, but it's not unknown for scientists to get stuck in postgraduate fellowships." Tough competition also exists for grants. "Obtaining money from the Medical Research Council or the Biotechnology and Biological Sciences Research Council is very difficult," says Foreman. "A lot of people rely on the Wellcome Trust, which is a major contributor to life science research in the U.K. Without that fund we would be in serious trouble." So although the country has a very good foundation in life science, "with more funding it would be even better," Foreman says.

Foreman's institution illustrates the strength of the U.K.'s academic life science sector. "There's an enormous amount of leading



edge activity going on at UCL," he says. Foreman's own research, funded mostly by pharmaceutical companies, deals mainly with human disease and human tissue. "In the past five years or so I've focused on the role of kinins in producing the symptoms of nasal allergy," he explains. "I've had some success in using compounds to block the effects of the kinins."



In recent years, [Britain] has also played a major role in the biology business.

Foreman takes an understanding view of public concern about controversial issues that involve life science. "The public here is obviously concerned about ethical issues in cloning, genetically modified organisms, and so on," he says. "The concern is reasonably based because science doesn't have all the answers. But the scientific community is doing its best to maintain a balance in the debate. And there's a major representation of active biological scientists on the official bodies that are setting criteria for work in the controversial areas."

 SANDWICH, KENT: According to Gill Samuels, director of science policy at Pfizer Central Research and Development's Sandwich Laboratories, one key issue facing the U.K.'s life science sector is improving the quality of the dialogue with the general public over the nature and goals of life science. "What few of us in the life science industry have done is talk about the ethics surrounding and underpinning our science," says Samuels. "It's important that we get out and talk about this. Getting a better-quality dialogue with the general public is important."

Pfizer has gone some distance toward that goal. "Our experience is that the more we invite people in and the more we go out and talk to people the fewer are our problems," Samuels says. "We've got a very active schools program. We have lots of young folk who come and visit. We regularly host a group from the International Youth Science Forum held in London and many others."

The key is face-to-face contact. "When people get to meet people, their attitudes change," Samuels says. "It's much easier to paint an organization that's big and anonymous into a corner. But

when you think that it's composed of people just as much concerned as everybody else about what happens to their families, you think differently. You hope to create participatory listening by both sides."

Part of the value of such sessions, Samuels continues, lies in informing

Gill Samuels
Pfizer Central Research and Development



CONTINUED >

Foreman

the public "that the U.K. regulates animal research more strongly than anywhere else in the world." Dialogue also serves to inform the public about forthcoming advances. "People don't like to be surprised," Samuels says. "For example, when AstraZeneca introduced its genetically modified tomatoes in tomato paste it labeled the paste — and had no problem with it."

Meanwhile Samuels believes that the U.K. offers a solid foundation for life science and a government committed to supporting it. "The country has a high-quality research base," she says. "It has good funding for the top groups from research councils and more funding promised from the government's comprehensive research review. The government is trying to meet strong competition from

MEANWHILE, ACROSS THE IRISH SEA...

Ireland has attracted over 1,200 international companies employing 116,000 people through the efforts of the Industrial Development Authority. A significant number of these are large multinationals in the health care/pharmaceutical sector.

Now, the Irish government is taking a step to attract further biotech and information technology business, by stimulating research in key technologies in related areas. It has set up a new body, Science Foundation Ireland, "to promote excellence in scientific research in strategic areas such as biotechnology and information & communications technologies." Here, we outline the organization's goals and ambitions.

 DUBLIN: Established in March 2000, Science Foundation Ireland (SFI) will invest over 500 million punts (Irish pounds, equivalent to \$545 million) for research,



technology and innovation between this year and 2006. "It represents the largest investment in basic research in the history of Ireland," says Conor O'Carroll, senior policy analyst at Forfás, the policy advisory and coordination board for industrial development and science and technology in Ireland. At present the country devotes no more than 12 million punts annually to all forms of scientific research. "The belief is that unless you have a very high research capability in the country the manufacturing companies won't stay and local companies will not be stimulated to develop research capability," O'Carroll adds.

In organizing its planning SFI has appointed two technical advisory panels. "They have representatives from industry as well as the scientific community," explains O'Carroll. "The industry representatives have been important as they can put forward the economic arguments."

In the first phase of its plan for biotechnology, SFI set out to identify a small number of world-class researchers (SFI principal investigators) and their teams, whose research it will fund in Irish universities and public research organizations. While many applicants are members of the Irish diaspora, "We've already received applications from people with no Irish connections in the United Kingdom and the United States," says O'Carroll. "We've also had expressions of interest from Australia, New Zealand, and Russia. The proposals will be evaluated by international peer review, and we expect to announce the results by early December," O'Carroll continues.

Attracting top-notch researchers represents just a start. "We may look at kick-starting the work of young researchers at early stages in their careers," says O'Carroll. As a further stimulus to companies to locate research facilities in Ireland, SFI plans to introduce new schemes for planning research partnerships between industry and academe. "It will be vital for the Foundation to get the message across that Ireland is a suitable location for Industry R&D centers," O'Carroll says, "This is the key to long-term sustained economic success for Ireland."

other European countries through the Genome Valley initiative. There's a recognition that we are a great center in Europe, probably the main center. There's both a desire and a practical commitment to maintaining the country's competitive edge."

• • • WELWYN GARDEN CITY, HERTFORDSHIRE:

As the only health care company in the U.K. that offers research biochemicals, diagnostics, and pharmaceuticals, Roche Products Limited has a unique view of British life science. "We see the U.K. as a strong market for research products," says director of corporate affairs Sarah Ridout. "And it is fair to say that the U.K. still has an impressive life science base. But the difference between the

U.K. and Europe is getting smaller as European universities open up their internal research to outside collaborators. We have had some very good collaborations with European, and especially German, universities."

The U.K. has one obvious advantage for research in life science. "It is still a cheaper place in which to carry out research than Europe and the United States," asserts Ridout. However, that position will come under threat once the European Union expands to include countries that used to belong to the Soviet bloc. "Those nations have research institutes in desperate need of external funding and offer very attractive collaborations," Ridout says.

In the U.K. itself, she notes "a trend towards creating fewer, larger 'centers of excellence' that attract large grants and most of the good scientists." That, she says, "may represent a move to the U.S. model, with a few large research universities that get their staff from other universities that act as training sites for new scientists."

That trend has an obvious advantage in that it produces critical masses of scientists working on the cutting edge. But it also has drawbacks. "It leaves little money and talent for the other universities," says Ridout. Indeed, she adds, "UK funding tends to be polarized towards the 'golden triangle' of Oxford, Cambridge, and London, and to a lesser extent the 'silver triangle' of Edinburgh, Glasgow, and Dundee. This has the effect of somewhat limiting innovation in other sites."

At the government level, Ridout comments that the intensity of the public debate on cloning and genetically modified organisms has implications for British

✓ Sarah Ridout ■ Roche Products Limited

life science. "The negative tone of much of the press coverage contributes to a general antiscience feeling which probably reduces the desire of students to take up science careers," says Ridout. "However, the U.K. is recognized as a center of excellence for pharmaceutical research and is therefore well placed to lead genetic and genomic research as well."

• • WINDLESHAM, SURREY: "We're still the leading European nation in biotechnology and life science," says lan Ragan, executive director of neuroscience, Europe, for pharmaceutical company Eli Lilly. "There has been a lot of talk about Germany's huge investment in biotechnology. But the U.K. government has just announced a vast investment of its own. And academe is much more willing to work with business than it used to be."

Britain's biotechnology sector has also emerged as an effective adjunct to the country's well-established pharmaceutical business. Admittedly one company, British Biotechnology, went broke trying to compete directly with the pharmas. "But those that have focused on providing services to the pharmaceutical industry have been very successful," says Ragan.

Lilly's European division, which also operates in Belgium, Germany, and Spain, recruits many non-British scientists in the U.K. "A lot of continental Europeans want to go to the U.K. for undergraduate degrees and especially Ph.D.s, as well as postdoctoral fellowships and permanent employment," says Ragan. "They can come to good laboratories and brush up their English. The quality of the work that U.K. universities do in pharmaceuticals and biotechnology is very high."

Britain has a small advantage in an issue of great concern to

Lilly and other pharmas. "Patenting of gene sequences is a real

headache for us in the pharmaceutical industry," Ragan com-

ments. "We're in a situation of not being able to work in an area

because we can't see a way to get around the patents. But in some

ways it's rather easier to work in the U.K. than the U.S. because of

than it was, the government seems to think that life science can be

turned on in the same way as the computer business," Ragan

explains. "The government invests money in biotechnology in uni-

Some challenges remain. "While funding for research is better

the differences in the ways the patent offices operate."

✓ Ian Ragan I Eli Lilly



versities and expects a return within a year. The balance between long-term and shortterm investment is not well understood by the financial community either."

Public opinion has had an impact on job prospects in the U.K. "The climate for doing life science in this country can be very hostile," Ragan says. "Some scientists have decided to move abroad because they don't want to have to watch out for bombs sent by activist groups. Opposition to genetically modified organisms is stronger here than elsewhere, and legislation on animal welfare has created bureaucratic problems for the scientific community."

 LONDON: Yen Choo, founder and research director of Gendaq Ltd., regards financial support as the key issue in both academic and commercial life science in Britain. "Funding of academic research is inadequate compared with the U.S.," says Choo. "Wellcome has done a good job increasing academic salaries. We hope that the Medical Research Council [MRC] and other funding bodies will follow suit. In Gendaq we have recognized the need for higher salaries and good facilities."

At the business level, Choo adds, "U.K. start-ups need more money at the early stages of commercialization. U.K. researchers are not as good at seeing business opportunities as their U.S. counterparts. So good financial angels are essential to help found



new companies."

In fact the country's financial and scientific communities have started to organize effectively to encourage new biotechnology companies. Gendaq Ltd. provides an example. The privately held company was founded in June 1999 to commercialize "Z-switch technology" originally developed at the MRC Laboratory of Molecular Biology in Cambridge. MRC Technology, the research council's technology transfer arm, helped the firm to get up and running. And in col-

laboration with MRC-affiliated venture capital company MVM, Gendaq this year obtained its first round of significant funding, amounting to about £6 million.
 Gendaq uses engineered derivatives of natural regulatory molecules called zinc finger transcription factors (the Z-switches) to regulate genes in humans, animals, and plants. The company has

Gendaq uses engineered derivatives of natural regulatory molecules called zinc finger transcription factors (the Z-switches) to regulate genes in humans, animals, and plants. The company has been assigned a strong intellectual property portfolio in the field from the MRC, and its location in London's Mill Hill district gives the firm access to the facilities of the next door National Institute for Medical Research.

In addition to illustrating the increasing flexibility for financing biotechnology start-ups in the U.K., Gendaq exemplifies the growth of a biotechnology corridor. "We have a strong research base along the Cambridge-London axis," says Choo. "It's a fairly attractive place to get things started. It has a big catchment area for life scientists."

Asked whether the rapid growth of European biotech outside the U.K. is a positive development, Choo says that "it provides an opportunity for partnering rather than being a threat. We can do business with people who are geographically close to us. We're not yet in competition with other European countries in terms of funding start-ups. The emergence of further successful biotechs across Europe will also influence the attitude of European capital markets towards the sector."

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Teaching duties will involve lecturing to both chemistry majors and students from other subjects. In particular the appointee will be required to teach within the bioscience specialisation area. Cooperation with other departments within the University as well as with the Max Planck Institute for Molecular Physiology (which is situated on the campus) and with industrial companies will be expected.

The University of Dortmund is an equal opportunities employer and encourages applications from minorities and woman.

Anyone wishing to discuss the post informally can contact the chairman of the selection committee, Prof. Dr. R. Winter (Tel.: +49 231 755 3900; e-mail: winter@steak.chemie.uni-dortmund.de). General information on the Department is available on the Internet under www.chemie.uni-dortmund.de.



Applications, which should include a CV, a publications list and a description of previous scientific activities should be sent to the following address: Dekan des Fachbereichs Chemie der Üniversität Dortmund, Otto-Hahn-Str. 6, D-44227 Dortmund, Germany.

Roche

PhD - Behavioural Neuroscientist

We are seeking a PhD scientist who is recently gualified or has up to two years' post-doctoral experience to compliment our growing project team investigating new approaches for treating schizophrenia. Your background will be in neuroscience, pharmacology, psychology or a related discipline and you will be actively involved in developing in vivo models for schizophrenia, including the use of transgenic mice.

Our company is Merck Sharp & Dohme, part of Merck & Co., Inc., one of the world's leading pharmaceutical companies with over 62,300 employees worldwide. Merck discovers, manufactures and markets a broad range of products to improve human and animal health, and has an unparalleled reputation for innovative research. This year alone the company will invest £1.5 billion in research and development, a 15% increase on 1999.

The Neuroscience Research Centre is fully committed to the discovery of novel therapies for the treatment of disorders of the central nervous system including Alzheimer's disease, stroke, depression, anxiety, chronic pain and migraine. It is one of the largest dedicated neuroscience research laboratories in the world and is a premier site for Merck. It is located in picturesque parkland surroundings on the rural Hertfordshire/Essex border.

We offer excellent salary and benefits including private healthcare, life assurance, company pension scheme and where appropriate, relocation assistance. There is also an on-site childcare facility.

If you are a good team worker, with a high degree of motivation and flexibility, interested in working in a fast a area and want to find out more about this exciting opportunity please email us at tp_hr@merck.com Att please write or e-mail, enclosing a full CV, quoting reference BN000017 to: Recruitment Co Human Resources Department, The Neuroscience Research Centre, Merck Sharp & Dohme, Ten Eastwick Road, Harlow, Essex CM20 2QR. e.mail: tp hr@merck.com http://www.msd-nrc.co.uk



Applications are invited at the **University of Freiburg Medical School** for a

Post-Doc Position - Micro Chip (BAT IIa)

A new microarray facility is being established in the Department of Psychiatry. The existing laboratory includes state-of-the-art molecular biology and protein chemistry equipment as well as a cell culture laboratory, and further expansion is being planned. We are looking for a highly motivated and skillful molecular biologist with experience in DNA microarrays and functional genomics to assist in the further development and application of DNA chips. Two projects are being funded in this area with two post-doc positions. The one to be filled immediately is to investigate changes of mRNA expression in cultured cells induced by a cytokine. It is presently limited to 18 months, but can be extended.

Please send CV and list of publications as well as addresses of two references directly to: Peter Gebicke-Härter. Ph.D., Universitätsklinik für Psychiatrie und Psychosomatik, Abteilung für Psychiatrie und Psychotherapie, Hauptstraße 8, D-79104 Freiburg I. Brsg., Tel: +49(761)270-6835; Fax: +49(761)270-6619;Email: peter_gebicke-haerter@psyalig.ukl.unifreiburg.de.

CALL FOR **PROPOSALS**

French Republic

The State and Ile-de-France Paris Region

launch an appeal for proposals for

5 new "Blaise Pascal" International Research Chairs

Each Chair will enable a top foreign scientist in exact or applied sciences, earth and environmental sciences, new technologies and human or social sciences, to be hosted for 12 months full time, possibly spread over 2 years, in one or more further education or research establishments in Paris/ Ile-de-France.

Applications should propose a scientific project and specify requirements, they have to be compiled jointly with the hosting establishment.

• The amount of finance dedicated to each project is 1.3 MF (salaries, social security charges, management costs, taxes and support expenses, etc. included).

• The beneficiaries must give about ten lectures and a public seminar should close their stay.

• A multi-disciplinary panel, drawn from the Institut de France, will select applicants according to the scientific interest of the project and the quality of the application.

Applications submitted: before 31 december 2000

Application forms available from the following address :

Fondation de l'Ecole Normale Supérieure

Chaires Internationales de Recherche "Blaise Pascal" 45, rue d'Ulm, F - 75230 Paris cedex 05

<u>Information :</u> Wladimir Mercouroff - Tel.: 33 (0) 1 44 32 3185 / 3581 / 3849 - Fax 33 (0) 1 44 32 3183 E-mail: wladimir.mercouroff@ens.fr

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We have an opening for a research scientist in our primary screening team that will be responsible for drug screening and mode of action studies in biochemical in vitro assays. The successful candidate has a Ph.D in Pharmacology or/and Biochemistry with theoretical and practical experience of enzyme and receptor assays, preferably in a robotised environment. For further information please contact Mikael Varga, phone +46 46 33 76 14, e-mail: mikael.varga@astrazeneca.com

Please send your application marked with Ref. No. 172/00, no later than October 20, to Human Resources, Carina Szymczak, AstraZeneca R&D Lund, SE-221 87 Lund, Sweden

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EUROPEAN COMMISSION MARIE CURIE INDUSTRY HOST FELLOWSHIP

An Industry Host Fellowship research position (Programme: Quality of Life and Management of Living Resources) is available for 24 months in the Department of Cellular and Molecular Biology at the Centre de Recherche Pierre Fabre (C. R. P. F.) in CASTRES (South of France). The C. R. P. F. is a drug discovery research center active in CNS, cardiovascular and cancer research. Receptor signalling is a major field of interest.

The candidate will focus on diversity of signalling via single neurotransmitter receptor subtypes and cooperate with other scientists active in Cellular and Molecular Biology.

The position requires a strong research-minded attitude with a high interest for innovative and quality research in molecular pharmacology.

The candidate must be of a Member State of the European Community or an Associated State other than the fellow's country of nationality and his/her recent centre of activity. The fellow may not be employed by the contracter of an affiliated organisation, and may not have been employed in research in any industrial and/or commercial entreprise for more than one year following completion of his/her university studies. The candidate should have a Ph.D. level training and a proven background in G-protein-coupled receptor signalling, the capacity to handle innovative research activities, a record of publications as principal author and fluent in oral and written English. He or she should be capable of working in a flexible multidisciplinary environment where high-quality results are expected. Experience with microelectrode recording will be an advantage.

This research position is open immediately. Send your detailed C. V. together with a list of three references to Dr. Peter J. PAUWELS (Tel. 33.5.63.71.42.65/42.54; Fax. 33.5.63.71.43.63; Email. peter.pauwels@pierre-fabre.com).

Full details of this project can be found on http://www.cordis.lu/improving (see under Marie Curie Fellowships: contract number OI GA-1999-00390



Postdoctoral Fellowships in Complex Studies at the Santa Fe Institute

The Santa Fe Institute expects to have openings for a number of Postdoctoral Fellows beginning in September 2001.

The Institute's interdisciplinary research program is devoted to the study of complex systems in a wide variety of fields, including biology (e.g., genomics, evolutionary biology, ecology, immunology), computer science (adaptive computation, novel forms of computation, simulation), physics (nonlinear systems, statistical physics, biophysics), mathematics, statistics, cognitive science, and the social sciences including anthropology, economics, and political science. Applications are also welcome from disciplines other than those listed here.

Postdoctoral Fellows work either on existing research projects or on projects of their own choosing. Research at the Institute focuses primarily on mathematical and computational approaches, although applicants whose research will include an experimental or data-collection component in collaboration with offsite colleagues are also encouraged to apply.

Candidates should have a Ph.D. (or expect to receive one before September 2001) in the mathematical, computational, physical, biological or social sciences, with an academic record of scientific excellence, a demonstrated ability for independent research, and a strong interest in interdisciplinary approaches and collaboration.

TO APPLY: Applicants should submit a curriculum vitae, list of publications, and statement of research interests. Arrange for three letters of recommendation to be sent to the address below. Non-U.S. applicants are eligible to apply. Successful foreign applicants will enter the U.S. on either a J or, less likely, an H visa. All application materials must be received by January 12, 2001. Send complete application package, by postal mail, to the address below. Include your e-mail address and/or fax number.

Postdoctoral Committee MS SN Santa Fe Institute 1399 Hyde Park Road Santa Fe, NM 87501

Questions should be addressed to: ginny@santafe.edu

SFI is an equal opportunity employer.

CALL FOR PROPOSALS

BMBF Competition "BioFuture"

The Federal Ministry of Education and Research (BMBF) intends to give younger scientists from Germany and abroad who are already experienced in heading a research group the opportunity to work on new, basic research-oriented approaches in the biosciences in Germany, independently and in their own team in order to generally improve chances for a further career in science or economy in Germany or to aim at self-employment in the private sector (e.g.; by setting up businesses or spin-out companies) in the medium term.

The teams (staff: 1 group leader, 1-2 postdocs, 1-2 doctoral students, 1-2 technicians; investments and expendable materials; depending on technical support required each) are to work for a period of 5 years on topics in the frontiers of biology and neighbouring disciplines such as chemistry, physics, mathematics, informatics, engineering sciences, nanotechnology, etc.

For the projects selected by a jury, nonrepayable grants will be awarded in the form of project funding.

Deadline: December 4, 2000 (fourth call)

Further information:

Internet: http://www.fz-juelich.de/beo/beo.htm

Forschungszentrum Jülich GmbH Projektträger Biologie, Energie, Umwelt, BEO 31 D-52425 Jülich, Germany

Infectious Diseases Physician/Scientists Faculty Positions

The Division of Infectious Diseases is seeking two physician/scientists for fulltime academic positions at the Assistant or Associate Professor level.

Primary responsibilities will be in research (75%) and patient care/teaching. Preference will be given to candidates with independent funding, whose research interests are broadly related to bacterial secretory systems, retrovirology, host cell responses to infectious agents, mechanisms for microbial dissemination, antimicrobial resistance or vectorborne diseases.

Candidates must be board-certified in Internal Medicine and board-eligible/ certified in Infectious Diseases. Expanded startup funds will be provided by a grant from the Howard Hughes Medical Institution.

Please send letter of interest and CV to: Dr. Benjamin J. Luft, Chairman Department of Medicine Health Sciences Center T16-020

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RESEARCH SCIENTIST (Full-Time)

This exciting position will be responsible for designing and implementing new research projects in bone cell/molecular biology. Duties include staff mentoring, writing scientific papers, experimental design and grants

In addition to a Doctorate degree and a minimum of 2 years experience as a post doctoral fellow, the candidate must have demonstrated experience with molecular techniques.

experience with molecular techniques.
 We offer an excellent salary and benefits package. For consideration, please send/fax your resume to: Dr. Ernesto Canalis, Director
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 114 Woodland Street, Hartford, CT 06105. Fax: 860-714-8053.
 TTY: 860-714-4447, E-mail: ecanalis@stfranciscare.org
 Visit our website at http://www.stfranciscare.org

If you do not have access to the Internet, please contact the Human Resource Call Center at its toll-free number: 1-877-250-9570 24 hours a day, 7 days a week.



Howard Hughes Medical Institute

⁶⁶Howard Hughes



Photo by Herb Weitman

Keith Amos Former HHMI-NIH Research Scholar fellowships solidified my pursuit of a career in academic surgery. "



An HHMI Undergraduate Biological Sciences Education Program grant to Xavier University of Louisiana helped launch Keith Amos on his way to a research career in surgical oncology. His HHMI fellowship at the National Cancer Institute helped lay the foundation for the development of cancer vaccines.

The Howard Hughes Medical Institute has established fellowship programs that support training in fundamental biological and biomedical research. Graduate students, medical students, and physicians may be eligible to apply for the programs listed below.

Predoctoral Fellowships in Biological Sciences Five years of support for full-time graduate study toward a Ph.D. degree in designated biological sciences or related fields. (Application deadline: November 8, 2000.)

Research Training Fellowships for Medical Students Support is awarded for one year of full-time fundamental research in a laboratory at the student's medical school or another institution (except NIH in Bethesda, Maryland). (Application deadline: December 6, 2000.)

Research Scholars at the National Institutes of Health Under this joint HHMI–NIH program, medical students in the United States spend an intensive year of research in the intramural program at NIH in Bethesda, Maryland. (Application deadline: January 10, 2001.)

Postdoctoral Research Fellowships for Physicians Three years of support for training in fundamental research subsequent to at least two years of post-graduate clinical training. (Application deadline: December 13, 2000.)

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and underrepresented minorities to apply.



For more information: www.hhmi.org/fellowships



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SoXCZA4

Science for the 21st Century

Wadsworth Center is a unique research environment.

The country's most comprehensive state health laboratory, it embraces original investigations in the midst of public health activities. Screening for disease, detecting outbreaks, monitoring health hazards, assuring laboratory quality. Since 1914, all have been founded upon and enriched by basic and applied research.

Studies in cell and molecular structure, genetics, cancer, pathogenesis and environmental science are supported by outstanding core facilities, as well as national centers in biological imaging (NIH/NCRR), genetics (CDC) and nanobiotechnology (NSF). The opportunity to train the next generation of researchers further informs this vibrant scientific community.

Now, three new initiatives — in bioinformatics, genomics and molecular epidemiology — promise to keep Wadsworth Center at science's leading edge.

Wadsworth Center

New York State Department of Health

For more information about Wadsworth Center: www.wadsworth.org

An affirmative action/equal opportunity employer

Bioinformatics & Gene Regulation

Wadsworth Center has established The Center for Bioinformatics with Rensselaer Polytechnic Institute, led by Dr. Charles (Chip) Lawrence as scientific director. The Center is embarking on an aggressive research agenda in which computational analysis and modeling drive parallel experimentation. An initial focus is the regulation of gene expression.

The Center is recruiting two faculty members, a computational biologist interested in the analysis of sequence and expression array data, and a biochemist/molecular biologist with expertise in gene expression and transcription factors. Appointments may be at the junior or senior level. Successful candidates will be expected to establish inventive, collaborative research programs and to work closely with the new Genomics Institute. The research environment includes a proteomics facility with state-of-the-art mass spectroscopy at Wadsworth, and a robotics center at Rensselaer.

Applicants should submit a C.V. with the names of three references to: Dr. Carmen Mannella, Executive Director, Center for Bioinformatics, Wadsworth Center, PO Box 509, Albany, NY 12201-0509; carmen@wadsworth.org

Genomics

The Genomics Institute, a joint venture between Wadsworth Center and Albany Medical College, is continuing its new initiative to build an internationally recognized program that coordinates efforts in basic sciences and medicine. The Institute will recruit several new faculty over the next few years and is now recruiting for two faculty positions in mammalian genomics (either mouse or human), one at the junior level (assistant professor), and one at either a junior or senior level.

The Genomics Institute provides an exceptional research environment and works closely with the new Center for Bioinformatics to develop novel ideas and technologies. Facilities for high-throughput genomic analyses, including microarray instruments, are available. Excellent start-up packages will be offered. Successful candidates will be expected to establish innovative research programs and participate in graduate training in the Department of Biomedical Sciences at the Wadsworth Center and/or Albany Medical College.

Applicants should submit a C.V. with the names of three references to: Dr. Lorraine Flaherty, Director, Genomics Institute, Wadsworth Center, P.O. Box 22002, Albany, NY 12201-2002; flaherty@wadsworth.org

Molecular Epidemiology

Wadsworth Center's Division of Environmental Disease Protection is expanding its capacity to assess the bases and mechanisms of environmental disease using approaches of molecular epidemiology. Three senior level faculty members are being recruited in the general areas of pharmacogenetics/genomics, toxicogenomics and proteomics, biomarkers of genotoxicity, and genetic epidemiology. The Division is exceptionally well equipped, and its exciting research environment is designed to complement the proposed new research directions.

Successful candidates will be expected to establish innovative, grant-funded research programs and participate in graduate training in the Department of Environmental Health and Toxicology at the Wadsworth Center.

Applicants should submit a C.V. with the names of three references to: Dr. Laurence Kaminsky, Deputy Director, Division of Environmental Disease Prevention, Wadsworth Center, PO Box 509, Albany, NY 12201-0509; kaminsky@wadsworth.org The Department of Biological and Environmental Sciences at Morehead State University is seeking applications for three tenure-track positions at the rank of Assistant Professor. The areas of teaching/ research expertise sought are:



INVERTEBRATE ZOOLOGY #494

Teach undergraduate and graduate courses in invertebrate zoology, entomology, evolution, general zoology, and courses in general biology for majors and non-majors. Candidate must have a working knowledge in the systematics, ecology and natural history of insects.

GENETICS #495

Teach undergraduate and graduate courses in genetics, biotechnology, and courses in general biology for majors and non-majors. Candidate must have a working knowledge of recombinant DNA techniques.

ANIMAL PHYSIOLOGY AND DEVELOPMENTAL BIOLOGY #496

Teach undergraduate and graduate courses in physiology and vertebrate development and courses in general biology and human anatomy for majors and non-majors.

Other responsibilities include advising and mentoring biology majors, development of a research program involving undergraduate and graduate students, and participation in departmental and other service activities. Candidates must have completed a Ph.D. in biology from an accredited institution with expertise in the appropriate field. Interested candidates that are ABD may be considered. In addition, all candidates must have excellent communication skills.

To ensure consideration, submit letter of application with the appropriate position code, curriculum vitae, official collegiate transcripts, statements of teaching philosophy and research interests, and three letters of reference to: Office of Human Resources, Attn: (Indicate Position Title and #), Morehead State University, HM 101, Morehead, KY 40351. Review of applications will begin November 17, 2000, and will continue until positions are filled.

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MAYO CLINIC POSTDOCTORAL POSITION

A postdoctoral position (NIH-funded) is available immediately to study mechanisms of normal and malignant human B lymphocyte proliferation and differentiation. Projects include molecular basis of cytokine responsiveness and gene expression profiling of normal B vs. malignant B lymphocytes. Applicants must have a recent Ph.D. degree and research experience in cellular immunology, molecular biology, and/or signal transduction is highly desirable. A highly competitive salary with full benefits is available to motivated candidates. Send a letter of application, curriculum vitae, and names of three references to:

> D.F. Jelinek, Ph.D. Department of Immunology Guggenheim 420 Mayo Clinic 200 First St. SW Rochester, MN 55905 E-mail: jelinek.diane@mayo.edu

Mayo Foundation is an affirmative action and equal opportunity employer and educator.



Vice Chancellor for Research University of Colorado Health Sciences Center Denver, Colorado

The Position: This is a newly created role for a senior member of the Chancellor's staff for the centralized direction, leadership, and advocacy for research conducted at the UCHSC.

As the chief science advocate for the UCHSC campus, schools, and its affiliates, the successful candidate shall be responsible for technology initiatives, animal facilitated biomedical research and teaching, facilitating integrity in science and regulatory requirements, clinical trials, core program support, and collaboration among professional schools and across research units. See the web site for further information and qualifications for the position. http:// www.uchsc.edu/vcresearch

The Campus: The University of Colorado's Health Sciences Center and its affiliated University Hospital are ranked as one of the top 20 research and clinical campuses in the US. It has research funding of \$200 million annually, with an extensive program of clinical trials and basic science research. The UCHSC is in the midst of an exciting, multi-year building program for a new campus and adjoining biomedical research complex on Denver's east side.

To Apply: Screening of applicants will begin December 1, and the position will remain open until filled. The University of Colorado Health Sciences Center is committed to equal opportunity and affirmative action. Interested parties should forward a letter of interest addressing their background related to selected areas of the qualifications and duties to:

UCHSC Vice Chancellor for Research Search Committee Mail Stop A-095 4200 East Ninth Avenue Denver, CO 80262

Postdoctoral Position

The Howard Hughes Medical Institute, a national and international philanthropy devoted to biomedical research and science education, has a Postdoctoral Position available at the UT Southwestern Medical Center.

This position will allow you to conduct biochemical and genetic studies of orphan G protein-coupled receptors, and focus on identifying novel endogenous ligands characterizing the in vivo function of new receptorligand pairs (see Cell 92:573-585; Cell 98:437-451).

HHMI is an intellectually demanding, results-oriented organization, please forward your CV, including three references, to: Dr. Masashi Yanagisawa, Department of Molecular Genetics, UT Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75390-9050 or e-mail: MYanagisawa@aol.com Visit our web site: www.hhmi.org HHMI is an Equal Opportunity Employer.

www.hhmi.org



FACULTY OPENINGS: THE EVERGREEN STATE COLLEGE seeks broadly trained faculty interested in teaching in a public liberal arts institution emphasizing interdisciplinary study and team-teaching. "Regular" positions typically involve initial 3-year term contracts, rotation between specialized and general education courses, eligibility for permanent appointment after 3-6 years of full-time Evergreen teaching. All faculty help students develop effective writing. All positions require a Master's degree. Review of completed applications will begin on dates indicated and continues until finalists are selected. For some of the following positions, as indicated, we invite applications only from recently trained candidates.

Developmental Biology

We seek a versatile developmental biologist with strong interests in undergraduate teaching in interdisciplinary, team-taught programs from the freshman to senior level. The applicant must have a strong background in molecular or organismal development from any of several subspecialties such as neurobiology, molecular or Mendelian genetics, endocrinology or anatomy. We seek someone who has the ability and the desire to examine the ethical, economic, and societal implications of work in this field. Preferred applicants will have wide expertise in biology, will be committed to undergraduate research, and will work effectively with other faculty to develop interdisciplinary programs that integrate biology and quantitative reasoning into a broader cultural context. Ph.D. preferred. Review of complete applications starts January 5, 2001.

Ecological Agriculture

We seek a broadly trained environmental scientist to teach sustainable agriculture in an interdisciplinary context. The successful candidate must have hands-on small farm experience and experience with the scientific foundations of agriculture as well as the practical, economic, cultural, and social context in which agriculture is embedded. Experience and skills in community-based applications, particularly involving undergraduate students, are desirable. The college operates a 13-acre organic farm located on our 1,000-acre forested campus where students gain experience in small farm operation and faculty can do hands-on teaching and research. We also encourage collaboration with local farmers including on-farm research and internships involving students. Ph.D. in agriculture science or plant ecological physiology is preferred, though we will consider candidates trained in plant ecology, ethnobotany, entomology, plant pathology, or related fields in natural science. Review of complete applications starts January 5, 2001.

Fish Biology

We are seeking a broadly trained vertebrate biologist to participate in interdisciplinary team teaching. Ability to teach fish biology, natural history, ecology of fishes, and vertebrate zoology is required. Biologists with experience and/or interests that include the conservation biology of Northwest fishes and knowledge of how tribal, state and federal governments deal with fish issues are encouraged to apply. The successful candidate will have opportunities to teach in Evergreen's Master of Environmental Studies program. The Evergreen State College is located on a 1,000-acre campus with 27 acres of Puget Sound tidelands, and two salmonid species have been known to spawn in streams on campus. We desire to find a person with research goals compatible with Evergreen's mission to mentor our outstanding undergraduate students and a willingness to foster collaborations and sponsor student internships with nearby government agencies and tribal organizations. Ph.D. preferred. For this position we invite applications only from recently trained candidates with 1 to 12 years of experience. Review of complete applications starts December 1, 2000.

Molecular Biology

We seek a versatile molecular biologist with strong interests in undergraduate teaching in interdisciplinary, team-taught programs from the freshman to senior level. The applicant must have a Master's degree, Ph.D. preferred, and a strong background in molecular biology and biotechnology. We seek someone who has the ability and the desire to examine the ethical, economic, and societal implications of work in this field. Preferred applicants will have wide expertise in biology, will be committed to undergraduate research, and will work effectively with other faculty to develop interdisciplinary programs that integrate science and quantitative reasoning into a broader cultural context. Review of complete applications starts November 13, 2000.

The College reserves the right to extend searches or not offer positions advertised. All position offers are contingent on funding. Further information about Evergreen available at http://www.evergreen.edu/facultyhiring. Persons with disabilities can receive accommodations in the hiring process by contacting the Hiring Coordinator. For required application procedures write to:

Faculty Hiring Coordinator TESC, L-2211 Olympia, WA 98505 email: blodgetd @evergreen.edu



POSTDOCTORAL POSITIONS DUKE UNIVERSITY SUPERFUND BASIC RESEARCH CENTER INTEGRATED TOXICOLOGY PROGRAM

Several NIH-supported positions are available in the new Duke University Superfund Basic Research Center. The center includes researchers from the Nicholas School of the Environment, Duke University Medical Center and the Pratt School of Engineering, and is affiliated with Duke's Integrated Toxicology Program. The primary research focus of the center is to understand the affects of environmental pollutants on reproduction and development. Positions are immediately available in the areas of mechanistic aquatic toxicology (R. Di Giulio), molecular toxicology (J. Freedman) and neurotoxicology (T. Slotkin). Leon Golberg postdoctoral fellowships are also offered through the Integrated Toxicology Program in a variety of research areas. For a more complete description of the research opportunities go to http://www.duke.edu/web/superfund/jobs.html.

Applicants should submit a cover letter indicating area of interest, curriculum vitae and the names of three references to Jonathan H. Freedman, Ph.D., Box 90328, Duke University, Durham, NC 27708-0328.

hr.duke.edu

Duke University Is An Equal Opportunity/Affirmative Action Employer

DIRECTOR OF MOLECULAR DIAGNOSTICS

Roswell Park Cancer Institute Division of Pathology & Laboratory

The Department of Pathology and Laboratory Medicine at Roswell Park Cancer Institute (RPCI) seeks an outstanding individual as Director of Molecular Diagnostics. RPCI is an NIH designated Comprehensive Cancer Center with a new hospital, new governance as a Public Benefit Corporation and several new Science Chairs including Cancer Genetics. The director should have several years of prior experience in Molecular Diagnostics capable of obtaining a New York State Certification of Qualification in that field, and should have a strong record of academic publications. Strong preference will be given to candidates, either M.D. or Ph.D., who have peer-reviewed extramural funding in cancer research. The director should be able to assist the translation cancer research program, support various clinical treatment and research protocols, and laboratory outreach efforts. An appointment at the SUNY Buffalo Medical School Department of Pathology is possible if appropriate.

The Roswell Park Cancer Institute and the State University of New York at Butfalo are Affirmative Action/Equal Opportunity Employers and are especially interested in identifying qualified women and minority candidates for this



position. The University at Buffalo and Roswell Park Cancer Institute do not discriminate on the basis of age, creed, color, handicap, national origin, race, religion, sex, marital status or veteran status in its program and activities.

Interested candidates should forward their CV and names of 3 references ASAP to: John J. Brooks, MD, FRCPath, Chairman, Division of Pathology and Laboratory Medicine, Roswell Park Cancer Institute, Elm & Carlton Streets Buffalo, NY 14263.

Phone: (716) 845-7700; Fax: (716) 845-3427 E-mail: brooks@SC3101.med.buffalo.edu

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Scientist

We are actively seeking two individuals to play key leadership roles on our scientific team. The ideal candidate has a Ph.D., a minimum of 3 to 5 years experience in immunology, genomics or related scientific discipline in an industrial environment. Previous experience with infectious disease, cytokines, hormones, and assay development a plus. Flow cytometry experience highly desirable. This position reports to the Chief Scientific Officer.

BioE offers a competitive salary, attractive benefits package and an opportunity for professional and personal growth. We value creativity, initiative, and people who enjoy a challenge as they grow personally and contribute to the growth of the company. Qualified individuals please mail, fax, or e-mail resume, with salary requirements, to: Mike Haider, BioE, 4280 Centerville Rd., St. Paul, MN 55127. Equal Opportunity Employer. Fax: 651-426-5740; E-mail: mph@bioe.com.

Visit us at www.bioe.com.

Biologist

St.Michael's College invites applications for a tenure-track position in biology at the Asst. Prof. level to begin in late Aug. 2001. The successful applicant will have the Ph.D. with extensive experience studying plant biology. Teaching assignments will include upper-level courses in botany and plant physiology, participation in a team-taught general biology course for majors, and nonmajors courses with lab components. Total teaching load is 21 hrs/yr. Responsibilities include maintaining an active research program in which undergraduates can become involved and service to the College community. Previous teaching and post-doctoral experience preferred.

Send CV, undergraduate and graduate transcripts, statements of teaching experience, interests and philosophy, research plans and objectives, and three letters of reference to Dr. Valerie Banschbach, c/o Human Resources, Saint Michael's College, Winooski Park, Colchester, VT 05439. Review of applications will begin on Nov.1, 2000. For more info, visit our site at

http://academics.smcvt.edu/biology. AA/EOE

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COLLEGE

POSTDOCTORAL POSITIONS MOLECULAR NUTRITION & TOXICOLOGY

Two Postdoctoral Positions available immediately in: 1) An NIH-supported project to study the role of diet in the development of alcohol-induced liver damage and drug metabolism. The experimental system involves a rat total enteral nutrition model allowing for controlled study of molecular mechanisms of alcohol effects and alcohol/nutrition interactions. 2) The USDA funded Arkansas Children's Nutrition Center to study the role of dietary factors in chronic disease especially prevention of breast, colon and prostate cancers. Current project aims to characterize the molecular mechanisms of action of phytochemicals and peptides in vitro and in vivo. Each candidate should have a Ph.D. or Ph.D./M.D. and a background in molecular biology and tissue culture. Experience in handling animal models a plus. Send curriculum vitae, summary of research experience and names of three references to: Dr. Thomas Badger, Arkansas Children's Nutrition Center, 1121 S. Marshall St., S-512-20B, Little Rock, AR 72202. E-mail: badgerthomasm@ exchange.uams.edu.

Equal Opportunity/Affirmative Action Employer.

GLOBAL OPPORTUNITIES

ADELAIDE UNIVERSITY

TENURABLE LECTURER/ SENIOR LECTURER IN GENETICS

Department of Molecular Biosciences (Ref: 10574)

We are seeking to appoint a suitably qualified geneticist with a proven record of excellence in research and teaching and with skills in computing and bioinformatics.

You should have:

- · a PhD or equivalent gualification in genetics ability to participate in an active and innovative research team
- enthusiasm and commitment to teaching and a capacity to play a leadership role in developing bioinformatics courses at Adelaide University
- ability to supervise Honours and PhD students Salary: Lecturer Level B \$49,249-\$58,484

Senior Lecturer Level C \$60,329-\$69,564 The appointment will be made at a level commensurate with the skills and experience of the successful applicant

This tenurable position is available from 1 January. 2001. Further information including the selection criteria may be obtained from Ms. Silvia Augello (Secretary, Genetics) telephone (61 8) 8303 5563 or email <silvia.augello@adelaide.edu.au>

APPLICATIONS IN DUPLICATE, addressing the selection criteria and quoting the reference number should include names and full contact details of three es, to the General Manager, Human Resources, Adelaide University, South Australia, 5005, Australia, by 1 November 2000.



DO SOME GOOD (science)

We seek experienced and motivated scientists to develop products that improve healthcare. With an emphasis on teamwork, creativity, and intellectual achievement, we are dedicated to providing a challenging and stimulating work environment, and a generous salary/benefits package

You should be an energetic self-starter with well-documented productivity and integrity: strong organizational, interpersonal, and communication skills required.

DIRECTOR OF R&D (job code: DS900)

You should have successfully managed all stages of in vitro diagnostic immunoassay/instrumentation development and commercialization, including R&D, regulatory, manufacturing. Role includes: strategic planning, supervising multiple teams, representing company, financial reporting, managing IP & licensing, attracting & managing contracts and alliances. Ph.D., ≥12 yr in industry.

SR. SCI. / SCIENTISTS (job code: SS900)

You should have proven abilities in conceptualizing. developing, optimizing and troubleshooting new diagnostic immunoassays. Sr. Scientists must have solid

team leadership & project management abilities, and must have demonstrated excellence in product development for infectious disease immunoassays in industry. Ph.D. + postdoc.

Genomic Profiling Évstems

MANY/ is an exciting. well-financed, Cambridge-based start-up company with breakthrough technology for producing a new generation of tools that promise to revolutionize infectious disease diagnostics.

Please submit a resume, one page cover letter, and contact information for 3 references (specifying relationship) to:

> Job Code Genomic Profiling Systems, Inc. 840 Memorial Drive, 4th FI Cambridge, MA 02139

Or FAX to: 617 547-6060 Or email (text or attached MS Word file) to:

jobs@genprosys.cor

(include last name & job code in BOTH the subj. line of email AND attached filename)

Elan Pharmaceuticals

Elan Pharmaceuticals, Inc. is a growing biopharmaceutical company committed to the discovery and development of new products to diagnose and treat diseases of the central nervous system, including Alzheimer's disease, multiple sclerosis and stroke.

Pharmaceutical Toxicologist - PCN #120045

Position provides Safety Evaluation support for both in-house and in-licensed drug candidates. Key responsibilities will include developing nonclinical toxicology/pharmacokinetic programs for both small molecule and biological drugs, monitoring contract GLP toxicology studies, reviewing drug candidates for in-licensing, performing in-house non-GLP toxicology testing studies, and conducting investigational studies. You will also serve as the preclinical representative on drug development teams, and be responsible for writing and reviewing regulatory submissions (U.S. and international)

Candidates should have a Ph.D. in Toxicology or related field, with 0-5 years' experience. Training in and/or experience with pharmaceutical research and development, U.S. and international regulatory experiments, and pharmacokinetic studies desirable. Must be able to be a team player as well as work independently, and possess strong communication skills. DABT certification preferred, but not required.

Elan Pharmaceuticals offers compelling benefits within a progressive, team-focused environment. For immediate consideration, please e-mail your resume, indicating PCN Number, to: elanpharma@rpc.webhire.com. Elan Pharmaceuticals, Inc., 700 Gateway Blvd., South San Francisco, CA 94080. EOE.

For full position details, visit www.elancorp.com



pharmaceuticals

US Environmental Protection Agency Office of Research and Development **Office of Science Policy**

EPA is seeking a highly qualified scientific leader for the position of Director, Office of Science Policy (OSP), Office of Research and Development (ORD), Washington, D.C. The successful candidate for this position will manage a broad spectrum of science and science policy issues with a focus on identification of an integrated ORD approach on same. The candidate will also lead both nearand long-term research planning efforts, and facilitate Agency decision-making by identifying and integrating scientific information to inform Agency regulatory and science policy products.

OSP is responsible for providing expert advice and evaluation on the use of scientific knowledge and science policy in Agency regulatory and other program decision-making. OSP is ORD's principal science policy support office with the lead for integrating diverse science and science policy positions into ORD and Agency products OSP implements its activities through the office in EPA Headquarters, Washington, D.C.

To meet the requirements of this position, applicants must have a bachelor's degree (or higher - Ph.D. is preferred) in the area of environmental science (1301 series), biology (401 series), or environmental engineering (801 series). Preferred candidates would possess recognized scientific expertise as evidenced by work experience and/or invitations to participate in national and international meetings/panels. Candidates must also have competence and substantive specialized (scientific, administrative, policy or managerial) experience in a type of work or a combination of functions directly related to the position. In addition, applicants must meet and address the Executive Core Qualifications (ECQ's), the mandatory technical factors and the desirable factors described in the vacancy announcement for this position. Call or write to: U.S. EPA, OARM/OHROS/ SES Human Resources Staff (Mailcode - 3650), 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460. You can also request a copy of the vacancy by calling the SES Vacancy hotline number (202) 260-6374. Request announcement number EPA-01-SES-ORD-6202. You may download a full text announcement via Internet at www.usajobs.opm.gov.

U.S. Citizenship Required Applications must be postmarked by the closing date December 1, 2000. EPA is an Equal Opportunity Employer.

Repligen's goal is to develop innovative therapeutic products for debilitating pediatric diseases. Expansion of our clinical development programs has created new opportunities for individuals eager to apply their experience within a stimulating, small company setting in the following areas:

Senior Director, Analytical Biochemistry

This research-based position will direct the development and assist in the implementation of analytical characterization methods to support the manufacture and use of recombinant proteins and synthetic peptides in clinical research. Prior experience with product and process characterization methods including measures of protein activity, purity, and structure are essential. Some experience with protein microanalyte analysis or other proteomics techniques would be helpful. This position will have responsibilities that span methods development for biochemical measures of patient samples to defining product specifications for commercialization. Training would include a Ph.D. in analytical biochemistry and 5 yrs. industrial experience including supervision of Ph.D. level scientists.

Senior Director, Immunology/Cell Biology

This senior position will manage external collaborations in large animal models of transplantation and autoimmune diseases. This person will participate in the strategy and implementation of clinical research studies. Extensive experience with models of T cell mediated diseases and transplantation regimens should include knowledge of in vitro measurement systems. Prior participation in clinical studies would be a plus. Training should include a Ph.D. or equivalent and 5 or more years of experience including experience supervising Ph.D. and non-Ph.D. scientists

Senior Director, Process Development

This position would be responsible for the design and implementation of methods for clinical material production. Prior experience should include use of scalable systems for recombinant mammalian cell culture and biologics purification. This position will coordinate all aspects of process definition, vendor selection and technology transfer through preparation of vialed product. Familiarity with peptide manufacturing, formulation, or analytical methods would be advantageous. Experience should include a PhD in biochemistry and 5+ years of industry experience in a GMP environment.

Vice President, Medical Research

A physician experienced in the clinical development of therapeutic drug candidates would oversee all aspects of Phase II/III studies including protocol design, clinical sites and CRO management. This position will supervise regulatory affairs, FDA communications and participate in corporate strategic planning. Prior experience must include designing and executing pivotal trials, as well as knowledge of both European drug registrations and US regulations. Experience with clinical endpoints involving cognitive, neurological function, immune system regulation and/or clinical development of pediatric products is preferred.

Repligen is located in Needham, MA. Competitive salary and benefits packages include equity participation in a publicly traded company. Send resumes to Human Resources, 117 Fourth Avenue, Needham, MA 02494, email <u>hr@repligen.com</u>, or fax 781-453-0048.



ASSISTANT PROFESSOR OF PLANT DEVELOPMENTAL BIOLOGY

As part of a University-wide genomics initiative, Cornell University is soliciting applications from outstanding candidates whose research focuses on the genetic analysis of developmental processes in plants. The appointee will join an interactive group of faculty who utilize genomic approaches and the latest techniques in genetics, cell and evolutionary biology, biochemistry, and analytical chemistry. Contribution to teaching in the area of plant developmental biology is expected.

Applicants should send curriculum vitae, statement of research interests and names of at least three references to:

> Plant Search Committee 228 Plant Science Building Cornell University Ithaca, NY 14853-1901

Attn: Sandra Brown (sgb2@cornell.edu) Phone 607-255-8507, Fax 607-255-5407

Position open until filled; review of applications to commence on October 31, 2000.



http://www.cornell.edu

University of Saskatchewan Department of Physiology, College of Medicine Assistant Professor

We invite applications for a tenure-track position at the level of Assistant Professor. Candidates must have a Ph.D. in Physiology or a closely related discipline and postdoctoral experience. They must have demonstrated excellence in research in regulatory and integrative physiology. The successful applicant will be expected to develop a strong, externally funded research program. This program should be in the cardiovascular or neuroscience fields which are areas of research strength in the College. She or he will contribute to the teaching of undergraduate students and the supervision of graduate students.

The University of Saskatchewan is committed to the principles of employment equity. Women, people of aboriginal descent, members of the visible minorities, and people with disabilities are invited to identify themselves as members of these designated groups on their application. This position has been cleared for advertising at the two-tier level: applications are invited from qualified individuals regardless of their immigration status in Canada. In accordance with Canadian immigration requirements, however, priority will be given to Canadian citizens and permanent residents. Applications must indicate citizenship. Please send curriculum vitae, your three most significant publications, and the names of three references by December 20, 2000 to: Dr. Wolfgang Walz, Head, Department of Physiology, College of Medicine, University of Saskatchewan, 107 Wiggins Road, Saskatoon, Saskatchewan, Canada S7N 5E5.

Research Fishery Biologist and Professor in Population Dynamics

Scripps Institution of Oceanography (SIO), University of California San Diego, and the Southwest Fisheries Science Center (SWFSC), U.S. National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration, U.S. Department of Commerce, are jointly seeking a Research Fishery Biologist and Professor in population dynamics as applied to fisheries research and management. The successful applicant will hold a half-time appointment in each institution. Responsibilities will range from practical stock assessment (SWFSC) to the teaching and mentoring of graduate students and research (SIO). Research in advanced techniques for resource assessment and/or modeling, incorporating other environmental data, is desirable. Evaluation of opportunities for professional advancement will be coordinated, but will be conducted separately within each institution. Applicants must hold a Ph.D. degree in a relevant field and meet the citizenship requirements defined in the Treasury Postal Service and General Government Appropriations Act.

Duties at SIO would include teaching and training of graduate students in applied statistics, and original, peer-reviewed and published research, particularly innovative applications of models and statistical approaches to data on large, real populations ranging from benthic invertebrates through fish to marine mammals. Although the SIO salary will be paid from University sources, the candidate will be expected to obtain extramural funding for research and support of graduate students.

Duties at SWFSC will include analysis of data and advice to fisheries managers through collaborations with the California Department of Fish and Game, the Southwest Region of NMFS, the Pacific Fishery Management Council, and NMFS staff. The appointee will serve as a stock assessment expert in various forums involving assessment and management of coastal pelagic species, demersal species, and highly migratory species.

Appointment will be made at the Assistant or Associate Professor level (SIO) depending on experience and qualifications with salary based on UC salary scales and at GS-0482-13/14 in the Federal salary system (SWFSC). We will begin to consider applications 1 November 2000 and continue until the search is complete. Interested applicants must apply separately for each position. For SIO, applicants should send a curriculum vitae, list of publications, statement of accomplishments and interests, and names and addresses of at least three professional references to:

Fisheries Search Committee c/o Graduate Department Scripps Institution of Oceanography University of California, San Diego 9500 Gilman Drive La Jolla, California 92093-0208, U.S.A

This information has also been published as Vacancy #W/NMF/SWSC/000458.RJ. Applicants should consult the Web site www.wasc.noaa.gov concerning application to SWFSC/NOAA.

Employment line for WASC/HRD: (206) 526-6294. Contact: Ron Jones, Personnel Management Specialist (206) 526-6407.

UCSD and SWFSC are Equal Opportunity Employers/UCSD is an Affirmative Action Employer.



HOWARD HUGHES MEDICAL INSTITUTE

The Howard Hughes Medical Institute conducts biomedical research in the areas of cell biology, genetics, immunology, neuroscience and structural biology at over seventy locations around the United States. HHMI regularly has positions open for research and administrative personnel.

Laboratory Positions:

- Postdoctoral Fellowships
- Research Specialists/Technicians
- Research Secretaries

Administrative Positions:

- Managers
- •Administrative Assistants
- Purchasing Coordinators
- •Receiving Clerks

Institute employees enjoy competitive salaries and an excellent benefits package. HHMI is an equal opportunity employer. Please visit our website at **www.hhmi.org/jobs** for a listing of available positions.

Postdoctoral Position G Proteins/Genomic Imprinting

Postdoctoral position immediately available in the Metabolic Diseases Branch, NIDDK. We are studying the role of the G protein Gs in regulating energy and glucose metabolism, the mechanisms by which the Gs- α subunit gene (Gnas) is imprinted, and the role of Gs- α defects in human disease, using transgenic mouse and human disease models. Candidates should have an Ph.D. and/or M.D. and less than five years postdoctoral experience. Please send CV, list of publications and names of 3 references to:

Lee S. Weinstein, M.D. Metabolic Diseases Branch NIDDK/NIH

Building 10 Room 8C101 10 Center Drive MSC1752 Bethesda, MD 20892-1752 Voice: (301) 402-2923 Fax (301) 402-0374 E-mail: *leew@amb.niddk.nih.gov*

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

Tenure/Tenure Track Position National Institute of Allergy and Infectious Diseases (NIAID)

The Laboratory of Intracellular Parasites (LICP), at the National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rocky Mountain Laboratories (RML) is recruiting for a tenure/tenure track scientist to develop an independent research program to explore fundamental molecular and biological processes of Chlamydia pneumoniae or C. trachomatis host cell interactions. Individuals using contemporary molecular genetics, genomics, and proteomics to investigate host-parasite interactions in the context of persistent infection are especially sought. Individuals will be expected to build a dynamic and productive research group. Applicants who have documented evidence of sustained independent research accomplishments and have an international reputation in their research area may be considered for a tenured position. Salary, start-up funds, and laboratory facilities are competitive with premier academic institutions. The RML is located in the scenic Bitterroot Valley in Hamilton, Montana and is currently undergoing significant scientific expansion and facility renovations. Facilities are available for state-of-the-art genomic analysis including high-throughput DNA sequencing and DNA microarray capabilities, imaging, and biosafety level-3 pathogen related research including a vivarium with non-human primate research capabilities. Applicants can direct programmatic inquiries to Dr. Harlan D. Caldwell, Chief, LICP by email: hcaldwell@niaid.nih.gov.

Application Process: Applicants must be U.S. citizens, resident aliens, or nonresident aliens with or eleigible to obtain a valid employment authorized visa. Salary depends on degree and qualifications. Salary up to \$157,000 per annum. Other incentives may be available. A curriculum vitae, bibliography, three letters of reference, a statement of research interests, and selected publications must be submitted by October 1, 2000 to Ms. Kim Tran, Office of Human Resources Management, NIAID, Bldg. 31, Room 7A27, 31 Center Drive, MSC 2520, Bethesda, Maryland, 20892-2520. Applicants interested in applying must submit a complete package and cite vacancy announcement number NIAID-00-149 on the package. All information provided by applicants will remain confidential and will only be viewed by authorized officials of the NIAID.

The NIH is an Equal Opportunity Employer

POSITIONS OPEN

CELL/MOLECULAR BIOLOGY

The Department of Biological Sciences at the University of Notre Dame invites applications for two **TENURE-TRACK FACULTY POSITIONS** in cell/molecular biology beginning fall semester 2001. Postdoctoral experience as well as a strong interest in undergraduate and graduate teaching is required. Teaching responsibilities will be one course per semester consisting of an undergraduate course in cell, molecular, or developmental biology and graduate teaching in an area of expertise.

Any research area of cell or molecular biology is appropriate. However, we are particularly interested in seeking research expertise to complement our current research emphases on cell and molecular biology, which include molecular motors, membrane trafficking, invasion and metastasis, apoptosis, nuclear recep tors, signal transduction, molecular genetics of visual processes, molecular and cellular nutrition, and tumor biology. Additional information is available at website: http://www.science.nd.edu/biology. The candidate's specific area of research is less important than a demonstrated record of excellence, originality, and productivity in research. The Department pro-vides an excellent research environment including state-of-the-art optical imaging, flow cytometry and cell sorting, automated histology, and laser capture microdissection core facilities. The University also maintains excellent animal care, zebrafish, and transgenic facilities.

The University of Notre Dame offers competitive salaries and generous start-up packages. Review of applications will begin December 15, 2000, and will continue until the positions are filled. Applicants should submit curriculum vitae, a brief description of research accomplishments, a two-page statement of research objectives and teaching interests, and have three letters of recommendation sent to: Cell and Molecular Biology Search, Department of Biological Sciences, University of Notre Dame, P.O. Box 369, Notre Dame, IN 46556-0369. For more information, contact: Dr. Martin Tenniswood; e-mail: tenniswood.1@nd.edu.

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

NEUROBIOLOGY Carnegie Mellon University

The Department of Biological Sciences at Carnegie Mellon University seeks to fill one of three TEN-URE- TRACK FACULTY POSITIONS as part of an expansion in the area of neurobiology in collaboration with the Center for the Neural Basis of Cognition (CNBC). The successful candidate will be expected to develop an independent research program and participate in the teaching of undergraduate and graduate students. Preference will be given to candidates who use interdisciplinary approaches, including molecular or genetic methods, to study questions related to neuronal function, plasticity, learning, memory, or other areas of cognitive/functional neuroscience in either invertebrate or vertebrate systems. The successful candidate will benefit from the strengths of the CNBC in neurophysiology, functional imaging, behavioral analysis, and computational modeling of the neural basis of cognition; from existing strengths of the Department of Biological Sciences in cellular and developmental biology, genetics/ molecular biology, and light optical and NMR-based biological imaging; and from the full breadth of the neuroscience community at Carnegie Mellon and the University of Pittsburgh. Applicants must have a Ph.D. and relevant postdoctoral experience. Please send curriculum vitae and a description of the proposed research program and have three letters of recommendation sent to: Neurobiology Search Committee, Department of Biological Sciences, Carnegie Mellon University, Box L, 4400 Fifth Avenue, Pittsburgh, PA 15213. Review of applications will begin on December 1, 2000.

Carnegie Mellon is an Equal Opportunity/Affirmative Action Employer. Our Department is eager to diversify its faculty; we encourage women and minorities to apply.

POSITIONS OPEN

ASSISTANT, ASSOCIATE, OR FULL PROFESSOR BIOLOGICAL NMR Department of Biochemistry Duke University Medical Center

The Department of Biochemistry, Duke University Medical Center, invites applications for a faculty position at the level of Assistant, Associate, or Full Professor. However, we are especially interested in applicants at the Assistant Professor level. We are seeking outstanding candidates with experience in the field of biological NMR as applied to fundamental problems of enzymology, protein structure, or nucleic acid biochemistry. Duke University has just installed an 800 MHz spectrometer, which complements the existing 600 and 500 MHz instruments in the NMR Center. The candidate may also choose to be affiliated with the newly created Center for Chemical Biology in the Duke University School of Medicine. Send résumé, summary of research interest, and three letters of reference to: Christian R. H. Raetz, Chairman, Department of Biochemistry, Duke University Medical Center, Durham, NC 27710. Applications should be received by November 1, 2000. Duke University is an Equal Opportunity/Affirmative Action Employer.

BIOLOGY TENURE-TRACK POSITION

Manhattan College invites applications for a tenure-track position at the level of **ASSISTANT PRO-FESSOR** available August 2001. Founded in 1853, Manhattan College is an independent Catholic coeducational institution in the LaSallian tradition. Manhattan College is a recent recipient of a \$900,000 Biological Sciences Education award from the Howard Hughes Medical Institute. The Biology Department is a joined department with the College of Mt. St. Vincent.

GENETICIST/MOLECULAR BIOLOGIST

Responsibilities include but are not limited to teaching an introductory-level genetics course and an upper-division course in molecular biology. There may also be opportunities to teach in the graduate program in biotechnology. A Ph.D. and a strong commitment to undergraduate education, advisement, and research are required. Experience in teaching introductory courses is a plus. Applicants should be adept at integrating computers into the curriculum.

Send letter of application, curriculum vitae, statement of teaching philosophy, summary of research goals, and the names and addresses of three references by December 15, 2000, to:

Dr. William A. Tramontano Chair, Department of Biology Manhattan College/ College of Mount Saint Vincent 6301 Riverdale Avenue Riverdale, NY 10471-1093 FAX: 718-862-7946 E-mail: wtramont@manhattan.edu

An Affirmative Action/Equal Opportunity Employer; Minorities/Females/Disabled/Veterans. Women and minorities are encouraged to apply. We are committed to a diverse workforce.

SABA UNIVERSITY SCHOOL OF MEDI-CINE (Saba) and MEDICAL UNIVERSITY OF THE AMERICAS (Nevis). Immediate openings: Several full-time FACULTY POSITIONS in the basic sciences (anatomy, histology, biochemistry, microbiology, neurosciences, physiology, medical psychology, genetics, pharmacology, pathology, clinical medicine, physical diagnosis). Salary range \$36,000 to \$45,000 USD, tax-free. All positions are on the beautiful Caribbean islands of Saba or Nevis. Please provide complete curriculum vitae and academic references to: Dr. David Fredrick, P.O. Box 386, Gardner, MA 01440. Telephone: 978-630-5122; E-mail: drfredrick@yahoo.com; websites: www. saba.org or www.medicaluniversity.org.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS in geological and hydrological sciences. The Department of Environmental Sciences at the University of Virginia invites applications for tenure-track **ASSIST-ANT PROFESSORSHIPS** in the geological and hydrological sciences. The Department is an interdisciplinary community of process-oriented Scientists representing hydrology, geosciences, ecology, and the atmospheric sciences. The department offers B.A., M.S., and Ph.D. degrees.

Position in geological sciences: The Department seeks candidates with the skills and interest to advance our understanding of geochemical and/or surface processes effective at landscape or larger scales (e.g., coastal environments, hillslopes, watersheds, continental margins). The ideal candidate will embrace the opportunity to work within our interdisciplinary mix of research areas. A Ph.D. in the geosciences or related field is required.

Position in hydrological sciences: The Department seeks candidates with clear interest and potential for advancing our understanding of the controls and dynamics of the landscape-scale terrestrial water cycle. In particular, we seek to augment our existing strengths through the addition of a colleague studying terrestrial water reservoirs (either surface or subsurface), possibly involving interaction with changing climate and vegetation communities. We encourage applications from diverse areas of hydrological sciences (e.g., ground water-surface water interactions in coastal areas, land surface water dynamics inferred through remote sensing, land cover controls on hydrology of large basins, etc.) Regardless of specialization, the ideal candidate will be a process-based Scientist working at the landscape scale. A Ph.D. in hydrology or related field is required.

The successful candidates will be expected to develop outstanding programs in research and teaching at both the undergraduate and graduate levels. Applicants must show demonstrated excellence in their research and a strong commitment to quality teaching.

Send statements of research and teaching interests, curriculum vitae, and the names and addresses of three references to: James N. Galloway, Professor and Chair, University of Virginia, Department of Environmental Sciences, P.O. Box 400123, Charlottesville, VA 22904-4123.

Evaluation of applications will begin on 15 November 2000. All applications must be received by 01 January 2001. In addition to the printed application, we would appreciate having a PDF file of the application e-mailed to us at either e-mail: geosciences@ mail.evsc.virginia.edu or e-mail: hydrology@mail. evsc.virginia.edu (although this is optional). For additional information, see the Department website: www.evsc.virginia.edu. The University of Virginia is an Equal Opportunity/Affirmative Action Employer. We especially encourage applications from underrepresented groups.

PHYSICS: Florida Southern College seeks a fulltime GENERALIST beginning January 2001 or fall 2001. The successful candidate will teach lectures and laboratories in physical sciences, introductory physics, and upper-level courses including but not limited to electronics and quantum mechanics. A passion for teaching, collegiality, students, and Ph.D. (ABD considered) are required. Enrolling almost 1,700 residential students plus 1,000 students in extension programs, the College is affiliated with the United Methodist Church and has been named in the top 10 of southeastern liberal arts institutions for value by U.S. News and World Report. Florida Southern College also boasts the world's largest collection of Frank Lloyd Wright architecture, and the Science Division has recently completed renovations of all facilities. Priority consideration will be given to applications received by November 1, 2000. The position will remain open until the successful candidate is identified. Send letter, curriculum vitae, teaching philosophy, transcript copies, and three reference letters to: Dr. N. J. Aumann, Vice President and Dean of the College, Florida Southern College, 111 Lake Hollingsworth Drive, Lakeland, FL 33801-5698. Women and minorities are encouraged to apply.

TENURE-TRACK FACULTY POSITIONS DEPARTMENT OF PATHOLOGY UC IRVINE COLLEGE OF MEDICINE

The UC Irvine Department of Pathology seeks to expand selected clinical and investigative programs with the recruitment of four statefunded (tenure-track) positions at the Assistant, Associate, or Full Professor level. The department seeks to identify outstanding candidates with innovative research programs in the areas of immunology/immunopathology, cancer/cancer genetics, infectious diseases, stem cell biology, and lipidology. Applicants for the positions listed should have a demonstrated commitment to teaching, scholarly investigation, and clinical service. Candidates for Associate or Full Professor appointments must have a strong record of extramurally funded research.

Successful candidates for each of the listed positions will be afforded adequate time to devote to a vigorous research program. M.D. applicants should be board eligible or certified by the American Board of Pathology and must be eligible within 12 months for a California medical license.

The Division of Anatomic Pathology seeks a **NEUROPATHOLOGIST** with a research emphasis in neuroimmunology, stem cell biology, infectious disease, neurodegenerative diseases, or cancer.

The Division of Diagnostic Molecular Pathology seeks a **MOLECULAR PATHOLOGIST** with a research program in cancer/cancer genetics, other genetic diseases, or immunopathology. Individuals with expertise in diagnostic molecular pathology and/or HLA typing are encouraged to apply.

The Division of Hematology seeks a **HEMATOPATHOLOGIST** with a research focus in stem cell biology, immunopathology, or leukemia/lymphoma biology.

The Division of Chemical Pathology seeks a **CLINICAL CHEMIST** or **CLINICAL TOXICOLOGIST**. Individuals with research programs in lipidology are encouraged to apply.

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



Michael E. Selsted, M.D., Ph.D. Professor and Chair Department of Pathology, D440 Med Sci UC Irvine College of Medicine Irvine, CA 92697-4800

UCI is an equal opportunity employer committed to excellence through diversity.

Announcement of Vacancy: DIRECTOR, MOSS LANDING MARINE LABORATORIES

THE LABORATORIES: Moss Landing Marine Laboratories (MLML) are operated by a consortium of seven California State Universities (Fresno, Hayward, Monterey Bay, Sacramento, San Francisco, San Jose and Stanislaus) and administered by San Jose State University. MLML is an upper-division undergraduate and graduate education and research institution with nine regular faculty, 57 affiliated professionals including research faculty and support staff, and a typical student enrollment of 120, most of whom are graduate (MS) students. The Laboratories, housed in a new 60,000 sq. ft. building completed in January, 2000, are located on Monterey Bay between Santa Cruz and the Monterey Peninsula and collaborate with numerous other marine science institutions in the region. MLML operates a research diving program, a fleet of small boats and the R/V Point Sur, a 135 ft. UNOLS vessel. The annual budget is approximately \$8 million, the majority of which comes from extramurally funded research.

RESPONSIBILITIES: The Director is responsible for the leadership and administration of academic and research programs, maintenance and development of laboratory facilities, fundraising, and coordinating faculty, student and staff affairs. The Director will be expected to foster and participate in the instructional program, maintain an active research program, and encourage the education and research activities of faculty and students. The Director will serve as the major liaison with the local community, state and federal agencies, and the consortium campuses.

QUALIFICATIONS: The Director should be a distinguished scientist with broad interests in the marine sciences, demonstrated excellence in teaching, and the ability to effectively lead and manage a diverse organization. Candidates must possess a PhD and be eligible for tenure.

APPLICATION: Submit a letter of interest, curriculum vitae, names of three references, and recent publications and other information as may be appropriate to: Director Search Committee, Moss Landing Marine Laboratories, 8272 Moss Landing Road, Moss Landing, CA 95039 USA. The Search Committee will begin reviewing applications December 15, 2000 and expects to make its recommendation via the MLML Governing Board to the President of San Jose State University by April 16, 2001, with an August 2001 starting date. Additional information about MLML can be found on MLML's web page: http://www.mlml.calstate.edu (Ref. #PVIN E01-027)

FACULTY POSITIONS

The Faculty of Environmental and Forest Biology is seeking **three Assistant Professors** to fill academic year, tenure-track positions at SUNY College of Environmental Science and Forestry. Candidates are expected to establish vigorous research programs, teach at graduate and undergraduate levels, advise students and contribute to public service. Teaching at Cranberry Lake Biological Station is optional.

The **Insect Ecologist** will emphasize applied ecology of insects as part of an integrated approach to conservation of biological resources, including but not limited to, the biological control of invasive insects and/or plants. Teaching opportunities include systematic entomology, insect ecology, and other courses in candidate's specialty.

The Vertebrate Conservation Biologist will work at population, community, or landscape levels or their interfaces. Taxa and research focus are open, but research interests and background should complement that of other conservation-oriented colleagues at ESF. Teaching opportunities include conservation biology, ecology, population and evolutionary biology, genetics, global environment, and others.

The **Wildlife Ecologist** will apply wildlife science toward the stewardship of vertebrate wildlife and interact with state, national, and international organizations concerned with wildlife management. Potential teaching opportunities include wildlife management, ecology, population biology, and other courses in candidate's specialty.

Requirements for all positions include a Ph.D.; teaching experience and postdoctoral experience in appropriate field is preferred. Applicants should send to the Search Chair hard copies of the curriculum vitae, graduate transcripts, separate statements of research and teaching interests, reprints of relevant publications, and should request three letters of recommendation (fax acceptable). Search Chairs: Insect Ecologist, Dr. Stephen Teale, (315) 470-6758 sateale@syr.edu. Closing date December 1, 2000. Vertebrate Conservation Biologist, Dr. William Shields, (315) 470-6771 wms1@syr.edu. Closing date November 20, 2000. Wildlife Ecologist, Dr. Guy Baldassarre, (315) 470-6739 gabaldas@syr.edu. Closing date November 20, 2000. SUNY College of Environmental Science and Forestry, 1 Forestry Drive, Syracuse, NY 13210. //www.esf.edu/. Position descriptions are available at www.esf.edu/resources/persaa/search/default.htm. SUNY ESF is an Equal Opportunity/Affirmative Action Employer; women and minorities are strongly encouraged to apply.

POSITIONS OPEN

FACULTY POSITION: PLANT MOLECULAR BIOLOGY VISITING ASSISTANT PROFESSOR: DEVELOPMENTAL GENETICS Department of Biology University of Central Florida

The Department of Biology invites applications for a faculty position in plant molecular biology (tenure track) and a Visiting Assistant Professor (nontenure track). ASSISTANT PROFESSOR (plant molecular biology) candidates must have a Ph.D. in an appropriate discipline and a minimum of three years of postdoctoral experience. Candidates using molecular techniques in plant systems to address ecological, physiological, cellular, or subcellular questions will be considered. The successful candidate will be expected to develop a nationally competitive research program supported by extramural funding, participate in train-ing of graduate students at the M.S. and Ph.D. levels, contribute to teaching in plant physiology, participate in team teaching basic biology, and develop a graduate course in area of research specialty. The position includes a competitive start-up package and salary commensurate with experience.

A Visiting Assistant Professor with a research background in Drosophila developmental genetics is sought. Minimum requirement is a Ph.D.; however, one to two years of postdoctoral experience is desirable. Salary is negotiable. Although the primary responsibility of the teaching position is for graduate and undergraduate classes in genetics, the successful candidate for this position should have strong research interests and will have the opportunity to conduct research with an active Drosophila developmental genetics group. The University of Central Florida offers a vibrant research and teaching environment and an ex-cellent benefits package. All applicants should submit curriculum vitae, a one-to-three-page statement of research interests, statement of teaching philosophy, and names of three references. Application materials should be sent to: Dr. Cathy Thaler, Chair, Plant Molecular Biology Search Committee or Dr. Laurence von Kalm, Chair, Visiting Assistant Professor Search Committee; Department of Biology, University of Central Florida, 4000 Central Florida Boulevard, Orlando, FL 32816-2368. Review of applications will begin November 17, 2000. The University of Central Florida is an Equal Opportunity/Affirmative Action Employer.

Purdue University Schools of Materials Engineering and Electrical and Computer Engineering invite applicants for the Turner Professor of Engineering. The Turner Professorship is a tenured joint appointment at the FULL PROFESSOR level in the two schools. Applicants must have an earned Doctorate degree and be recognized as a leader in some aspect of electronic materials. We are seeking applicants who wish to carry out research and teaching at the interface of materials and electronics and will bridge the disciplines involved in processing, structure, and function of electronic materials including nanoscale phenomena.

Successful candidates will also be expected to teach both undergraduate and graduate courses (especially in the individual's area of expertise), to supervise M.S. and Ph.D. projects, and to establish a strong research program. Several opportunities exist to develop multiinvestigator programs, and interest/leadership will be a factor considered.

The position is available and expected to be filled during the 2000-2001 academic year. All interested persons should submit an application prior to December 10, 2000, for full consideration. The search will continue until the position is filled.

Send a résumé and names of three references to: **Turner Professor Search Committee**

Mike Ladisch, Chairman c/o Jill Ćomer

1285 EE Building, Room 116 School of Electrical and Computer Engineering Purdue University West Lafayette, IN 47907-1285

Purdue University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF TORONTO DEPARTMENT OF GEOLOGY EARTH AND PLANETARY MATERIALS

The Department of Geology invites applications for a tenure-track position at the St. George campus in the field of earth and planetary materials. The position is at the ASSISTANT PROFESSOR level and is made available through a major endowment that has created the McRae-Quantec Chair in Geosciences, a senior position to be held by the Chair of the Department. We encourage applications from candidates in all specialities within this broad field. Postdoctoral experience will be an important asset, but applicants must be able to demonstrate their ability for independent research and a potential for collaboration with existing research programs described on our website: www.geology.utoronto.ca. In addition to establishing an internationally recognized independent research program, the successful candidate must have a strong commitment to teaching; she/he will be expected to teach upper-level undergraduate courses in fields related to their specialization as well as general introductory courses.

The Department of Geology is well equipped with analytical and experimental facilities to support Earth and planetary materials research. More information on facilities and programs is available on our Website.

Applicants should send curriculum vitae, statement of research plans, and the names of three references to: Chair, Department of Geology, University of Toronto, 22 Russell Street, Toronto, Ontario M5S 3B1 Canada by December 1, 2000. They should also arrange for their references to send supporting letters directly to the above address or by e-mail: chair@geology.utoronto.ca. The position is available July 1, 2001

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Toronto is strongly committed to diversity within its community. The University especially welcomes applications from visible minority group members, women, aboriginal persons, persons with disabilities, and others who may add to the diversity of ideas.

ASSISTANT PROFESSOR VASCULAR PLANT SYSTEMATICS PLANT BIOLOGY Arizona State University

The Department of Plant Biology invites applications for a tenure-track faculty position in the area of plant systematics at the Assistant Professor level. Preference will be given to candidates applying imaginative approaches, combining molecular techniques with monographic, developmental, evolutionary, and /or morphological studies and who have demonstrated ability to work with an interdisciplinary group of faculty. The Vascular Plant Herbarium at Arizona State University has a long history of research in the Cactaceae and other Southwestern desert plants and close connections with area botanical gardens. Current research emphases of the Herbarium include floristic studies of Arizona and research on Latin American plants. The successful candidate will be expected to develop a vigorous extramurally funded research program and contribute to teaching at the undergraduate and graduate levels, including courses in Arizona flora and the use of molecular techniques. Applicants must have a Ph.D. degree in biological sciences, postdoctoral experience, evidence of research productivity, and demonstrated potential for excellence in teaching. Additional information about the Department and this position can be found at website: http://lifesciences.asu.edu/plantbiology/. The position is scheduled to begin August 16, 2001, pending final budgetary approval. Applicants must send curriculum vitae; statement of research interests and teaching philosophy; and the names, addresses, and e-mail addresses (if possible) of four references to: Chair, Plant Systematics Search Committee, Department of Plant Biology, Arizona State University, Box 871601, Tempe, AZ 85287-1601 by November 15, 2000. Arizona State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOCHEMISTRY INSTITUTE OF BIOCHEMISTRY **Carleton University**

Applications are invited for a full-time tenure-track position at the ASSISTANT or ASSOCIATE PRO-FESSOR level in the Institute of Biochemistry to commence January 1, 2001. Candidates should have demonstrated research ability in the field of biochemistry. Areas of particular interest include protein chemistry, enzyme structure and function, toxicology, biosynthetic pathways, and bioinformatics including the use of computational methods for estimations of structure-biological activity, proteomics, and genomics. The successful candidate will be expected to build a strong research program, to be active in graduate student supervision, and to teach and develop courses at the graduate and senior undergraduate levels. The Institute of Biochemistry has a strong expertise in environmental molecular biology, microbiology, membrane biochemistry, metabolic pathways, stress tolerance, toxicology, organic chemistry, and computational methods. Collaborations with medical research facilities and the National Research Council as well as government department research institutes are common. Candidates must hold a Doctoral degree. Applications, with curriculum vitae and the names of three references, should be sent by January 2, 2001, to:

Dr. Peter Buist Director, Institute of Biochemistry **Carleton University** 1125 Colonel By Drive Ottawa, ON K1S 5B6 Canada

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Carleton University is committed to Equality of Employment for women, aboriginal peoples, visible minorities, and persons with disabilities. Persons from these groups are encouraged to apply. The position is subject to budgetary approval

ASSISTANT/ASSOCIATE PROFESSOR

The Department of Surgery at Wright State University School of Medicine is seeking a Basic Scientist to assist in the development of a research division within the Department. This is a full-time, 12-month faculty position. Candidates must possess a Ph.D. degree plus two or more years of postdoctoral training. Candidates for Associate Professor level must have external grant funding. Assistant Professor-level candidates will be expected to develop an extramurally funded, independent research program. Laboratory facilities and a second faculty appointment will accompany the primary appointment in surgery. Teaching responsibilities will include undergraduate, graduate, and medical student education in the secondary department. Initial appointment is for three years with subsequent continuances at five-year intervals. Research areas of interest include trauma, vascular disease, surgical infections, and burns. Initial consideration will begin December 1, 2000, but the position will remain open until filled.

Applicants should submit recent curriculum vitae and three letters of reference to: James B. Peoples, M.D., Elizabeth Berry Gray Professor and Chair, Wright State University Department of Surgery, Suite 7000 CHE, One Wyoming Street, Dayton, OH 45409 Inquiries can be directed to e-mail: james.peoples@wright.edu; Telephone: 937-208-Wright State University is an Affirmative Action/ 2177 Equal Opportunity Employer.

FACULTY POSITIONS: PHARMACOLOGY COLLEGE OF PHARMACY LONG ISLAND UNIVERSITY

The College is seeking qualified individuals (Ph.D.) for several full-time, tenure-track faculty positions in medicinal chemistry/pharmacology beginning January 2001. Please send curriculum vitae and the names of three references to: Ravindra Raje, Ph.D., Director, PTM Division, College of Pharmacy, 75 De-Kalb Avenue, Room L-32, Brooklyn, NY 11201. E-mail: rraje@liu.edu.



COR Therapeutics, Inc. is a publicly-held biopharmaceutical company focused on the discovery, development, and commercialization of novel therapeutics for the treatment and prevention of severe cardiovascular diseases. We currently have multiple opportunities in our South San Francisco facility for dedicated scientific professionals to join our multipliciplinary R&D team.

Scientist

Platelet Biology

In this key role, you will elucidate mechanism of platelet-mediated inflammation to discover novel antiinflammatory drug targets. The position requires a PhD or MD in a biological science with demonstrated productivity in Cellular and Molecular Biology resulting from postdoctoral training. Integrin biology experience preferred. (Job# A066-SCI)

Scientist

Vascular Biology

Utilizing expression profiling and functional genomics, you will investigate the role of receptor tyrosine kinase signaling in cardiovascular diseases, including restenosis, transplant vasculopathy and atherosclerosis. The position requires a PhD or MD and 3-5 years of postdoctoral training. A strong background in vascular biology, molecular biology, signal transduction, and bioinformatics preferred. (Job# A044-SCI)

Postdoctoral Fellowships

New Program

COR Therapeutics is proud to announce a new program to provide training in basic biomedical research within the setting of active, innovative biotechnology and drug discovery programs. Fellowships are available in the following areas:

Platelet Biology/Thrombosis Vascular Biology Functional Genomics Signal Transduction Cancer Biology

Applicants should have a PhD or MD with training in Molecular Biology, Biochemistry and/or Cell Biology.

Research Associate

Drug Metabolism & Pharmacokinetics

You will develop and validate analytical methods and in vitro/in vivo pharmacokinetic models; analyze samples supporting research, development, and clinical efforts; prepare technical reports for internal use and submission to regulatory agencies; troubleshoot existing methods and systems; and review laboratory data. Qualified candidates will possess a BS in Chemistry, Biochemistry or related field (MS is preferred); 5+ years' experience in pharmaceutical industry; experience with lab automation equipment and other analytical methodology; familiarity with pharmacokinetics, drug metabolism, and/or pharmacology; and skills in development and validation of bioanalytical methods. LC/MS/MS experience preferred. (Job# A051-SCI)

COR Therapeutics, Inc. offers competitive salaries and benefits, and attractive equity positions. To apply, please send resume to:

COR Therapeutics, Inc. HR Department Attn: (Job #) 256 East Grand Avenue South San Francisco, CA 94080 Fax: (650) 615-9639 Email: hr@corr.com COR is an equal opportunity employer.

www.corr.com



THYMIC REPERTOIRE GENERATION INFECTIOUS DISEASE/CANCER VACCINES

The **Molecular Immunology Foundation** in conjunction with **Harvard Medical School** and **Dana-Farber Cancer Institute** is developing a new form of vaccination technology through analysis of the basis of immune recognition. Recent advances in structural biology, molecular immunology, and functional genomics/proteomics offer the potential to combat deadly infectious agents and cancers by altering the thymic repertoire. Outstanding PhD scientists from the postdoctoral to independent senior levels are needed with expertise in the following areas:



Cellular Immunology: murine immunology with transgenic, knockout and normal mice, functional analysis in vitro and in vivo, FACS analysis, FTOC, animal breeding, genotyping

> **Molecular Modeling:** protein structure, 3D protein comparison, homology model building, unix-based systems and msi-based computers

> **Informatics:** genomic analysis to probe epitope determination, threading analysis, development of search engine motifs, mass spectrometry data interfacing with genomic libraries, new data bases

Prokaryotic

Expression/Biochemistry: molecular cloning, pcr, protein expression, HPLC and FPLC, affinity purification, SDS-PAGE, protein assays

Mass Spectroscopy: protein MS, including maldi-tof and ion trap to identify peptides bound to defined MHC molecules; ms data base programs

Qualified applicants with 3-5 years of experience send resume to:

Professor Ellis L. Reinherz c/o Dana-Farber Cancer Institute 44 Binney Street Boston, MA 02115

Fax: 617.632.3351

E-mail: ellis_reinherz@dfci.harvard.edu

POSITIONS OPEN

ASSISTANT PROFESSOR DEVELOPMENTAL BIOLOGY

The Biology Department at Bradley University seeks applications for a TENURE-TRACK FAC-ULTY POSITION in developmental biology to begin August 20, 2001. Duties will include teaching genetics at the introductory or general education level, developing or participating in one or more courses at the upper level, maintaining an active research program, and involving undergraduates in research. Typical teaching loads are nine contact hours per semester plus supervising undergraduate research. Qualifications include a Ph.D., one year of postdoctoral experience, and a demonstrated commitment to undergraduate teaching and research. More information is available at website: http://www.bradley.edu/ personnel/. For full consideration, send letter of interest, curriculum vitae, transcripts, statements of teaching and research interests, and have three letters of reference sent by November 17, 2000, to: Dr. Kelly McConnaughay, Department of Biology, Bradley University, Peoria, IL 61625. Applicant screening will begin November 1, 2000, and will continue until the position is filled. Bradley University is an Equal Employment Opportunity / Affirmative Action Employer and encourages applications from underrepresented groups.

PLANT BIOLOGY FACULTY POSITION AT STANFORD UNIVERSITY

The Department of Biological Sciences at Stanford University seeks applicants for a tenure-track faculty appointment in plant biology at the level of **ASSIST**-**ANT PROFESSOR**. We are particularly searching for an individual who employs molecular genetics, cell biology, biochemistry, or biophysics to study fundamental processes of plant development or plant function. The successful applicant is expected to conduct a vigorous research program and to contribute to the teaching of graduate and undergraduate students.

Applicants should send a letter of application (include e-mail address and FAX number), curriculum vitae, bibliography, names and e-mail addresses of three references, and statements of research and teaching interests and teaching experience to:

Plant Biology Search Committee Department of Biological Sciences 371 Serra Mall Stanford University Stanford, CA 94305-5020

To receive full consideration, materials should be received by December 1, 2000. The term of appointment would begin September 1, 2001. Stanford University is an Equal Opportunity/Affirmative Action Employer; women and minority candidates are encouraged to apply.

DEVELOPMENTAL BIOLOGIST/ GENETICIST

The Trinity College Department of Biology invites applications for a tenure-track position at the level of ASSISTANT PROFESSOR beginning in the fall term 2001. Applicants must have a Ph.D. degree; postdoctoral experience is preferred. Teaching responsibilities include a course in developmental biology with laboratory, a course in genetics with laboratory, participation in a team-taught introductory biology course, and alternate-year instruction of a course for nonmajors. The candidate will be expected to initiate and pursue a program of independent research in which upper-level undergraduates may participate; excellent facilities and start-up funds are available. Send curriculum vitae, graduate and undergraduate transcripts, a statement of research plans, course descriptions/syllabi for a course in developmental biology and a course in genetics, and three letters of recommendation to: Professor Craig Schneider, Chair, Department of Biology, Trinity College, Hartford, CT 06106. Evaluation of applications will continue until the position is filled. Trinity College is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from minorities and women.

POSITIONS OPEN

PROTEIN STRUCTURAL BIOLOGY Department of Biochemistry and Molecular Biology Michigan State University

The Department of Biochemistry and Molecular Biology seeks applications for a tenure-track position at the ASSISTANT or ASSOCIATE PROFES-SOR level. Applicants at the Assistant Professor level should have postdoctoral experience that demonstrates productivity and outstanding potential for independent research applying modern biophysical and computational methodology in the area of protein structure, function, and design. The successful candidate will complement and enhance existing expertise in these areas. Applicants at the Associate Professor level should have already demonstrated superior accomplishment in protein structural research. The Department has a large faculty conducting research on many aspects of contemporary biochemistry and molecular biology with other research emphases in the areas of plant biochemistry and the biochemistry of the cell nucleus. This provides both a stimulating environment and opportunities for research collaboration. The Department occupies a building with wellequipped research and teaching laboratories and support facilities and has vigorous undergraduate, graduate, and postdoctoral training programs. Further information about the position and the Department, including research activities and interdisciplinary interactions with faculty in other departments/units, is available at website: http://www.bch.msu.edu.

Applicants should submit curriculum vitae and a description of research accomplishments and future interests and have three letters of recommendation sent on their behalf to: Dr. William L. Smith, Chairperson, Department of Biochemistry and Molecular Biology, Box PSWWW, Michigan State University, East Lansing, MI 48824-1319. To ensure consideration, applications and supporting documents must be received by December 8, 2000.

Michigan State University is an Equal Opportunity/Affirmative Action Employer. Persons with disabilities have the right to request and receive reasonable accommodation. The faculty has explicitly endorsed efforts to increase the diversity of its ranks. Accordingly, candidates from groups currently underrepresented in academic science are encouraged to apply.

The Department of Biology at the University of Louisville, website: http://www.louisville.edu/ a-s/biology, invites applications for an ASSISTANT PROFESSOR position in the area of plant biology to begin fall 2001. Ph.D. or equivalent required. Successful candidates are expected to contribute to both the undergraduate and M.S. and Ph.D. training programs. Preference will be given to candidates with an excellent record of research productivity as evidenced by publications in leading journals. The use of physiological, molecular/genetic, and ecological approaches in any area of plant biology will be considered. Applicants should submit curriculum vitae, statements of research and teaching interests, up to three reprints, and contact information for four references to: Dr. Arnold J. Karpoff, Department of Biology, University of Louisville, Louisville, KY 40292. Review of applications will begin immediately and will continue until the position is filled. The University of Louisville is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

Department of Psychology, Princeton University, has four FACULTY POSITIONS available at the junior/senior levels in the area of cognitive psychology, cognitive neuroscience, and systems neuroscience. Strong applicants with a focus at any point along this continuum are encouraged to apply. Positions carry an optional affiliation with the newly formed Center for the Study of Brain, Mind, and Behavior. All positions are immediately available and will remain opened until filled. Applicants should submit curriculum vitae and three letters of reference to: Search Committee SBV4, Department of Psychology, Princeton University, Green Hall, Princeton, NJ 08544-1010. Princeton University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION Department of Structural and Cellular Biology and the Tulane Cancer Center

The Department of Structural and Cellular Biology and the Tulane Cancer Center are seeking applications for one tenure-track appointment at the ASSIST-ANT PROFESSOR level. Candidates must have an earned Doctorate in a relevant field of study and at least two years of productive postdoctoral research experience. The candidate must have the potential for competing for extramural research funding, and an active, transferable grant is highly desirable. Preferred areas of research consistent with the Cancer Center's programmatic development are (1) cell signaling and the hormonal control of cell proliferation and differentiation of breast, ovarian, and/or prostate cancer; and (2) molecular therapeutics of breast, ovarian, and/ or prostate cancer. Modern laboratory space will be provided in a growing cancer center. Successful candidates will be expected to participate in both graduate and medical student teaching. Prior experience in teaching gross anatomy would be helpful but not essential for the candidate willing to learn and teach gross anatomy. Submit applications including curriculum vitae, summary of research interests, summary of teaching philosophies, funding history, and names of three references to: Dr. Steven M. Hill, Department of Structural and Cellular Biology, SL49, Tulane University Health Sciences Center, 1430 Tulane Avenue, New Orleans, LA 70112 by November 22, 2000. Tulane University is an Affirmative Action/Equal Opportunity Employer.

BACTERIOLOGIST: ASSISTANT/ASSOCI-ATE PROFESSOR. The Department of Biology at the University of Louisville (website: http://www. louisville.edu/a-s/biology) invites applications for a tenure-track position in the area of bacteriology to begin fall 2001. Ph.D. or equivalent required. The successful candidate is expected to contribute to both undergraduate and graduate training programs in the Department and have an excellent record of extramurally funded research productivity as well as other professional activities. Candidates using physiological, molecular genetic, or molecular evolutionary approaches in any area of bacteriology will be considered. The current research addresses the molecular evolution of genes involved in nitrification, resistance to antibiotics and oxidative stress, bioremediation, and the molecular characterization of plant-microbe interactions. Applicants should submit curriculum vitae, statements of research and teaching interests, up to three recent reprints, and contact information for four references to: Dr. Martin Klotz, Department of Biology, University of Louisville, Louisville, KY 40292. Review of complete applications will begin immediately and continue until the position is filled. The University of Louisville is an Affirmative Action/ Equal Opportunity Employer. Women and minorities are encouraged to apply.

The Center for NMR Research and Development at the University of Alabama at Birmingham is seeking applications for two open-rank FACULTY POSI-TIONS. Applicants are expected to develop an independent research program in the area of whole body in *vivo* NMR spectroscopy and participate in an existing 4.1 T whole body NMR facility supported by NIH through the NCRR (National Center for Research Resources). The successful candidates will be expected to develop an independent research program, fo-cusing on ¹H, ³¹P, and ¹³C NMR spectroscopy of human organs and tissues, in particular brain and heart. Candidates with experience in developing and implementing novel experimental methods will be given preference. Excellent laboratory space and generous start-up funds are available. Please send applications with curriculum vitae, a brief statement of research interest, and three letters of recommendation to: Jan A. den Hollander, The University of Ala-bama at Birmingham, CNIR 140, 828 Eighth Court South, Birmingham, AL 35294-4470.

The University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.

Setting Precedence Everyday.

Provost

✓ Purdue University invites nominations and applications for the position of Provost. As chief academic officer of the University, the Provost has key responsibilities for helping Purdue achieve its aspirations for continued excellence. The Provost reports to the President of the University.

One of the leading public universities in the nation, Purdue University is a comprehensive educational and research institution with its main campus in West Lafayette, Indiana - a community of 100,000 people known for its exceptional quality of life - and three regional campuses in Fort Wayne, Hammond, and Westville. Purdue has 67,000 students; 15,000 employees statewide, including 2,200 faculty; and a budget in excess of \$1.1 billion. The University offers undergraduate, graduate, and professional degrees through its ten schools. Further information about Purdue is available at our Web site: www.purdue.edu.

The Provost works closely with the President in providing overall leadership for the University. The Provost directs the University's academic programs in teaching, research, and service and oversees the University Libraries, the University Computing Center, Student Services, and International Programs. Recruitment, hiring, and review of deans and heads are also among the Provost's responsibilities.

The successful applicant must have a distinguished record of academic accomplishments commensurate with that of a tenured professor in one of the University's departments; must have an understanding of the broad spectrum of academic programs in a research university like Purdue; must have a strong commitment to academic excellence and high quality programs of teaching, research, and service; and must have a commitment to the land-grant philosophy and the principles of diversity. Administrative experience in a complex academic organization and experience in strategic planning, program development, and fund-raising are preferred.

Purdue University is an equal opportunity/ equal access/affirmative action employer and encourages the nomination and application of women and minority candidates.

Dean

School of Natural Resources and Environment



The University of Michigan-Ann Arbor

The University of Michigan invites applications and nominations for the position of Dean of the School of Natural Resources and Environment. The School's over-arching objective is to contribute to the protection of the earth's resources and the achievement of a sustainable society. Through research and teaching, faculty and students of the School are devoted to generating knowledge and developing policies, techniques, and skills to manage and conserve environmental resources to meet the full range of human needs on a sustainable basis. We believe this is best accomplished through the joining of multiple disciplines and approaches in a creative research and teaching atmosphere.

Faculty and students are drawn from an unusually wide range of disciplinary backgrounds and professional experiences, representing the natural and social sciences, and numerous professional fields. Research activities take place in varied settings, from wilderness to urban, regionally and internationally, and involve diverse partners, from private sector to governmental and non-profit. The School provides instruction through undergraduate, masters, and doctoral programs.

The Dean is the chief academic and administrative officer of the School and reports directly to the Provost and Executive Vice President for Academic Affairs. The Dean provides leadership for the highest quality of scholarly achievements and academic program planning and implementation. Candidates should have a demonstrated commitment to positive action that supports those educational goals associated with a diverse student body and faculty. The Dean is expected to represent the School effectively to internal and external constituencies and to seek and secure funds from a variety of sources. Qualifications should be appropriate to assume a tenured faculty position at the University of Michigan. We seek highly qualified candidates from professional as well as academic backgrounds.

Nominations and applications will be reviewed continuously beginning **October 1, 2000**, and will be accepted until the position is filled. The University's dedication to excellence is complemented by its commitment to building a culturally diverse academic community. Individuals from under-represented groups are encouraged to apply.

Correspondence should be addressed to:

J. David Allan Chair, School of Natural Resources and Environment Search Advisory Committee The University of Michigan 3074 Fleming Building Ann Arbor, MI 48109-1340

E-mail may be addressed to **snredeansearch.chair@umich.edu.** The University has retained the services of Judith Auerbach of Auerbach Associates to assist the Search Advisory Committee in this process. Telephone: (617) 451-0095; Fax: (617) 451-5199. E-mail may be addressed to **jaa@auerbach-assc.com**.

The University of Michigan treats inquiries, nominations, and applications for this position and others in a confidential manner. Applicants should confirm in their letters that they wish their applications to be kept confidential.

A Non-Discriminatory, Affirmative Action Employer

To receive full consideration, applications should be received by October 30, 2000. Applications should include a letter addressing the applicant's interest. relevant experience, and qualifications: and current Send nominations or applications to: Dr. Richard F. Borch, Chair, Provost Search Committee, Office of the President, Purdue University, 1031 Hoyde Hall, Room 200, West afayette, Indiana, 47907-1031.

POSITIONS OPEN

CONTINUATION OF SEARCH DIRECTOR OF THE CAROLINA NANOCENTER

The University of South Carolina invites applications for a position as Director of the Carolina Nano-Center. Funding in excess of \$10 million is anticipated for this center. The Director will coordinate the ongoing research across campus, develop new directions in the broadly defined area of nanoscience, and will be expected to represent the Center to external agencies and sponsors. The Director is expected to maintain a vigorous research program at the graduate level and possess the administrative and management skills commensurate with the Directorship and will report directly to the Vice President for Research. Candidates should be qualified for appointment at the tenured FULL PROFESSOR level. Applicants should submit complete curriculum vitae, publication list, and statement of research interests and accomplishments to: Chair of the Nanoscience Search Committee, Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC 29208. Further information is available at websites: http://www.chem.sc.edu and http://epscor.cosm.sc.edu/nanoscience/. Evaluation of applicants will begin October 20, 2000, and will continue until the position is filled. The University of South Carolina is an Equal Opportunity/ Affirmative Action Employer and encourages applications from minorities and women

The Lake Forest College Biology Department invites applications for a tenure-track ASSISTANT PROFESSOR position. We are seeking a CELL BI-OLOGIST who uses molecular or genomic approaches. Postdoctoral experience is required. Candidates will be expected to participate in teaching at all levels of the undergraduate curriculum and to develop an active research program leading to publication with undergraduates. Start-up funds are available. Teaching responsibilities include the core Course in cell and molecular biology, as well as upper-level and seminar courses in candidate's area of interest, and should complement the Department's existing strengths. Lake Forest College is an undergraduate liberal arts institution located 30 miles north of Chicago, with small class sizes and state-of-the-art teaching and research facilities. With students from approximately 45 states and 45 countries. Lake Forest College embraces diversity throughout all its constituencies. Please send curriculum vitae, statement of teaching interests/philosophy, research plan, and have letters sent from three references to: **Dr. Karen** Kirk, Department of Biology, Lake Forest College, 555 North Sheridan Road, Lake Forest, IL 60045. Review of applications will begin November 7, 2000. We encourage applications from women and from members of historically underrepresented minority groups

The University of California, San Diego, Department of Chemistry and Biochemistry invites applications for a tenure-track/tenured faculty position in environmental chemistry (in the broadest sense) with a strong preference for candidates at the ASSIST-ANT PROFESSOR level. All research areas of chemistry or biochemistry focusing on environmental problems will be considered. The candidate will be expected to teach environmental chemistry in the Department's newly established major in environmental chemistry. Applicants must have a Ph.D. or equivalent degree in a field related to environmental chemistry. Candidates should send curriculum vitae, list of publications, a statement of teaching experience, and a detailed research proposal to: Chair, Environmental Search Committee 3-790S, University of California, San Diego, Department of Chemistry and Biochemistry, La Jolla, CA 92093-0332. Candidates should also arrange to have three letters of reference sent under separate cover. Review of applications will begin December 1, 2000, and continue until the position is filled. Salary to be commensurate with qualifications and based on the University of California salary scale. University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

POSITIONS OPEN

DIRECTOR ENVIRONMENTAL SCIENCE AND PUBLIC POLICY George Mason University

The Environmental Science and Public Policy Program of George Mason University invites applications for the position of Director of the Environmental Science and Public Policy Program (ESPP). ESPP is an interdisciplinary graduate program with about 130 Ph.D. and 50 M.S. students. More than 50 faculty serve on graduate committees. Starting in fall 2001 the program will become a free-standing unit within the College of Arts and Sciences. A core ESPP faculty will be established, and the Director will report directly to the Dean. The new unit will also house an undergraduate general education course and graduate and undergraduate certificate programs in environmental management. To provide dynamic leadership to the program in its new role, we seek a Director who has a distinguished record of publication and funding, significant administrative experience, and a strong interest in interdisciplinary program development. Ph.D. required. Field of specialization and discipline are open.

George Mason is a state university located about 15 miles from Washington, D.C., in the midst of one of the largest concentrations of high technology companies in the nation. Candidates should submit a letter of interest and curriculum vitae to: Rick Diecchio, ESPP Director, Search Committee, Mail Stop 1E2, George Mason University, Fairfax, VA 22030-4444. We will begin screening applicants on November 10, 2000, and will continue until the position is filled. For further information on ESPP, please visit our website: www.gmu.cdu/~espp. George Mason is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR MICROBIAL ECOLOGIST UNIVERSITY OF DENVER

The Department of Biological Sciences, University of Denver, invites applications for a tenure-track position at the Assistant Professor level to begin September 1, 2001. We seek a Microbial Ecologist, especially one working with microbial populations, communities, and/or ecosystems. The successful candidate will have a Ph.D. and postdoctoral experience in appropriate fields, will develop an extramurally funded research program, will be expected to supervise M.S. and Ph.D. students, and will teach undergraduate and graduate courses in areas of specialty. Submit curriculum vitae, two recent publications, three letters of recommendation and statements of (1) teaching philosophy and (2) research interests to: Dr. Joseph K. Angleson, Chair, Microbial Ecologist Search Committee, Department of Biological Sciences, University of Denver, Denver, CO 80208. Applications should be received by November 15, 2000. Additional information about the Department of Biological Sciences can be found at website: http:// www.du.edu/biology/. The University of Denver is an Equal Opportunity/Affirmative Action Employer.

EVOLUTIONARY BIOLOGY University of North Carolina, Chapel Hill

The Department of Biology seeks a tenure-track ASSISTANT PROFESSOR in any area of evolutionary biology. Applicants should send (1) curriculum vitae, (2) copies of no more than three published and in-press papers, (3) a description of current and future research, and (4) a summary of teaching interests and experience. Have four letters of recommendation sent to: David Pfennig, Chair, Evolutionary Biology Search Committee, Department of Biology, CB#3280, Coker Hall, University of North Carolina, Chapel Hill, NC 27599 U.S.A. Closing date: open until filled, but all application materials, including letters of recommendation, must be received before November 17, 2000, to assure full consideration. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

POSITIONS OPEN

GENETICS

The Department of Biology at Rhodes College seeks qualified applicants for a tenure-track **ASSIST**-**ANT PROFESSOR** position to begin in August of 2001. Candidates must have a Ph.D., a strong interest in teaching at the undergraduate level, and the ability to maintain an active research program in which undergraduate students can participate. Teaching responsibilities will include a course in genetics as well as participation in the introductory biology sequence. The applicants' area of research must be in genetics, with preference being given to persons whose research is in a microbial system and who can teach a course in microbiology.

Rhodes College is a highly selective, nationally ranked undergraduate college of the liberal arts and sciences whose location in metropolitan Memphis, Tennessee, provides the cultural and social amenities of a city of one million residents and opportunities for collaboration with world-class centers of biomedical research.

Applicants should submit a letter of application, curriculum vitae, transcripts of graduate coursework, representative reprints, statements of teaching philosophy and research goals, and three letters of recommendation by November 15, 2000, to:

Dr. Gary J. Lindquester Chair of the Search Committee Department of Biology Rhodes College Memphis, TN 38112

Rhodes welcomes applications for all of its faculty positions from all persons and does not discriminate on the basis of gender, race, color, age, religion, disability, or national and ethnic origin.

FACULTY POSITION IN MECHANISMS OF BEHAVIOR THE UNIVERSITY OF FLORIDA

The Department of Zoology at the University of Florida invite applications for a tenure-track ASSIST-ANT PROFESSOR position beginning August 2001. We seek a colleague who uses an integrative approach to study mechanisms of behavior and who will strengthen our programs in ecology, evolution, and physiology. Possible areas of research include neuroethology and the sensory and endocrine basis of animal behavior. This colleague will be expected to establish an internationally recognized, externally funded research program, supervise graduate students, and teach at the graduate and undergraduate levels. Please submit curriculum vitae, recent reprints, separate statements of research and teaching interests, and have three letters of reference sent to: Mechanisms of Behavior Search, Dr. Douglas Levey, Department of Zoology, P.O. Box 118525, University of Florida, Gainesville, FL 32611-8525. Applications must be received by December 1, 2000. For more information, see website: http://www.zoo. ufl.edu or e-mail: mechbehav@zoo.ufl.edu. The University of Florida is an Equal Opportunity Employer, and we encourage applications from minorities and women.

Oberlin College: The Department of Chemistry invites applications for an open-rank, tenure-track FACULTY POSITION in biochemistry or physical chemistry beginning fall 2001. Applicants should have a Ph.D. in biochemistry or physical chemistry. The appointee will teach a course in her/his specialty, general chemistry, a nonmajors course, and be expected to establish a vigorous undergraduate research program, preferably in a biologically related area. Oberlin College is the undergraduate origin of more Ph.D.s than any other liberal arts college. See the Departmental website: www.oberlin.edu/chem for additional information. Applicants should submit curriculum vitae, academic transcripts, a description of their proposed research program, and arrange to have three letters of recommendation sent to: Michael W. Nee, Chair, Chemistry Department, Oberlin College, Oberlin, OH 44074. Review of applications will begin October 25, 2000, and continue until the position is filled. Oberlin College is an Affirmative Action/Equal Opportunity Employer.

PENNSTATE

Vice President for RESEARCH

Environmental Consortium Director

The Pennsylvania State University seeks applications and nominations for an innovative Director of the newly formed Environmental Consortium. The Environmental Consortium was established following a year-long strategic analysis sponsored by the Office of the University President and carried out by a multidisciplinary team of faculty from the biological, physical, and social sciences. A major goal of this initiative is to improve our understanding of the biological and physical environment and its impact on individual and social well-being. We also seek to improve our understanding of the relationships between human society and the environment, and develop innovative approaches to achieving societal goals for the environment. The objectives of the Consortium are: to increase the visibility of Penn State's environmental research and education programs, to facilitate the ability of faculty and students to address opportunities that require interdisciplinary interaction and collaboration, and to engender new research and education directions. State-of-the-art instrumentation is available across the full spectrum of environmental science and engineering, ranging from capabilities to probe biological, biochemical, and biogeochemical processes and properties at the fundamental molecular level to state-of-the-art computational facilities for modeling human impacts of environmental change or for simulating changes in the earth system. In conjunction with the Life Science Consortium and the Materials Research Institute at Penn State, opportunities exist for utilizing an animal transgenic facility and core facilities in high throughput DNA sequencing and proteomics, structural biology and computational science, mass spectrometry, and electron microscopy. As a part of this new initiative, the University has committed funds to recruit five senior faculty and twenty junior faculty into key disciplines of the Consortium in a university-wide effort to increase the visibility and stature of an already strong, diverse program of environmental research and education.

The Director of the Consortium reports directly to the Office of the Vice President for Research, which oversees a research activity exceeding \$440 million annually. The responsibilities of the Director include: (1) administering the Environmental Resources Research Institute, a core multidisciplinary faculty research unit with a research contract base of approximately \$30 million; (2) proactively fostering collaboration among the core colleges and developing policies and incentives for active faculty participation, which build an atmosphere of inclusion of diverse perspectives; (3) chairing the faculty steering committee, which oversees all Consortium activities and provides leadership, direction, and vision; (4) identifying funding opportunities and coordinating research programs; (5) coordinating undergraduate and graduate programs in environmental studies across colleges; and (6) serving as liaison between the University's environmental programs and state, national, and international environmental organizations. The Director will contribute to and promote existing strengths at Penn State in the areas of air quality, biodiversity and ecosystems, coastal and marine environments, global change, health and the environment, industrial ecology and green engineering, natural disaster impact reduction, resource use and management, toxic substances/hazardous and solid wastes and water resources.

Candidates must have a Ph.D. or equivalent degree in one of the environmental science or engineering disciplines and must have credentials appropriate for a tenured professor in an appropriate college. The successful candidate will be recognized as an international leader in environmental sciences in terms of scientific accomplishments and vision; possess leadership skills necessary to advance ongoing and new initiatives in research, teaching, and outreach in environmental sciences and engineering; and have an appreciation for the academic environment and our land grant mission.

Review of applications will begin on November 15, 2000, and will continue until the position is filled. Nominations may be sent via e-mail to vxi2@psu.edu. Applicants should send a letter expressing an interest in this position with a detailed visionary statement, a resume or curriculum vitae, and the names, addresses, telephone numbers, and e-mail addresses of four references on a computer diskette or via e-mail attachment to:

C. Channa Reddy, Chair Search Committee for Environmental Consortium Director The Pennsylvania State University 304 Old Main University Park, Pa 16802 E-mail: vxi2@psu.edu

Interested individuals are invited to visit the following web site for more information: www.research.psu.edu/environment

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workplace.

An Equal Opportunity University

POSITIONS OPEN

DEVELOPMENTAL NEUROBIOLOGIST TENURED FACULTY POSITION Emory University School of Medicine

The Department of Cell Biology invites applications from established Developmental Neurobiologists for a tenured faculty position at the ASSOCI-ATE or FULL PROFESSOR level. We are particularly interested in candidates using a genetic model system, but people in all contemporary areas of developmental neurobiology will be considered. Six new investigators, including a new Chair, have joined the Cell Biology Department within the past four years. The Department is also part of an extensive network of Emory Neuroscientists. In the fall of 2001, Cell Biology and several other basic science departments will relocate into a new research building with stateof-the-art facilities. For more specific questions, contact us at e-mail: search@cellbio.emory.edu. Interviews will be held beginning in January 2001. Interested applicants should send their curriculum vitae, a brief description of their future plans, the names and address of three references, and representative reprints to: Kevin Moses, Ph.D., Chair, Faculty Search Committee, Department of Cell Biology, Emory University School of Medicine, 1648 Pierce Drive, Atlanta, GA 30322-3030.

Equal Opportunity/Affirmative Action Employer. Women and members of underrepresented racial and ethnic groups are encouraged to apply.

BASIC VISION SCIENTISTS AND CLINICIAN-SCIENTISTS

The New England Eye Center, Tufts University School of Medicine, seeks to fill one to two FACUL-TY POSITIONS within its Vision Research Laboratories (website: http://www.neec.com). Candi-dates must have a Ph.D., M.D., O.D., or equivalent. Appointment will be considered at all faculty ranks. A requirement for this position is an established and scientifically excellent research program. All vision science research concentrations are appropriate. A highly competitive salary, start-up package, and research space allocation are offered, with potential for expansion. Excellent collaborative opportunity exists through the Tufts Center for Vision Research comprising 27 vision scientists from six different departments on the Tufts health sciences campus (website: http://www.tcvr.org). Review of applicants will continue on a rolling basis until the position(s) is filled. Please send curriculum vitae with a cover letter describing objectives of your position search, research interests, and the names of three references to: Dr. M. Elizabeth Fini, Director, Vision Research Laboratories, New England Eye Center, Tufts University School of Medicine, 750 Washington Street, Box 450, Boston, MA 02111. E-mail applications are strongly encouraged (e-mail: efini@lifespan.org).

RESEARCH FACULTY

The Department of Physiology and Cell Biology at University of Nevada School of Medicine is seeking Research Faculty to conduct investigations supported by federally funded and/or agency-funded grants into the ionic basis of rhythmicity in smooth muscles, neural regulation of smooth muscles, endothelium-dependent regulation of vascular smooth muscles, biochemical and molecular biological studies of phosphatases and their substrates, ionic mechanisms in cardiac muscles, development of excitation and contraction mechanisms in smooth and cardiac muscles, or developmental neurobiology. Various molecular, biochemical, electrophysiological, and imaging techniques are utilized in these studies. Requires Ph.D., M.D., or equivalent degree in medical sciences. Experience with smooth muscle physiology, molecular biology, biochemistry, biophysics, electrophysiology, or morphological techniques required.

Send curriculum vitae and three references to: Kenton Sanders, Ph.D., Department of Physiology and Cell Biology/352, University of Nevada School of Medicine, Reno, NV 89557. Review of applications will begin November 1, 2000. Applications will be accepted until July 1, 2001. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS IN CANCER BIOLOGY AND MOLECULAR BIOLOGY

The Department of Microbiology and Molecular Cell Biology of Eastern Virginia Medical School is seeking qualified applicants for full-time academic positions at the rank of ASSISTANT or ASSOCIATE PROFESSOR. A Ph.D., M.D., or M.D./Ph.D. degree or equivalent is required. Applicants must demonstrate a record of publication, evidence of the ability to obtain extramural funding, and evidence of teaching experience commensurate with their professional experience. Desired areas of emphasis include signal transduction, gene regulation, molecular pathogenesis, prostate and breast cancer, viral oncology, immunotherapy, gene therapy, proteomics, and innovative use of animal models to investigate mechanisms of cancer or CMV and/or retroviral infections. Successful candidates are expected to develop and maintain a productive, extramurally funded research program; be willing to develop collaborations with incumbent faculty and basic science focal research programs; and to participate in medical and graduate student teaching. These are tenure-track positions with attractive start-up funds, excellent laboratory facilities, and competitive 100% base salaries. Please send curriculum vitae, a brief statement of major academic/research accomplishments, and have four letters of reference sent to: Dr. George L. Wright, Jr., Ph.D., Department of Microbiology and Molecular Cell Biology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501-1980. É-mail: wrightgl@evms.edu. For more information, see our website: http://www.evms. edu/micro/index.html. Review of applications will commence immediately and they will be accepted through January 15, 2001. Eastern Virginia Medical School is an Equal Opportunity / Affirmative Action Employer.

TWO FACULTY POSITIONS IN CELL BIOLOGY JOHNS HOPKINS SCHOOL OF MEDICINE

Applicants are invited to apply for two tenure-track faculty positions at the **ASSISTANT PROFESSOR** level in the Department of Cell Biology and Anatomy. Applicants at senior levels will also be considered. We seek outstanding individuals who are addressing fundamental problems in cell biology or development using genetic, molecular, biochemical, and cellular approaches. Candidates should have a Ph.D. or M.D., postdoctoral experience, and a strong publication record. The successful candidate is expected to develop an independent, exciting research program and to display a commitment to excellence in teaching by participating in an interdepartmental graduate program and medical student teaching. By November 30, 2000, applicants should submit curriculum vitae; summary of research accomplishments; a two-page statement of research plans; reprints of major publications; and arrange to have three letters of recommendation sent to: Dr. Susan Michaelis, Chair, Faculty Search Committee, Department of Cell Biology and Anatomy, The Johns Hopkins School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205. Please visit our website: www.bs.jhmi.edu/

The Johns Hopkins University is an Equal Opportunity Employer. The University promotes Affirmative Action for minorities, women, individuals with disabilities, and veterans. The Johns Hopkins University is a smoke-free and drug-free workplace.

M.D. AND Ph.D.

The University of Sint Eustatius has openings for ASSISTANT PROFESSORS to teach histology and gross anatomy to first-year medical students. The University is located on the Island of Sint Eustatius in the Dutch Caribbean. We are purely a teaching institution; we have no funds or facilities for research. Applicants should reply with curriculum vitae and references to: C. Frank Chambers, M.D., Managing Director, P.O. Box 572, Saba, Netherlands Antilles. Telephone: 011 599-416-2499. E-mail: drfc@erols.com.

POSITIONS OPEN

PLANT NEMATOLOGY: permanent full-time (12-month) tenure-track faculty position at ASSIST-ANT or ASSOCIATE level and EXTENSION SPECIALIST. 70% research, 20% extension, and 10% teaching appointment at Washington State University, Irrigated Agriculture Research and Extension Center, near Prosser, Washington. Required: Ph.D. in plant pathology, plant nematology, or related field and advanced training in plant nematology and nematode diseases. Highly desired: research experience in field plant nematology, evidence of ability to design and implement innovative research, ability to attract extramural funds, evidence of scholarly contributions, documented ability to provide instruction and develop extension programming, evidence of ability to communicate research in oral and written form. Desired: ability to perform taxonomic differentiation; research experience in host resistance mechanisms, the use of DNA-based diagnostic tools, soil fumigation techniques, and/or virus-vector relationships; familiarity with agricultural production systems, and evidence of team-oriented research. Screening begins on December 1, 2000, until filled. Letter of application and three letters of reference (sent directly to Dr. Eastwell) should address specific requirements stated above. This information along with curriculum vitae and copies of college and university transcripts should be sent to: Dr. Eastwell, Washington State University, IAREC, 24106 North Bunn Road, Prosser, Washington U.S.A. 99350. Telephone: 509-786-9385; FAX: 509-786-9370; e-mail: keastw@ tricity.wsu.edu. Equal Employment Opportunity/Affirmative Action/Americans With Disabilities Act.

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF BIOLOGY BALL STATE UNIVERSITY Muncie, Indiana

Tenure-track position (years toward tenure considered) available August 17, 2001. Responsibilities: etaching introductory biology, introductory microbi-ology, and medical microbiology courses; conducting and promoting student involvement in research specialty; providing service to the academic community. Minimum qualifications: earned Doctorate in a biological science by August 1, 2001; effective written and oral communication skills; commitment to excellence in teaching and competency in current approaches in microbiology. Preferred qualifications: demonstrated teaching ability and publications and/ or evidence of other scholarly activity. Send letter of application, curriculum vitae, documentation of scholarly activity and teaching ability, copies of tran-scripts, and three letters of reference to: Chair, Search and Selection Committee, Department of Biology, Ball State University, Muncie, IN 47306. Review of applications will begin November 15, 2000, 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.

The Psychology Department at Boston College invites applications for a tenure-track ASSISTANT **PROFESSOR** position in behavioral neuroscience, which will begin on September 1, 2001. Responsibilities will include research and undergraduate/graudate teaching. Applicants must have a Ph.D., postdoctoral experience, and an active research program. Those studying central mechanisms of learning and memory in adult or developing animals using anatomical, electrophysiological, molecular, or functional genetic methods are especially encouraged to apply. Under exceptional circumstances, we would consider hiring at a higher level. For more information, see www.bc.edu/bc_org/avp/cas/psych/ website: psych.html. Submit letter of application, curriculum vitae, statements of research and teaching interests, and three letters of reference by December 31, 2000, to: Behavioral Neuroscience Search Committee, Boston College, Department of Psychology, McGuinn Hall, 140 Commonwealth Avenue, Chestnut Hill, MA 02467.
Enzymologist

SmithKline Beecham is at the forefront of exploiting cutting edge technologies to discover novel antimicrobial agents. These approaches have successfully identified a variety of novel antibacterial targets. A PhD level position currently exists in our Anti-Infectives Research Department at our state-of-the-art suburban Philadelphia facility for an experienced Enzymologist.

The Anti-Infectives Research Department is evaluating a diversity of bacterial pathways and essential proteins as novel antibacterial targets and we are looking to recruit an individual with proven expertise in enzyme kinetics to assist in the progression of these pioneer targets.

You will be responsible for detailed mechanistic analysis of novel bacterial enzymes and kinetic studies to characterize the interactions of lead inhibitor molecules with these targets. Proven experience with a variety of fluorescence based assays formats and knowledge of diverse enzyme systems and assay formats is preferred. You should possess excellent communication skills with a desire to play a pivotal role in a multi-disciplinary team. Recent Post Docs and scientists with several years of industry experience should apply.

SmithKline Beecham is dedicated to an innovative workplace and supports you with career long opportunities and learning. We offer a competitive benefits and compensation package. For immediate consideration, please apply online at www.sb.com/careers, indicating Ad Code: 2K0821 (ASCII text required). You may also send your scannable resume, which must include Ad Code, to: SmithKline Beecham, c/o National Resume Processing, Ad Code: 2K0821, P.O. Box 1070, Burlington, MA 01803. Principals only, no agencies, please.

SmithKline Beecham

Pharmaceuticals

Developing talent through equality of opportunity, M/F/D/V.

Viral Immunology

Rocky Mountain Laboratories, NIAID, NIH

An immediate opening for a postdoctoral fellow in the field of retroviral immunology is available. Ongoing projects include studies on vaccine protection (Nature Med., 1999, 5:189), host genetic resistance (J. Virol., 1999, 73:6468), immune control of virus persistence (Virology, 2000, 272:177), virus-induced immunosuppression (J. Virol., 1999, 73:7848) and mechanisms of protection from acute infection (J. Virol., 2000, 74:5363). All studies are in a mouse model with an emphasis on developing a basic understanding of in vivo mechanisms. Applicants must have a strong background in immunology and a virology background is desirable. Please send cover letter, CV and bibliography to:

> Kim J. Hasenkrug, Ph.D. Laboratory of Persistent Viral Diseases Rocky Mountain Laboratories 903 South 4th Street Hamilton, MT 59840

phone (406) 363-9310 email: khasenkrug@nih.gov

Faculty Positions in Genomics, Genetics, Models of Human Disease, Computational Biology

University of Rochester - Center for Human Genetics and Molecular Pediatric Disease

The University of Rochester is developing a new Center for Human Genetics and Molecular Pediatric Disease that will focus on human genetic disease, gene-environment interactions, functional genomics, and models of human disease and development. The Center will recruit 10 junior and senior faculty, who will be housed in a new state-of-the-art laboratory building and will collaborate closely with other Centers of the University's Aab Institute, including the Centers for Aging and Developmental Biology, Cancer Biology, Cardiovascular Research, and Oral Biology. The Aab Institute provides a highly interactive environment with ready access to transgenic, gene knockout and DNA microassay cores.

Research faculty will have appointments in existing academic departments of the University and be expected to have or develop independently funded research programs. Applicants should send a curriculum vitae, a brief statement of research interests, and contact information for at least three references to:

Dr. Richard A. Insel Director, Center for Human Genetics and Molecular Pediatric Disease University of Rochester School of Medicine 601 Elmwood Avenue, Box 703 Rochester, New York 14642 E-mail: richard_insel@urmc.rochester.edu



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

The Department of Mechanical and Industrial Engineering, College of Engineering, University of Illinois at Urbana–Champaign invites applications for full-time tenure-track positions at the **ASSISTANT**, **ASSOCIATE**, and **FULL PROFESSOR** levels. Senior-level appointments with tenure will be considered for a person of recognized national and international stature.

Candidates are sought in all areas of mechanical and industrial engineering with preference given to candidates with specific interests in: bioengineering (including bioinformatics, biomechanics, biomaterials, transport phenomena, and tissue mechanics); dynamics (including nonlinear dynamics, experimental dynamics, modal analysis and system identification, and computational dynamics); and noncontinuum, quantum, and discrete mechanics (including mechanical engineering phenomena associated with small length and time scales and quantum effects).

Requirements include a Ph.D. degree and a background that enables the candidates to teach both undergraduate and graduate students. Successful candidates will be expected to establish and sustain an active research program. Salary is commensurate with education and experience.

To ensure full consideration, applications must be received by December 1, 2000; applications will be considered until the positions are filled. The proposed starting dates for the positions are May 21 or August 21, 2001, or January 5, 2002. In your cover letter, please reference Position Number 7177. Interviews may take place before the closing date; however, no decision will be made until after that time. Send an up-to-date biography with names of four references to: Professor Richard O. Buckius, Head, Department of Mechanical and Industrial Engineering, University of Illinois at Urbana-Champaign, 1206 West Green Street, Ubana, IL 61801. Telephone: 217-333-1079; website: http://www. mie.uiuc.edu.

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

JUNIOR FACULTY POSITIONS UNIVERSITY OF CALIFORNIA, IRVINE

As a part of the expansion of medical genomics at the University of California, Irvine, the Department of Biological Chemistry in the College of Medicine invites applications for a state-funded faculty position at the ASSISTANT PROFESSOR level. Applicants should hold the Ph.D. or Ph.D./M.D. degree and have an outstanding record in biomedical research. Preference will be given to candidates using innovative approaches in vertebrate model or human systems to address fundamental molecular problems in the areas of development and disease. The individual is expected to establish and maintain an independent research program of high caliber and participate in the training of graduate and medical students. Exceptional candidates at the FULL PROFESSOR level may be considered for an endowed chair position. Curriculum vitae, brief research description, representative publications, statement of teaching interests, and three letters of reference should be submitted prior to December 15, 2000, to: Department of Biological Chemistry Séarch Committee, Department of Bi-ological Chemistry, College of Medicine, D240 Medical Science I, University of California, Irvine, CA 92697-1700. E-mail applications will not be accepted. The University of California, Irvine, is an Equal Opportunity Employer.

ENVIRONMENTAL SCIENTIST. The Natural Resources Defense Council, a not-for-profit environmental organization, seeks a Senior Scientis (Ph.D. or M.D.) for its Health and Environment program. Candidates should be trained in toxicology, epidemiology, or public health; familiar with policy issues in regulating toxic chemicals, and comfortable with being a strong advocate for public health. Compensation commensurate with experience; good benefits and working environment. Send résumé to: M. Waples, NRDC, 1200 New York Ave., N.W., Washington, DC 20005. Women and minority candidates are encouraged to apply.

POSITIONS OPEN

TWO FACULTY POSITIONS IN BIOLOGY

The Biology Department at the University of Texas at Arlington invites applications for two positions at the rank of ASSISTANT, ASSOCIATE, or FULL PROFESSOR. Successful applicants will be expected to establish an externally funded research program and participate in our Ph.D. program in quantitative biology, which will include teaching graduate courses in biometry and experimental design. We encourage applicants with research interests that complement existing strengths in evolution, ecology, genetics, or microbiology and whose approach is quantitative. Possible research areas include but are not limited to evolutionary/ecological genetics, experimental or molecular evolution, or genomics. Applicants must have a Ph.D. (postdoctoral experience preferred) with an established record of productivity. Submit curriculum vitae, statement of current and future research interests, reprints of recent publications, and names and contact information for three references to: Daniel R. Formanowicz, Search Committee Chair, Department of Biology, Box 19498, University of Texas at Arlington, Arlington, TX 76019-0498. Evaluation of applicants begins No-vember 1, 2000. University of Texas at Arlington is located in the Dallas-Ft. Worth metroplex. The Department offers B.S., M.S., and Ph.D. degrees. See our website: http://ww.uta.edu/biology for more information. University of Texas at Arlington is an Equal Opportunity/Affirmative Action Employer.

SENIOR SCIENTIST

Responsible for initiating, directing, and executing all preclinical scientific research and/or development strategies in optimizing proprietary bone-related synthetic implant technology. Design and conduct ex-periments to analyze and test micro- and macroporous ceramic compounds using various chemical analysis and synthesis techniques. Use of instrumentation including X-ray diffraction, FTIR, atomic absorption, HPLC, scanning electron microscope, density measurement using helium pyctonometry, thermal gravimetry analysis, differential scanning, calorimetry, infrared spectrometry, UV visible-optical density measurement, XPS and BET technique of surface analysis. Investigate feasibility of application of scientific principles and concepts to product development; interface with various departments. Must have Ph.D. in chemistry and two years of research in bone substitute biomaterials. Must have knowledge of Xray diffraction, FTIR, HPLC, scanning electron microscope, density measurement using helium pyctonometry, thermal gravimetry analysis, differential scanning calorimetry, infrared pyometry, UV visible-optical density measurement, XPS technique of surface analysis, Hg porosity. Forty hours per week; 9 a.m. to 5 p.m.; annual salary \$85,500. Send two ré-sumés to: Case Number 19984058, P.O. Box Number 8968, Boston, MA 02114.

FACULTY POSITION IN FUNCTIONAL GENOMICS. A tenure-track position is offered at the ASSISTANT PROFESSOR level in the area of functional genomics. The use of transcriptional profiling or similar applications of DNA microarray technology to study cellular or developmental regulation at the genomewide level is of special interest, although related experimental approaches will be considered. A Ph.D. degree and at least two years of relevant postdoctoral experience are required. The successful applicant is expected to establish a nationally competitive research program and participate in undergraduate and graduate instruction. The University of Kentucky offers a generous start-up package and a supportive academic environment. Applicants should submit current curriculum vitae and arrange for three letters of recommendation to be sent to: Functional Genomics Search Committee, T.H. Morgan School of Biological Sciences, University of Kentucky, Lexington, KY 40506-0225. FAX: 859-257-1717; website: http://biology. uky.edu/bio.html. The review of applications will begin on November 10, 2000. The University of Kentucky is an Equal Opportunity Employer.

POSITIONS OPEN

TENURE-TRACK ASSISTANT PROFESSORS THE DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOPHYSICS Washington University School of Medicine Professor Carl Frieden, Wittcoff Professor and Head

We invite applications from Scientists with interests in the areas of experimental biochemistry or molecular biophysics. We offer an exceptionally interactive scientific environment, newly renovated laboratory space, and generous start-up funds for the successful candidates. These Scientists will develop independent research programs that complement or enhance current Departmental interests. Candidates should have an enthusiasm for participating in an interdisciplinary scientific community and an interest in graduate student teaching. The anticipated start date for these positions is summer 2001. Applicants should submit curriculum vitae, selected reprints, a short summary of future research plans, and the names of three references by December 1, 2000, to:

Kathleen B. Hall, Ph.D. Chair, Faculty Search Committee Washington University School of Medicine Department of Biochemistry and Molecular Biophysics Box 8231, 660 South Euclid Avenue St. Louis, MO 63110

DIRECTOR UNIVERSITY OF GEORGIA MARINE INSTITUTE

The School of Marine Programs at the University of Georgia seeks a Director for the University of Georgia's Marine Institute on Sapelo Island to be filled at a rank of ASSOCIATE or FULL PROFESSOR by fall 2001. This is a tenure/tenure-track position (duties assigned 50% to research, 50% to administration). Area of expertise is open, but the successful candidate is expected to develop an externally funded research program that focuses on coastal processes and takes advantage of University of Georgia's resources on Sapelo Island, which is also an LTER site (website: http://gce-lter.marsci.uga.edu/lter). Curriculum vitae, a brief statement of research interests, and names and addresses of four references should be sent to: Chair, Search Committee, School of Marine Programs, Marine Sciences Building, University of Georgia, Athens, GA 30602-3636. Additional information can be obtained through the Department of Marine Sciences website: http://www.marsci. uga.edu or direct inquiries may be addressed to: Dr. Mary Ann Moran; e-mail: mmoran@arches. uga.edu; Telephone: 706-542-6481. Applications received by December 15, 2000, are assured full consideration. The University of Georgia is an Equal Opportunity Employer

ASSISTANT PROFESSOR OF BIOCHEMISTRY BRANDEIS UNIVERSITY

The Department of Biochemistry, Brandeis University, seeks a tenure-track **ASSISTANT PROFES-SOR** beginning September 2001. Candidates should have strong research interests in macromolecular chemistry, mechanism, folding, or structure and should be skilled at teaching in the general area of biochemistry and biophysics. Applicants should send curriculum vitae, including a succinct summary of present research activities and future plans, and should arrange for submission of three letters of reference. All materials should be directed to:

Christopher Miller, Biochemistry Search Chairman Department of Biochemistry Howard Hughes Medical Institute Brandeis University, Mail Stop 013 Waltham, MA 02454

Detailed information about biological sciences at Brandeis University may be accessed at **website: www. bio.brandeis.edu**. To guarantee full consideration, candidates should apply by October 31, 2000. Brandeis University is an Affirmative Action/Equal Opportunity Employer encouraging applications from qualified women and minority candidates.

Government Career in Washington, D.C.

Rewarding full-time career with flexible hours, vacation/sick leave. Retirement and health and life insurance benefits and Thrift Savings Plan at the USDA, FOOD AND NUTRITION SERVICE, Center for Nutrition Policy and Promotion, Duty Location: Washington, D.C. Career Opportunity for:

Program Manager (Deputy Executive Director) GS-0340-15 \$84,638-\$110,028 per year Federal and Non-Federal Applicants can apply

Vacancy Announcement #CP-002-00-20. Opens10-10-2000. Closes 11-24-2000.

The Center for Nutrition Policy and Promotion (CNPP) is seeking exceptional applicants for the position of Program Manager (Deputy Executive Director) to provide leadership and management to CNPP. Must have an established record of strong research, administrative, and leadership experience. The mission of the CNPP is to improve the health of Americans by developing and promoting dietary guidance that links scientific research to the nutritional needs of consumers. A doctorate degree with extensive research experience in nutrition or related fields is highly desirable. Applicants must obtain copy of vacancy announcement and address the evaluation criteria and the selective placement factors in order to be considered. Call (703) 305-1474 or go to www.usdajobs.opm.gov. Applications must be postmarked by 11-24-2000.

> U.S. Citizenship required Equal Opportunity Employer

Faculty Positions in the Center for Vaccine Biology and Immunology

University of Rochester - Center for Vaccine Biology and Immunology

The Center for Vaccine Biology and Immunology at the University of Rochester Medical Center carries out research in basic immunology with the long- term aim of helping to design the next generation of vaccines for infectious or immunological diseases. The Center occupies the top floor of the recently-completed Arthur Kornberg Medical Research building, and currently houses six highly interactive research groups dedicated to the study of antigen presentation by dendritic cells, immunoregulation, lymphocyte differentiation and effector functions, T cell memory and apoptosis. Additional related areas of strength in the University of Rochester Medical Center include clinical vaccine trials; cancer immunology; and virology. We are now seeking up to four new faculty members at the Assistant, Associate or Full Professor level. We are particularly interested in scientists working in mucosal immunology, resistance to pathogens, autoimmnity/ tolerance, and the cell biology of antigen presentation. Further information on our Center and the University of Rochester can be obtained at:

http://www.urmc.rochester.edu/Aab/vaccbio/ and

http://www.urmc.rochester.edu/GEBS/imv/imvfaclist2.html.

Applications should include a cv, names and addresses of three references, and a brief statement of future research interests, and should be sent to:

Dr. Tim Mosmann

Director, Center for Vaccine Biology and Immunology Aab Institute for Biomedical Sciences University of Rochester Medical Center 601 Elmwood Avenue, Box 609 Rochester, NY 14642 Phone: 716-275-9120 FAX: 716-273-2454

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



Professor and Head Department of Medical Microbiology and Parasitology

The University of Georgia College of Veterinary Medicine seeks to fill the position of Professor and Head of the Department of Medical Microbiology and Parasitology. Applicants should have an outstanding scientific background with an established record of extramural support in the area of microbial pathogenesis, molecular biology of viral, bacterial or parasitic pathogens, or mechanisms of immunity. The successful candidate is expected to continue a strong research program in renovated laboratories in the Department. Additional qualifications include demonstrated leadership ability, evidence of commitment to teaching excellence and an understanding of the service mission of the department.

The department includes 15 full-time faculty in the disciplines of bacteriology, immunology, parasitology, virology and epidemiology. The department occupies modern laboratory and teaching facilities including the newly completed Animal Health Research Center which possesses state-of-the-art BL3 biocontainment capabilities. Departmental faculty are engaged in active research collaboration with investigators in academic departments within the College of Veterinary Medicine, departments across campus such as Cellular Biology, Microbiology, and the Center for Tropical, Emerging, and Global Diseases. Opportunities exist for interaction with colleagues in the animal health and pharmaceutical industry and the U.S.D.A. laboratories in Athens, and the Centers for Disease Control and Prevention in Atlanta.

This is a 12-month, state-funded position. Applications received by November 15, 2000 are assured full consideration. Interested candidates should forward a letter of intent, curriculum vitae and the names of three references to: Thomas F. Murray, Ph.D., Chair, Search Committee, Department of Physiology and Pharmacology, College of Veterinary Medicine, The University of Georgia, Athens, GA 30602-7389.



The University of Georgia is an Equal Employment Opportunity/Affirmative Action Employer. Members of minorities and women are encouraged to apply.

Post-doctoral positions: Immune Responses to Human Papillomavirus

University of Rochester Center for Vaccine Biology and Immunology

We are seeking three post-doctoral fellows to work on a set of inter-related projects on the immune response against human papillomavirus (HPV). This project, recently funded as a Program Project by the NIH, is focused on understanding successful immune responses against HPV, to aid in designing future vaccines. Areas of research include analyzing the interference by HPV with keratinocyte and dendritic cell function (Dennis McCance); determining the specificity of HPV recognition by the immune system (William Bonnez); and analysing anti-HPV immune effector functions using two new single-cell assays for multiple cytokine secretion and cytotoxicity (Tim Mosmann). Applicants should have a Ph.D. with a background in immunology and/or virology. Applications should include a cv and names and addresses of three references, and should be sent to:

Dr. Tim Mosmann Director, Center for Vaccine Biology and Immunology Aab Institute for Biomedical Sciences University of Rochester Medical Center 601 Elmwood Avenue, Box 609 Rochester, NY 14642 Phone: 716 275 9120 FAX: 716 275 2452



The University of Rochester is an Affrmative Action/Equal Opportunity Employer. Women and underrepresented minorities are encouraged to apply.

FACULTY POSITIONS IN PHARMACOLOGY

The Department of Pharmacology at The University of Texas Southwestern Medical Center seeks applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**. Competitive applicants must have a relevant Ph.D. or M.D. degree, postdoctoral training, and show evidence of firm commitment to a career in independent research.

We are particularly interested in strong candidates with an appropriate background who wish to apply techniques of molecular or cellular biology, biochemistry, or physiology to fundamental problems of pharmacological interest. A superb start-up package and excellent research facilities are available. Responsibilities will also include teaching of medical and/or graduate students after the first year of employment. Send curriculum vitae and a brief description of proposed research to:

Dr. Alfred G. Gilman, Chairman Department of Pharmacology/Recruitment The University of Texas Southwestern Medical Center 5323 Harry Hines Boulevard Dallas, TX 75390-9041

An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN CELL BIOLOGY University of California, San Francisco

The Department of Physiology and the Programs in Biological Sciences at the University of California, San Francisco (UCSF), seek an **ASSISTANT** or **ASSO-CIATE PROFESSOR**, tenure track, taking cellular, molecular, genetic, or other novel experimental or theoretical approaches to the biology of cells or systems. A successful applicant will be expected to mount an exciting research program, to participate in graduate and postdoctoral training, and to teach in graduate and professional school courses. The search will remain open until an appointment is made, but complete applications should be received by November 15, 2000, to ensure full consideration. Please send curriculum vitae, reprints of one or two key publications, a two-page summary of past research and future goals, and have three letters of recommendation sent to:

Dr. David Morgan Chair, Search Committee Department of Physiology, Box 0444 University of California 513 Parnassus Avenue San Francisco, CA 94143-0444

UCSF is an Affirmative Action/Equal Opportunity Employer.

ENDOWED CHAIR: EVOLUTION OR ECOLOGY. The Department of Ecology and Evolutionary Biology at Rice University (website: http://dacnet.rice.edu/depts/eeb/) solicits nominations and applications for an Endowed Chair in any area of evolution or ecology. The person filling this position will also serve as Department Chair. We are seeking an intellectual leader with an innovative and outstanding research program who will benefit from being in a first-rate, very collegial growing department dedicated to creative research and teaching. Rice is a private research university with a strong commitment to the highest standards of education at the graduate and undergraduate levels. Applicants should submit curriculum vitae, statement of research interests, selected reprints, and the names of three references to: Joan Strassmann, Endowed Chair Search Committee Chair, Department of Ecology and Evolutionary Biology, MS 170, Rice University, P. O. Box 1892, Houston, TX 77251-1892. Email: strassm@rice.edu. Review of applications will begin 25 October 2000 and continue until the position is filled.

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

POSITIONS OPEN

ASSISTANT or ASSOCIATE PROFESSOR: The Pennsylvania State University invites applications for tenure-track positions in its new Department of Bioengineering at its University Park campus. Through the generosity of the Whitaker Foundation, Penn State is expanding its longstanding graduate program into a full-fledged Department of Bioengineering that will offer a new undergraduate major leading to the B.S. degree in bioengineering beginning in fall 2001. The new major consists of a core curriculum of bioengineering courses and specialized instruction in the areas of tissue and cellular engineering, biotransport, bioinstrumentation and devices, medical imaging, biomaterials, and biomechanics. Applicants with research and teaching experience in these areas are encouraged to apply. Bioengineering at Penn State has a 30-year history of multidisciplinary graduate training, and the new Department has a solid foundation to promote faculty growth and development. Stimulating and productive interactions between engineering and life science faculty are abundant and revolve around well-supported research programs in Penn State's Materials Research Laboratory, Center for Locomotion Studies, Center for Ultrasound Transducer Engineering, Life Science Consortium, and the Institute for Biomedical Engineering at the Milton S. Hershey Medical Center. For more details, visit our Department at website: http:// bioeng.psu.edu. Applicants should have a Ph.D. in bioengineering or a related field with an emphasis on engineering applications to the life sciences. Outstanding graduate students nearing degree completion, Postdoctoral Fellows, and current faculty members are invited to apply. Send curriculum vitae, statement of objectives, and names of three references by January 1, 2001, to: Dr. Herbert H. Lipowsky, Professor and Chairman, Department of Bioengineering, Position Number: S-8885, Penn State University, 233 Hallowell Building, University Park, PA 16802. Affirmative Action/Equal Opportunity Employer.

CENTER FOR BIOINFORMATICS AND COMPUTATIONAL BIOLOGY University of Maryland, College Park

The University of Maryland invites FACULTY APPLICATIONS at all levels for the newly established Center for Bioinformatics and Computational Biology. The campus has substantial resources committed to the Center, including funds for the recruitment of six new faculty with research interests in focused areas of computational genomics such as functional genomics and proteomics. It is anticipated that the primary backgrounds of the new faculty will span computer science, mathematics and statistics, molecular biology, and biochemistry. The primary responsibility of the new faculty will be to lead a focused, nationally visible research program in computational genomics. All the new faculty will be housed in the University of Maryland Institute for Advanced Computer Studies (UMIACS) and will have access to significant high-end computing infrastructure. The new faculty will also be affiliated with at least one of the academic units on campus depending on their interests, with the potential of pursuing research collaborations with nearby outstanding research groups in organizations such as NIH, Celera, TIGR, UMBI, and the Smithsonian. To apply, send a letter of appli-cation, curriculum vitae, and a list of suggested names and addresses for letters of recommendation to:

Dr. Joseph JaJa, Chair of Search Committee Center for Bioinformatics and Computational Biology Institute for Advanced Computer Studies University of Maryland College Park, MD 20742

For more information, please contact: **Dr. Joseph** JaJa; Telephone: 301-405-6722; e-mail: joseph@ umiacs.umd.edu. Applications will be accepted until the positions are filled. The University of Maryland is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

CANCER BIOLOGISTS VIRGINIA PROSTATE CENTER Eastern Virginia Medical School

The Virginia Prostate Center of Eastern Virginia Medical School and the Sentara Cancer Institute invite applications for a tenure-track ASSISTANT PROFESSOR position in molecular, cellular, or immunobiology of prostate cancer. A Ph.D., M.D., or M.D./Ph.D. or equivalent is required. We are particularly interested in candidates whose research is complementary to the ongoing research in early detection/diagnostics and immunotherapy of prostate cancer. Individuals with a more mechanistic focus in cancer development and progression are also urged to apply. The candidate must have an excellent publication record and evidence of the ability to obtain extramural funding. The successful candidate must establish and maintain an extramurally funded research program, participate in basic and translational research collaborations with other faculty, and participate in professional and graduate education with an academic appointment in the Department of Microbiology and Molecular Cell Biology. This is a tenuretrack position with attractive start-up funds, excellent laboratory facilities, and competitive 100% base salaries. The successful candidate will be eligible to be considered for a joint faculty appointment in the Department of Urology. Interested individuals should send their curriculum vitae, a brief statement of major academic/research accomplishments, and arrange to have four letters of reference sent to: Dr. George L. Wright, Jr., Ph.D., Department of Microbiology and Molecular Cell Biology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501-1980. É-mail: wrightgl@evms.edu. For more information, see our website: http://www. evms.edu/micro/index.html; a link to the Virginia Prostate Center can be found at this site under "Special Programs." Review of applications will commence immediately and they will be accepted through January 15, 2001. Eastern Virginia Medical School is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION ASSISTANT OR ASSOCIATE PROFESSOR OF PHARMACEUTICAL SCIENCES College of Pharmacy The University of Michigan

The Department of Pharmaceutical Sciences at the University of Michigan College of Pharmacy is seeking applicants for a tenure-track or tenured position at the Assistant or Associate Professor level. Applicants should have a Ph.D. (or equivalent) in the pharmaceutical or biomedical sciences and a minimum of one year of postdoctoral experience. The successful candidate will be expected to establish or have established an independent and extramurally funded research program and to participate in the teaching and service missions of the professional and graduate programs. Preferred research areas include the following:

(1) pharmacogenetics and genomics of transporters and enzymes, (2) bioinformatics and genomic database sciences, (3) biophysics and molecular biology of membrane transporters, and (4) innovative drug delivery and targeting approaches.

Interested individuals should send curriculum vitae, future research plans, and three letters of recommendation to the Search Committee Chair. Information about our programs can be found at website: http://www.umich.edu/~pharmacy/academics/ pharmaceutics.html.

The Search Committee will begin reviewing applications immediately and will continue until the position is filled. Submit the requested information to: Professor Gordon L. Amidon, Search Committee Chair, College of Pharmacy, The University of Michigan, 428 Church Street, Ann Arbor, MI 48109-1065. Telephone: 734-615-3749; FAX: 734-615-6162; e-mail: glamidon@umich.edu. The University of Michigan is an Equal Opportunity/Affirmative Action Employer.



Virology Faculty Position Department of Microbiology & Immunology University of Michigan Medical School

The Department of Microbiology & Immunology at the University of Michigan Medical School invites applications from outstanding scientists for a tenure-track position at the Assistant or Associate Professor level in virology. The successful applicant also will be considered for the Biological Scholars Program, a medical school initiative (see 18 August 2000 Science). We are particularly interested in applications from investigators studying pathogenic mechanisms of viruses or the host response to virus infection using in vitro or in vivo models. Candidates are expected to have a Ph.D., M.D., or M.D.-Ph.D. degree and relevant post-doctoral training. They will be expected to develop a vigorous, externally funded research program that will add to the significant strength of the current virology group at Michigan. Areas of current interest include study of a wide range of pathogenic mechanisms including viral entry, immune evasion, gene regulation, and cell transformation. Significant scientific resources including a generous start-up package, stimulating environment and modern facilities will be available. The successful candidate will also participate in the medical and graduate student teaching mission of the Department. For more information on research areas within the Department of Microbiology & Immunology, please visit our web site (www.med.umich.edu/microbio/ homepage.html). Applicants should send a curriculum vitae and a summary of research interests and future plans to: Chair, Virology Search Committee, Department of Microbiology and Immunology, University of Michigan Medical School, 5641 Medical Science II, Ann Arbor, MI 48109-0620. In addition, please provide the names and addresses of three references, and arrange to have letters sent to the same address. Deadline for receipt of applications is December 1st, 2000.

The Department of Microbiology and Immunology Graduate Program is 8th in the most recent US News and World Report rankings. In addition, The University of Michigan is ranked 9th nationally in terms of overall funding from the NIH. This is likely to improve over the next decade as the University and State are investing heavily in the biomedical research enterprise, including the creation of the University of Michigan Life Sciences Institute, and the addition of 500,000 sq. ft. of research infrastructure.

Ann Arbor is the center of a great number of cultural, sports, and recreational events, and is consistently ranked as one of the best places to live and raise children in America.

University of Michigan is an Equal Opportunity/Affirmative Action Employer committed to achieving diversity among its faculty and staff.



Senior Scientist for the Census of Marine Life

The Consortium for Oceanographic Research and Education (CORE), a non-profit corporation (http://core.ssc.erc.msstate.edu) is seeking a dedicated individual to act as a Senior Scientist for the Census of Marine Life (CoML), an exciting new international research program that will focus on the diversity, distribution and abundance of life in the oceans.

The Senior Scientist will act as a full-time scientific and technical advisor to the Census of Marine Life Secretariat at CORE and will support and implement scientific activities of the Census of Marine Life Secretariat with a key focus on expanding national and international sponsorship of the program. Specific activities will include working with the CoML Scientific Steering Committee (SSC) to develop a Science Implementation Plan based on the Scientific Strategy; acting as an advocate for the CoML with potential research sponsors; working with international, national and intergovernmental program sponsors and the research community to develop and coordinate a large field-based scientific research program; and acting as a pokesperson for CoML at meetings and conferences.

The applicant must have a Ph.D. in marine ecology, biological oceanography or related field and 10-15 years experience in marine research, preferably at a research institution. The applicant should have experience in building national and international organizational support for basic research and in developing large scientific programs with links to universities, government agencies and international groups. The candidate should also have a keen interest in working with people from many backgrounds around the world and should be dedicated to advancing our knowledge of the oceans.

This is a full-time position, located in the Washington, DC area with two years of support anticipated. However, depending on the candidate's qualifications, it is possible that the position could be less than full time (but at least 75 percent) and the candidate could be located at a university or other location if it is of benefit to the CoML. Salary is negotiable based on qualifications.

Please send an application letter, complete CV/resume and list of references to Administrative Manager, Attn: Consortium for Oceanographic Research and Education SSCOML, Suite 800, 1755 Massachusetts Ave., NW, Washington, DC 20036-2102. The deadline for this application is 30 November 2000. EOE/M/F/D/V



Send applications to: Cognitive Search Committee, E25-406, MIT, Cambridge, MA 02139. Qualified women and minority candidates are especially encouraged to apply. MIT is an Affirmative Action/Equal Opportunity employer. http://web.mit.edu/bcs/jobs.html



VIACELL

ViaCell, Inc. is a privately held, pre-IPO, cellular medicine company focused on leveraging its high quality cord blood banking service business and patented stem cell expansion technology to build a premier cellular medicine pharmaceutical company providing the highest quality products and services for the treatment of diseases using stem cells.

Director of Stem Cell Biology: Scientific leadership position to build a multidisciplinary R&D group focused on using stem cells to treat human diseases. Candidate should have Ph.D. or M.D. degree with at least 5-10 years experience in stem cell biology and a demonstrated history of publications and grant awards.

Stem Cell Biologists: Successful candidates will have a strong background in hematopoietic, mesenchymal or neural stem cell biology. Requires Ph.D. or M.D. degree with minimum of 2-4 years postdoctoral experience in stem cell biology and/ or biochemistry and a demonstrated history of publications.

Cryobiology Scientist: Successful candidate will have a strong background in cryopreservation and recovery of hematopoietic cells. Experience with other mammalian cell lines or human tissues a plus. Position requires an MS or Ph.D. degree with 2-5 years experience and strong organization skills.

> We are also looking for: Quality Systems Manager Bioassay Scientist Research Associate

Send resume to: ViaCell, Inc., Human Resources, One Innovation Drive, Worcester, MA 01605, hr@viacord.com, Fax: 617-247-6271.

FACULTY POSITION CANCER ETIOLOGY and/or PREVENTION Eppley Institute, UNMC Eppley Cancer Center University of Nebraksa Medical Center

The Eppley Institute for Research in Cancer of the University of Nebraska Medical Center (UNMC) is seeking faculty to conduct research relating to cancer etiology and/or prevention. This faculty appoint-ment is tenure track with academic rank at the level of ASSISTANT PROFESSOR or above. The Eppley Institute is an academic unit of UNMC and a key component of the UNMC Eppley Cancer Center, a National Cancer Institute-designated clinical cancer center. Both the Institute and Cancer Center are in a dynamic growth phase. Areas of established research excellence include hematologic malignancies, gastrointestinal cancers, breast cancer, and prostate cancer. Applicants should possess a Ph.D., M.D., or other Doctoral-level degree and appropriate postdoctoral training. The successful applicant will be expected to develop an extramurally funded laboratory research program, collaborate with other faculty, and participate in the training programs of the Institute including an NCI-funded Cancer Research training program and a U.S. Army-funded Breast Cancer training program. Applicants should forward curriculum vitae, brief summary of future research plans, and a minimum of three letters of reference to: Dr. Kenneth H. Cowan, Director, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, 986805 Nebraska Medical Center, Omaha, NE 68198-6805. Review of applications will begin immediately and will continue until the position is filled. See website: http://www.unmc.edu/Eppley/ for more information. The University of Nebraska Medical Center is an Equal Opportunity Employer.

Iowa State University invites applications for several TENURE-TRACK FACULTY POSITIONS in chemistry. Areas of interest include but are not limited to the following topics: analytical chemistry, organic chemistry, and interdisciplinary topics, particularly those at the boundary of cell biology and chemistry. Review of applications will begin October 20, 2000. Appointment commences on August 16, 2001. Applicants in suitable research areas may have the opportunity to work within the newly constructed Roy J. Carver Laboratory for Ultra High Resolution Biological Microscopy. A competitive salary, excellent research facilities, and generous start-up package are available. The successful candidate will be expected to establish an internationally recognized research program and to contribute strongly to graduate and undergraduate education. Applications should include current curriculum vitae plus list of publications and a brief statement of research interests (three pages or less). Arrange to have three letters of reference sent to: Chair of the Search Committee, Department of Chemistry, Iowa State University, Ames, IA 50011. Iowa State University is an Equal Opportunity/ Affirmative Action Employer. Women and members of minority groups are encouraged to apply.

The Department of Microbiology, University of Hawaii, invites applications for a tenure-track, ninemonth faculty appointment at the ASSISTANT PROFESSOR level beginning August 1, 2001. We are seeking a Bacteriologist who will provide a challenging upper-division course in prokaryotic biology annually and an advanced course in his/her area of specialization on alternate years. The applicant is expected to maintain an active research program emphasizing either bacterial physiology or microbial pathogenesis. Minimum qualifications: Doctorate in microbiology, postdoctoral experience with publications, and a demonstrated commitment to teaching. Salary will be commensurate with experience. To apply: send curriculum vitae, statement of teaching philosophy and research goals, and the names of at least three references to: Search Committee, Department of Microbiology, University of Hawaii, 2538 The Mall, Snyder Hall 207, Honolulu, HI 96822. Review of applications will begin December 1, 2000. Applications received after December 1, 2000, may not receive full consideration. The University of Hawaii is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

UNIVERSITY OF MINNESOTA Endowed Chair in Developmental Biology

The University of Minnesota Department of Pediatrics in conjunction with the Department of Genetics, Cell Biology, and Development and the Institute of Human Genetics invites applications at the ASSO-CIATE or PROFESSOR level (tenured position) to fill the Harrison Chair in Developmental Biology. The successful candidate is expected to have an internationally recognized research program that focuses on elucidating mechanisms of vertebrate development. Individuals with expertise in mouse genetics are especially encouraged to apply; however, candidates with expertise in other vertebrate systems will also be considered. The applicant is anticipated to assume a leadership role within the Developmental Biology Center at the University of Minnesota and to foster research ties with Clinician-Scientists. The Developmental Biology Center comprises approximately 20 highly interactive faculty who utilize many model systems including Drosophila, C. elegans, mouse, zebrafish, Xenopus, and Arabodopsis to address fundamental principles guiding development. The successful candidate is expected to maintain a strong, externally funded research program and to participate in the training of graduate students and Clinician-Scientists. This position comes with generous start-up resources and the ability to recruit up to three individuals in the area of vertebrate development.

The initial pool of applicants will be reviewed for a December 15, 2000, receipt date; however, the position will remain open until filled by a suitable applicant.

Interested applicants should submit curriculum vitae, statement of research interests, and the names of four references to:

> Michael B. O'Connor Search Committee Chair Department of Genetics, Cell Biology, and Development University of Minnesota 6-160 Jackson Hall Minneapolis, MN 55455 Telephone: 612-626-0642 FAX: 612-625-5402 E-mail: moconnor@tc.umn.edu

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

POSITIONS OPEN INSTITUTE OF MOLECULAR BIOLOGY ACADEMIA SINICA, TAIWAN, ROC

Tenure-track positions for **RESEARCH FEL-**LOWS are open for outstanding individuals to establish research programs in an expanding and stimulating research institute. Scientists with a Ph.D. degree and at least two years of postdoctoral are encouraged to apply. Although people who work on genomicsbased research and/or chemical biology are of particular interest to the search committee, individuals with demonstrated records of research accomplishments and scientific creativity in all areas of molecular genetics will be considered.

The Institute currently has 29 laboratories and is jointly funded by the Academia Sinica, the National Science Council, the National Health Research Institutes, and industry. It is also supported by in-house transgenic/knockout mouse and transgenic fly facilities. Successful candidates will be appointed at the ASSISTANT, ASSOCIATE, or FULL RE-SEARCH FELLOW level and are expected to develop their own independent research programs as well as program projects with other Research Fellows in the Institute.

Deadline for application is October 31, 2000. Firstround candidates will be selected by November 30, 2000. The interview process and final decision are expected to be completed by March 2001.

Interested individuals should send curriculum vitae, a description of past research accomplishments and future research interests, and three letters of reference to: Dr. C.-K. James Shen, Director, Institute of Molecular Biology, Nankang, Taipei, Taiwan 11529 ROC. FAX: 886-2-788-4177

POSITIONS OPEN

CHAIR DEPARTMENT OF ANATOMY

Case Western Reserve University School of Medicine seeks an accomplished **SCIENTIST** to serve as Chair of its Department of Anatomy.

The Department of Anatomy offers an interdisciplinary approach to research that combines training in biochemical and molecular biological techniques with organ physiology and morphologic studies. The Department offers unique teaching opportunities that combine the classics with modern approaches and instrumentation. Programs lead to the Ph.D., combined M.D./Ph.D., and M.D./M.S. degrees along with an accelerated Ph.D. program for those already holding the M.D. and an M.S. in applied anatomy.

Applicants for this leadership position should hold the M.D. and/or Ph.D. degree or equivalent terminal degree. Preference will be given to an individual with an outstanding record of academic accomplishments in the field. This individual will develop and implement a long-term vision and strategy for the further development of the Department including teaching (to medical and graduate students) and sponsored research in anatomy and cell biology.

Case Western Reserve University School of Medicine currently ranks 13th among U.S. medical schools in terms of NIH funding. CWRU and its affiliated hospitals form the largest biomedical complex in the state of Ohio.

Please send letters of interest with curriculum vitae to: Search Committee for Anatomy Chair, c/o Lynn Landmesser, Ph.D., Room E653, Case Western Reserve University School of Medicine, Cleveland, OH 44106-4975.

Case Western Reserve University is an Affirmative Action/ Equal Opportunity Employer. Qualified women and minority group members are encouraged to apply.

TENURE-TRACK FACULTY POSITION IN STRUCTURAL BIOLOGY

The School of Biological Sciences, University of Missouri-Kansas City (UMKC) invites applications for a tenure-track faculty position (ASSISTANT or ASSOCIATE PROFESSOR) in X-ray crystallography. Consideration will be given to applicant research areas compatible with but not limited to existing lines of the School's research focus on molecular recognition, including macromolecular assembly. We seek an outstanding scholar with demonstrable achievements in research, teaching experience in an English-language institution, and exemplary communication and supervisory skills. Teaching activities will involve participation in at least two of the following disciplines: biophysics, biochemistry, molecular biology, and cell biology. State-of-the-art research facilities, including membership in the SER-CAT at APS (Argonne), start-up funds, competitive salary, and fringe benefits are available. Review of applications will begin immediately and will continue until the position is filled. Submit curriculum vitae with summary of present and future research interests and request that three letters of recommendation be forwarded to: CBB Search Committee, Division of Cell Biology and Biophysics, School of Biological Sciences, BSB 403, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499.

POSTDOCTORAL POSITIONS: Postdoctoral positions are available immediately for NIH-funded projects to study AIDS pathogenesis and vaccines against HIV-1. Previous experience with cellular immunology and/or virology is preferred but not required. Competitive salary and benefits package. Send résumé or curriculum vitae, research interests, and names of references to: Kunal Saha, M.D., Ph.D., Children's Research Institute, The Ohio State University, 700 Children's Drive, Room W532, Columbus, OH 43205. FAX: 614-722-3273; email: sahak@pediatrics.ohio-state.edu.



TWO TENURE-TRACK FACULTY POSITIONS BOSTON COLLEGE BIOLOGY DEPARTMENT

In conjunction with an \$80 million expansion and renovation of Higgins Hall, home to the Departments of Biology and Physics, the Biology Department at Boston College invites applications for two tenure-track faculty positions. These hires will occur in the context of a substantial expansion of our infrastructure, including new research and teaching facilities. Extremely competitive start-up funds and research space are available for initiation and growth of the research programs of incoming faculty. Significant further hiring of tenure track faculty is anticipated. The successful candidates will join a department with established and growing research strengths in molecular and cell biology, developmental biology, genetics, signal transduction, neuroscience, and vector and insect science.

INSECT AND VECTOR BIOLOGY ASSISTANT, ASSOCIATE or FULL PROFESSOR

We seek an outstanding colleague to join our newly established initiative in vector and insect science at its inception. 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 other insect models. The appointee will have the skills and experience to direct an innovative, externally funded program in molecular genetics and/or cell biology of insect systems. The successful candidate will be expected to train doctoral and master's students and to contribute to the teaching mission of the department. Applicants should submit a curriculum vitae, a statement of present and future research plans, and a statement of teaching interests, along with the names and contact information for four references to: Dr. Marc Muskavitch, c/o Insect Science Search Committee, Biology Department, Higgins Hall, Boston College, Chestnut Hill, MA 02467. Inquiries, by phone (617-552-3540) or e-mail (muskavit@bc.edu), are also welcome.

PROKARYOTIC OR EUKARYOTIC MICROBIOLOGY ASSISTANT PROFESSOR

We are looking for an outstanding scientist to direct a creative, externally funded research program based in either a model or pathogenic fungal or bacterial system. Scientists using modern genetic, cell biological, molecular or computational approaches are especially encouraged to apply. The successful candidate will be expected to train doctoral and master's students and to contribute to the teaching mission of the department. Applicants should submit a curriculum vitae, a statement of present and future research plans, and a statement of teaching interests, along with the names and contact information for four references to: Dr. Charles Hoffman, c/o Microbiology Search Committee, Biology Department, Higgins Hall, Boston College, Chestnut Hill, MA 02467.

These appointments will begin on or after July 1, 2001. Review of applications will begin October 30, 2000, and will continue until the positions are filled. Boston College is an affirmative action, equal opportunity employer. Women and minority group members are especially encouraged to apply.

JUNIOR FACULTY POSITIONS AT THE FRED HUTCHINSON CANCER RESEARCH CENTER

The Division of Human Biology at the Fred Hutchinson Cancer Research Center in Seattle is soliciting applications for two positions at the junior faculty level. One of the two recruitments is specifically targeted to expand the Center's strengths in human/mammalian genomics and genetics. We are seeking individuals with research interests in developing the tools of genomics, computational biology, or population-based approaches and applying them to study human biology and disease. For the second position, we are seeking individuals studying any aspect of human biology, cancer, or other disease.

The goal of the Human Biology Division is to use the research tools of molecular biology, cellular biology, genetics, and computational biology to further our understanding of human biology and disease. The Division fosters interdisciplinary, collaborative research at the interface of basic, clinical, and population sciences in an effort to improve the prevention and treatment of cancer and other complex human disorders. Additional information about the Division can be found at: http://www.fhcrc.org/science/human_biology.

The Division laboratories are part of a new lakeside campus and include state-of-the-art research facilities. The Cancer Center has committed major resources to developing outstanding core facilities in support of biological research. The Center has active graduate-student and postdoctoral training programs and offers exceptional opportunities for scientific interactions with other investigators in the Seattle area.

Candidates should send a curriculum vitae, a concise statement of research plans, and three letters of reference to: Human Biology Faculty Search Committee, Fred Hutchinson Cancer Research Center, Division of Human Biology, Mailstop: C3-168, 1100 Fairview Avenue North, P.O. Box 19024, Seattle WA 98109-1024. The application deadline is October 31, 2000.

The Fred Hutchinson Cancer Research Center is an Equal Opportunity Employer committed to workforce diversity. Applications from female and minority candidates are strongly encouraged.

DIRECTOR CALIFORNIA REGIONAL PRIMATE RESEARCH CENTER School of Veterinary Medicine University of California, Davis

Applications and nominations are invited for position of Director, California Regional Primate Research Center (CRPRC). Will hold joint administrative and professorial appointment in appropriate academic department of the University of California, Davis. Salary and level commensurate with qualifications. The CRPRC is an Organized Research Unit on the UC Davis Campus and one of eight national centers established by NIH to pursue basic and applied biomedical primate research. The Director 1) is accountable to both NIH and UC for the overall administration of the Center; 2) is responsible for establishing policy and managing administrative functions of the CRPRC; 3) serves as liaison with NIH on all matters relating to the administration of Center resources, including policy development and accountability; 4) provides fiscal and quality control for research and administrative functions at the Center; and 5) develops and implements long- and short-range Center plans. Additional responsibilities include encouraging and assisting Center scientific staff in development of extramural grants/contracts to support research. Serves as liaison with the University research community and regional scientific community to encourage collaborative research interactions with Center and establishes research teams to study significant biomedical problems affecting human health. Must have (1) DVM, MD and/or PhD degree; (2) broad understanding of modern biomedical science; (3) demonstrated administrative/leadership skills; (4) active and distinguished research record in use of comparative biological models and primate research experience focused on elucidating mechanisms, prevention and/or treatment of human diseases or promoting understanding of basic biological mechanisms; (5) demonstrated competence in teaching; (6) nationally recognized reputation for career achievement and leadership; (7) experience in the acquisition of extramural funding, including NIH, and a commitment to work in securing additional funding for programs of the Center; and (8) excellent interpersonal and communication skills and demonstrated ability to work with others in collegial atmosphere. Expected to qualify for senior professorial position in appropriate academic department. Applicants should submit letter of interest, curriculum vitae and names and addresses of three professional references to Jean A. Weigt, Personnel Officer, School of Veterinary Medicine, University of California, Davis, CA 95616-8734 (telephone: 530 752-1384; fax: 530 754-9337). Applications accepted through November 15, 2000 or until filled. AA/EOE

The Department of Molecular Biosciences at the University of Kansas is planning to recruit many new faculty over the next five years. For the fall/spring of 2001/2002, we invite applications for three tenure-track positions at the **ASSISTANT** and/or **ASSO-CIATE PROFESSOR** levels. Candidates must have a Ph.D. (or equivalent degree) in molecular biosciences or a related field and postdoctoral experience. Candidates must have demonstrated excellence in research and be committed to quality undergraduate and graduate education. New faculty will have the opportunity to interact with faculty in the many interdisciplinary programs within the University.

(1) Microbiologist: Research interests should include the molecular mechanisms of infectious and/or immunologic diseases that employ murine or other appropriate mammalian models to perform a molecular approach to the study of host-pathogen interaction and disease. Examples of fields of research involved include but are not limited to bacterial and mycotic diseases, immunologic diseases, parasitic diseases, sexually transmitted diseases, viral, and rickettsial infections. Contact: Dr. Jack Brown; e-mail: jbrown@ukans.edu; Telephone: 785-864-5157.

(2) Cellular, Molecular, and Developmental Biologist: Research interests include but are not limited to molecular mechanisms that determine cell polarity, membrane trafficking, cytoskeletal dynamics during development, and signaling in cell migration and differentiation. Contact: Dr. Kathy Suprenant; e-mail: ksupre@ukans.edu; Telephone: 785-864-4580.

(3) Structural Biologist: Research interests should include dynamics and structure of membrane proteins/receptors, DNA or RNA binding proteins, or protein-protein interactions. Contact: Dr. Diana Bigelow; e-mail: dbigelow@falcon.cc.ukans.edu; Telephone: 785-864-3831.

Application materials should be sent to the appropriate contact person at: Department of Molecular Biosciences, 2034 Haworth Hall, University of Kansas, Lawrence, KS 66045-2106 and include a letter of application, statements of research and teaching interests, and curriculum vitae. Applicants should arrange to have three letters of reference sent to the appropriate contact person; position announcements can be obtained from the same person. Review of applications will begin November 1, 2000. The Department's website is: www.cc. ukans.edu/~mb/bcmb.html. The University of Kansas is an Equal Opportunity/Affinnative Action Employer. Positions are contingent upon budgetary approval.

The Department of Biology at the State University of New York College at Oneonta invites applications for two tenure-track ASSISTANT PROFESSOR positions beginning fall 2001. Initial appointments will be for two years. Cell Biologist: Duties are to develop new courses or redesign existing courses such as cell biology, cell physiology, or general physiology, and teach general biology. Required qualifications: Ph.D. in biology or related field and a zoological background. Limnologist: Duties are teaching limnology, aquatic pollution, and general biology and the opportunity to develop elective courses (undergraduate and graduate). Possibilities for research and teaching exist at the Biological Field Station located in Cooperstown. Required qualifications: Ph.D. in limnology or related field with a zoological background preferred. Both positions: Preferred qualifications are evidence of ability to teach and develop Departmental courses at all levels and ability to integrate computerbased technology into curriculum. To apply, please send current curriculum vitae, statements of teaching and research interest, official transcripts, and three letters of recommendation to: Dr. William J. Pietraface, Chair, Search Committee, Department of Biology, Box S, State University College at One-onta, Oneonta, NY 13820-4015. Review of applications will begin immediately and will continue until the position is filled. SUNY Oneonta is an Equal Employment Opportunity/Affirmative Action/Americans With Disabilities Act employer. Women, minorities, veterans, and persons with disabilities are encouraged to apply.

POSITIONS OPEN

ECOLOGIST

The Department of Biology at Swarthmore College invites applications for a tenure-track appointment in ecology at the ASSISTANT PROFESSOR level to begin September 2001. We seek an Ecologist with strong field experience, preferably plant-related, who is committed to combining teaching and research at a small liberal arts college. Teaching responsibilities will include an intermediate-level course in general ecology, an advanced seminar in a major area within ecology, and participation in the Department's introductory biology sequence. The successful candidate will be expected to establish an active research program that will provide opportunities for undergraduate participation and to participate in the College's environmental studies programs. A Ph.D. is required; postdoctoral research experience and teaching experience are desirable.

Applicants should submit curriculum vitae, three letters of recommendation, and statements of teaching and research interests by November 10, 2000, to:

Mark Jacobs, Chair Department of Biology Swarthmore College Swarthmore, PA 19081-1390

Swarthmore College is a small, selective liberal arts college of approximately 1,400 undergraduates. The College supports faculty research by providing generous support for undergraduate summer stipends, a leave every fourth year, and travel allowances to attend national meetings. For more information about the Biology Department at Swarthmore, please visit our website: www.swarthmore.edu/natsci/ biology/. Swarthmore College is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

BEHAVIOR GENETICS/ NEUROGENETICS UNIVERSITY OF COLORADO

The University of Colorado Department of Psychology invites applications for a tenure-track Behavior Geneticist/ Neurogeneticist at the **ASSISTANT PROFESSOR** level. Candidates who employ stateof-the-art molecular and neurobiological methods to study human, vertebrate, or invertebrate models of complex behaviors and might interface with existing research programs in drug abuse, learning and memory processes, and aging will be given special consideration.

Applicants should submit curriculum vitae, a statement of research and teaching interests, example research papers, and at least three letters of recommendation to: Behavior Genetics Search Committee, Department of Psychology, University of Colorado, Campus Box 345, Boulder, CO 80309-0345. Inquiries should be addressed to: Dr. Jeanne Wehner, Chair, Behavior Genetics Search; Telephone: 303-492-5663; e-mail: Jeanne.Wehner@ Colorado.edu. Applications should be completed by November 1, 2000, but will be reviewed until the position is filled. The University of Colorado at Boulder is committed to diversity and Equality in Education and Employment.

RESEARCH SCIENTIST/POSTDOCTORAL ASSOCIATE

Position available to study vascular wall gene expression in gene-targeted models of atherosclerosis (see Arterioscler. Thromb. Vasc. Biol. 20:1939, 2000). Postdoctoral Associate should have Ph.D. in biological sciences with training in morphology/histology at the light and electron microscopic level, preferably with experience in immunolocalization of antigens, in situ hybridization, and DNA microarray analysis. Research Scientist should have four years of postdoctoral experience. Salary and level of appointment commensurate with work experience. See labwebsite: http://www.pharm.sunysb. oratory edu/faculty/williams/. Send curriculum vitae and names of three references to: David Williams, Department of Pharmacological Sciences, SUNY at Stony Brook, Stony Brook, NY 11794; e-mail: Dave@pharm.sunysb.edu.

POSITIONS OPEN

TWO FACULTY POSITIONS INTRODUCTORY BIOLOGY ANATOMY

The Department of Biology at Eastern Michigan University is seeking to fill two tenure-track faculty positions at the rank of ASSISTANT PROFESSOR with appointments beginning fall 2001. Position One is for an outstanding teacher for large introductory biology classes. Candidates from all areas of biology are encouraged to apply; however, some preference will be given to candidates with a background in any of the following areas: invertebrate biology, parasitology, or herpetology. Candidates for Position Two will be expected to teach human gross anatomy and neuroanatomy and will have opportunities to contribute to other areas in the Department. Positions require a Ph.D., teaching experience, and productive research. Successful candidates must have a strong commitment to teaching at undergraduate and graduate levels, including involvement of students in ongoing research, and will be expected to develop programs capable of attracting external funding. The Department of Biology has 22 faculty with graduate program concentrations in ecology and organismal biology, molecular and cellular biology, physiology, and general biology. Eastern Michigan University provides modern laboratory facilities, field sites, and a new Terrestrial and Aquatic Ecology Research Facility with a 3,000 square foot greenhouse to support research from molecular to ecosystem levels of organization. There are opportunities to interact with the Urban Water Resources Consortium, the Kresge Environmental Education Center, NOAA Great Lakes Environmental Research Laboratory, Great Lakes Science Center, and nearby universities.

Submit a letter of interest, curriculum vitae, statement of teaching interests and philosophy, description of research, relevant reprints, copies of transcripts (unofficial acceptable), and three letters of recommendation to: Posting F 0104 (Introductory Biology) or Posting F 0137 (Anatomy), Eastern Michigan University, Academic Human Resources, 202 Bowen, Ypsilanti, MI 48197. Deadline for receipt of materials is November 8, 2000. For additional information, contact: Robert Neely, Biology Department Head; Telephone: 734-487-4242; FAX: 734-487-9235 or for the Introductory Biology position, e-mail: Jamin.Eisenbach@emich. edu and for the Anatomy position, e-mail: HZot@ online.emich.edu. Website: www.emich.edu/ public/biology/bioweb.htm.

RESEARCH INVESTIGATOR

We are looking for an ORGANIC CHEMIST tojoin our group working on development of a vaginal product that will protect against HIV infection The product under development is a sulfated polysaccharide formulation that is currently in expanded safety trials. The candidate will be responsible for carrying out FDA-required analyses necessary for obtaining approval for future efficacy trials. Responsibilities also include supervising laboratory technician(s) in investigation of possible modification to the formulation to improve efficacy in preventing HIV infection, as well as extending the range of activity against other sexually transmitted pathogens. Ph.D. in organic chemis-try or related field plus minimum of two to four years of postdoctoral experience required. Send curriculum vitae to: Dr. David M. Phillips, Population Council, CBR, 1230 York Avenue, New York, NY 10021. FAX: 212-327-7678; e-mail: dphillips@ popcouncil.org. Affirmative Action/Equal Opportunity Employer, Minorities/Females.

The University of Colorado Museum, a natural history museum with collection strengths in anthropology, botany, paleobiology, and zoology, invites applications for a tenure-track ASSISTANT/ASSOCI ATE PROFESSOR to direct and teach in the Museum and Field Studies graduate program and pursue research in an allied discipline. Obtain details of the position and application procedures at website: http://www.Colorado.EDU/CUMUSEUM/. University of Colorado, Boulder, is committed to diversity and Equality in Education and Employment.

Faculty Positions Molecular Genetics, Biochemistry and Microbiology University of Cincinnati College of Medicine

The Department of Molecular Genetics, Biochemistry and Microbiology has well established research programs and seeks to attract faculty at the tenure-track Assistant Professor level with research that complements the following areas:

- 1) Genetics, Biochemistry and Molecular Biology of Signal Transduction and/or Transcription
- 2) X-ray Crystallography
- 3) Microbiology, Pathogenesis, Immunology, Virology
- 4) Structural Biology/Biochemistry

The 26 full time faculty maintain highly visible research programs in multiple areas including viral and microbial pathogenesis, molecular and cellular immunology, differentiation, developmental and cancer biology, human genetics, structural biology, and membrane transport. Our graduate program includes 44 graduate students and an equal number of postdoctoral fellows training in the department. Our structural biology program has a world-class NMR facility with five instruments, including one of 800 MHz. The College is completing a state of the art BL3 containment facility to work with pathogens. We maintain core facilities for production of transgenic and knockout mice, DNA synthesis and sequencing, gene microarray analysis, proteomics and informatics. These provide a breadth of research opportunities unparalleled at most research institutions.

For further information, please see http://ucmg65.med.uc.edu/. Applicants should submit a CV, brief description of research, and the names of three qualified references to: Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry and Microbiology, PO Box 670524, Cincinnati, OH 45267-0524.

Affirmative Action/Equal Opportunity Employer

Two Tenure-Track Assistant Professor of Biology Positions Neuroscientist and Geneticist

The Department of Biology of Rider University invites applications for two tenure-track faculty positions at the level of Assistant Professor. Candidates whose interests complement and enhance our strengths in combining high-quality teaching and research conducted with undergraduates are encouraged to apply (our Web site: http://enigma.rider.edu/~wwwbio/).A Ph.D. and postdoctoral training are required; evidence of teaching experience is expected. Successful candidates will establish a research program involving undergraduates and teach introductory and upper division courses in their specialty area. The Neuroscientist will contribute to our growing program in Biopsychology. The Geneticist will provide a core course for Biology, Biopsychology, and Biochemistry majors. Preference will be given to individuals with the ability to conduct meaningful research in an undergraduate environment. Questions should be directed to James Riggs, Ph.D., Professor of Biology (riggs@rider.edu). Applications, including a curriculum vitae, statements of teaching and research interests and the names of three references should be sent to: Rosemary Molloy, Manager of Employment, Human Resources, Rider University, 2083 Lawrenceville Road, Lawrenceville, NJ 08648-3099. Review of applications will begin on December 15, 2000 and continue until the positions are filled. Rider University is an Equal Opportunity/Affirmative

Action Employer and does not discriminate on the basis of age, race, sex, disability, sexual orientation, national origin, religion, or any other non-job related criteria.



Visit Rider on the Internet: http://www.rider.edu



POSTDOCTORAL POSITIONS AVAILABLE IN THE STUDY OF INFECTIOUS DISEASES

A postdoctoral position is available to study cytokine-mediated control of the immune response in infectious diseases. Specific problems include understanding the molecular basis of latency in mycobacterial infections and the inhibitory role of IL-10 in acute and chronic inflammation. The technologies we are using to dissect these problems include transgenic mice construction, knockout mouse production and analysis, microarray screening, in vitro macrophage and T cell analysis and flow cytometry.

This postdoctoral position would be ideally suited to an individual with a strong background in immunology and/or mouse models of infectious diseases who has recently obtained a Ph.D. and/or M.D. and wishes to pursue training in the underlying basis of disease. The support facilities and the research environment at St. Jude Children's Research Hospital are exceptional, with strong collaborative interactions between departments within St. Jude as well as affiliated programs in the Memphis area.

This position is available immediately, and interested candidates should send a curriculum vitae and must arrange to have three letters of recommendation sent to **Peter Murray**, Ph.D., **Department of Infectious Diseases**, **St. Jude Children's Research Hospital**, **332 North Lauderdale St.**, **Memphis**, **TN 38103**.

Postdoctoral positions are available to study the molecular and cellular basis of pneumococcal infections. We are coupling a variety of geneticallyaltered mouse models, chip technology, and information from the pneumococcal genome to understand the pathophysiology of meningitis from both the host and pathogen perspectives. Specific areas of interest focus on responses of live cells, leukocytes, neurons, glia and blood brain barrier endothelial cells.

The ideal candidate will have a strong background in bacterial genetics, host-pathogen interactions, immunology and/or mouse models of infectious diseases and will have obtained a Ph.D. and/or M.D. Our laboratories are part of the Department of Infectious Diseases which has strong programs in diverse aspects of bacterial and viral pathogenesis. The support facilities and the research environment at St. Jude Children's Research Hospital are exceptional, with strong collaborative interactions between departments within St. Jude as well as affiliated programs in the Memphis area.

These positions are available immediately. Interested candidates should send a curriculum vitae and three letters of recommendation to: **Elaine Tuomanen**, **M.D.**, **Chair**, **Department of Infectious Diseases**, **St. Jude Children's Research Hospital**, **332 North Lauderdale St.**, **Memphis**, **TN 38103**.

> www.stjude.org AA/EOE M/F/D/V



SENIOR RESEARCH ASSOCIATE IN CARDIOVASCULAR GENETICS The Donald W. Reynolds Cardiovascular Clinical Research Center at Stanford University

A large-scale effort is being initiated to identify human genes associated with atherosclerotic vascular disease. Sophisticated molecular biology techniques will be employed to clone vascular wall genes, which will then be evaluated for aberrant expression in the diseased vessel wall by microarray transcriptional profiling. Functional genomics approaches as well as in vitro and in vivo assays will be employed to study and prioritize candidate genes for use in genetic epidemiology studies. A position is available for an accomplished individual with graduate and postdoctoral training in molecular biology, genomics, or human genetics to help oversee the development and functional evaluation of the panel of candidate genes. This work will employ latest technologies in microarray construction and analysis, sequence and microarray database construction, and algorithm design for highthroughput computerized data analysis. The individual in this position will have the unique opportunity to identify and study novel cardiovascular genes at the molecular and cellular level and to learn and benefit from genetic epidemiology studies aimed at linking these genes to human disease. In addition, they will benefit from collaborations with the Stanford Human Genome Center and the Lawrence Berkeley Laboratories. Send curriculum vitae to: Marcia Gibbs, Faculty Affairs, Division of Cardiovascular Medicine, Stanford University School of Medicine, Falk Cardiovascular Research Center, 300 Pasteur Drive, Stanford, CA 94305-5406. E-mail: mgibbs@cvmed.stanford.edu. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

Chemistry Department, Penn State, University Park, Pennsylvania. Several JUNIOR and SENIOR-LEVEL FACULTY POSITIONS are available for fall 2001. Appointees are expected to establish an exceptionally strong and highly visible research program that incorporates excellence in undergraduate and graduate education. Rank is open; however, senior appointments should have a previous record of national and international distinction. We encourage applications from candidates in all areas of chemistry, including those that interface with other disciplines such as environmental sciences, materials sciences, biological sciences, and bioinformatics. Applicants should submit curriculum vitae, a list of publications, research plans, and arrange to have three letters of recommendation sent to: Chair of the Search Committee, Box S, Department of Chemistry, 152 Davey Laboratory, Penn State University, University Park, PA 16802. Review of applications will begin on October 1, 2000, and continue until the positions are filled. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW

A position is available for postdoctoral research in the laboratory of **Barbara A. Miller, M.D.**, Senior Scientist, Weis Center for Research, dedicated to the study of normal and malignant hematopoietic proliferation and differentiation. Current projects include the study of hematopoietic growth factor signal transduction and the molecular characterization of a novel family of nuclear migration genes utilizing gene disruption, transgenic mice, and protein biochemistry. A strong background in molecular biology is suggested. Interested applicants should submit their curriculum vitae and the names of three references to: Julie A. Brosius, Research Secretary, Henry Hood Research Program, Weis Center for Research, Geisinger Clinic, 100 North Academy Avenue, Danville, PA 17822-2600.

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR AND CELLULAR BIOLOGY HARVARD UNIVERSITY

The Department of Molecular and Cellular Biology (MCB) is seeking outstanding candidates for the position of Assistant Professor (entry-level appointment). Our Department covers a broad range of topics including cellular biology, developmental biology, molecular biology, molecular evolution, molecular genetics, neurobiology, and structural biology. We are particularly interested in candidates working in the following areas: neurobiology, cell biological and evolutionary approaches to development, structural biology, genomics, and molecular approaches to understanding gene function.

Applications should include curriculum vitae, reprints of publications, and a statement of present and future research plans (one to three pages). Complete applications and three letters of recommendation solicited by the applicant should be received no later than October 13, 2000. Mail applications to:

> Elaine R. Wood MCB Search Committee Harvard University 7 Divinity Avenue Cambridge, MA 02138

Harvard University is an Affirmative Action/Equal Opportunity Employer. We strongly encourage applications from women and minority candidates.

MEDICAL/SCIENTIFIC RESEARCH ANALYST

Major Midwest law firm is seeking applicants for the position of Research Analyst. Duties include the review and analysis of medical literature on a variety of topics in the context of pharmaceutical product liability litigation. Position also requires review and analysis of medical records and the preparation and communication to nonscientists of analyses of medical issues. Position may require some travel. This is a high-intensity position which emphasizes practical application of scientific knowledge and requires a result-oriented and self-motivated individual while offering a competitive salary and excellent benefits. The position provides a unique opportunity for scientists to apply their skills outside the area of basic research.

This position requires an outstanding academic record and a graduate degree in biological, life, or biomedical sciences. A working knowledge of pharmacology and/or epidemiology is preferred but not required. Excellent communication skills, both verbal and written, are essential. No legal education or experience required but outstanding interpersonal skills are a must.

Please send a letter of application, complete college transcripts, a personal résumé, and references to: Staff Recruiting Coordinator, Shook, Hardy & Bacon L.L.P., One Kansas City Place, 1200 Main Street, Kansas City, MO 64105-2118. FAX: 816-421-5547.

ASSISTANT or ASSOCIATE DIRECTOR of the Harvard Brain Tissue Resource Center, an NIH national resource for the acquisition and distribution of postmortem brain tissue from patients with dementias, movement disorders, and major psychoses. Requirements: Ph.D. in neuroscience and/or neuroanatomy and good organizational and communications skills. Opportunity for Harvard appointment and advancement. Send curriculum vitae and recent photograph to: Francine M. Benes, M.D., Ph.D., Director; e-mail: benes@mclean.harvard.edu. Equal Opportunity Employer.

DYSTONIA FELLOWSHIP: A two-year FEL-LOWSHIP of \$50,000 per year focusing on genetics, treatments, and studies of torsinA biology related to dystonia is available from: Dystonia Medical Research Foundation, One East Wacker Drive, Suite 2430, Chicago, IL 60601. Telephone: 312-755-0198; FAX: 312-803-0138; e-mail: dystonia@ dystonia-foundation.org; website: www.dystoniafoundation.org. Application deadline is December 30. 2000.



ASSOCIATE DIRECTOR OF THE BLANDY EXPERIMENTAL FARM

The Blandy Experimental Farm (BEF), a 700-acre ecological field station of the University of Virginia in the northern Shenandoah Valley and home of the State Arboretum, invites applications for a new, fulltime Associate Director (AD). The AD position is 50% research, 50% administration. The AD assists the Director in performing administrative duties related to personnel management, budgets, and facility use/ maintenance and provides liaison to certain key Foundation of the State Arboretum and local government communities. He/she advises the Curator with regard to institutional matters related to the Arboretum and assists in developing academic programs and in-tegrating these with University of Virginia programs and Departments. Some outreach and development duties are required. Excellent writing and personto-person communication skills and experience in administrating personnel, budgets, and working with state or federal agencies and nonprofit NGOs are desired.

The Associate Director also maintains an active, externally supported research program, advises students and postdoctoral associates, and performs all the duties of a research faculty member in the Department of Environmental Sciences, which may also include teaching. A Ph.D. in ecology, biology, environmental sciences or similar field with proven research experience is required. The appointment is expected to be at the **RESEARCH ASSISTANT PROFES-SOR** level with a contractual term of three years (with merit-based renewals). While the area of research is somewhat open, experimental, field-based research that is multiscale and features plant ecology, plantanimal interactions, or agroecosystems is preferred.

Applicants should submit electronic versions (PDF or attached Word or Word Perfect files) of their curriculum vitae (including names, addresses, and e-mail contacts of four references) and a description of administrative and research interests to: Michael A. Bowers at e-mail: mab3g@virginia.edu. Review of applications will begin on 15 November 2000; however, the position will remain open until filled. More information about Blandy Experimental Farm is available at website: http://virginia.edu/~blandy/.

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

MICROBIOLOGIST/PLANT BIOLOGIST

Carroll College, a Catholic coeducational liberal arts college, invites applications for a tenure-track **AS**-**SISTANT PROFESSOR** to begin fall 2001. A Ph.D. by August 2001 is required. Preference will be given to applicants who are able to teach both microbiology and botany to biology majors. Other teaching responsibilities include microbiology for nursing students and introductory biology for nonmajors. Applicants should be committed to undergraduate teaching and should have a strong interest in developing an undergraduate research program. Send cover letter, curriculum vitae, transcripts, three letters of fice of Human Resources, Carroll College, 1601 North Benton Avenue, Helena, MT 59625 by December 1, 2000. Information about Carroll College and its biology program is available on our website: http://www.carroll.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS are available to pursue research with **Professor John Reif**, Duke University, in DNA nanostructures (see website: www.cs.duke.edu/~reif/ad.html). Candidate should have a Ph.D. in molecular biology, biochemistry, or a related field and extensive laboratory experience in recombinant DNA techniques. E-mail curriculum vitae including e-mail addresses of three references to: jr12@acpub.duke.edu.

ANERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

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Uhat >>> Help shape science and technology policy in Washington, DC: Contribute scientific and technical information and external perspectives to tederal decision-making, while learning how government works. The AAAS fellowship programs provide a unique participatory public policy experience for scientists and engineers, through one-year assignments involving domestic and international science policy issues in the Congress and several executive branch agencies. Stipends typically range from \$48,000 to \$52,000.

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Uhen >>> The fellowship year begins September 1, 2001. Fellows attend a two-week orientation before beginning their assignments and participate in a year-long seminar series on topics relevant to science, technology, and public policy. Application deadline is January 10, 2001.

UNETE >>> Fellows are placed in the Congress, the National Science Foundation, the National Institutes of Health, the Department of State, the Department of Defense, the Agency for International Development, the Environmental Protection Agency, the Department of Agriculture, the Food and Drug Administration, the Department of Levison Agency, the Department of Agriculture, the Food and Drug Administration, the Department of Levison Agency, the Department of Agriculture, the Food and Drug Administration, the Department of Levison Agency, the Department of Agriculture, the Pood and Drug Administration, the Department of Justice, and other federal offices.

UDY >>> AAAS sponsors these programs to provide the opportunity for accomplished and societallyaware scientists and engineers to participate in and contribute to the public policy-making process of the federal government. The programs include:

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+ Risk Policy Fellows	+ Defense Policy Fellows
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How >>> For application instructions and further information: fellowships.aaas.org. WAA Science and Technology Policy Fellowship Programs, 1200 New York Avenue, NW, Washington, DC 20005 • Phone 202/326-6700 • E-mail science_policy@aaas.org



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DERMATOPATHOLOGIST/ CYTOPATHOLOGIST DIVISION OF ANATOMIC PATHOLOGY

Applications are invited for an M.D. faculty position in cytopathology and surgical pathology (dermopathology), Division of Anatomic Pathology in the Department of Pathology at the University of Alabama at Birmingham. Successful candidates will join a large faculty in the state-of-the-art Department with a rich and diverse program in diagnostic service; basic, clinical, and translational research; and teaching. The clinical base is large and diverse (40,000 surgical pa-thology [15% dermatopathology] and 115,000 cytopathology accessions are expected in 2000), and our residency and subspecialty residency (Fellowship) training programs are thriving. Minimum require-ments include an M.D. degree, license to practice in Alabama, Board certification in anatomic pathology, and subspecialty Board certification or eligibility in cytopathology or equivalent experience and Board certification in dermatopathology. Demonstration of research productivity will be a distinct advantage. Salary, rank, and tenure status are commensurate with experience and background. Interested candidates should submit a letter of interest and detailed curriculum vitae including a list of publications to: Gene P. Siegal, M.D., Ph.D., Professor and Director, Division of Anatomic Pathology, University of Ala-bama at Birmingham, 506 Kracke Building, 619 19th Street South, Birmingham, AL 35233-1924. The University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer and welcomes applications from qualified women and minorities.

SENIOR RESEARCH SCIENTIST and DI-RECTOR OF BIOINFORMATICS. Established and rapidly expanding pre-IPO biotechnology company in the San Francisco Bay area is seeking seniorlevel Scientists to lead projects aimed at identifying human genes associated with cardiac and vascular disease. The positions and the company are poised for rapid high growth in the coming months.

Genomics and molecular biology: A position is available for an accomplished individual with graduate and postdoctoral training in molecular biology, genomics, and/or human genetics. This individual will head a research team while working with worldclass Scientists and collaborators. This work will employ the latest technologies in genomics in addition to traditional molecular and cellular biology approaches.

Director of Bioinformatics: This individual should have extensive experience in computational approaches to biological questions. At a minimum, the individual should have postdoctoral training and a strong understanding of molecular biology and genomics. The position will involve the creation of proprietary databases and algorithms and the development of novel solutions to difficult computational questions. These efforts will be supported by cutting-edge hardware, software, and world leaders in the area.

Please send applications to: Heather Hall, Human Resources, 384 Oyster Point Boulevard #4, South San Francisco, CA 94080.

DEPARTMENT HEAD SEARCH PHYSICS, ASTRONOMY, AND GEOSCIENCES

Valdosta State University seeks applications for Head of the Department of Physics, Astronomy, and Geosciences. Programs include B.S. degrees in astronomy, environmental geography, and physics and engineering transfer to Georgia Tech.

Ph.D. and sufficient experience to warrant appointment to the rank of ASSOCIATE or FULL PRO-FESSOR required. Starting date July 1, 2001. Further information at website: http://www.valdosta. edu/phy/.

Application deadline is November 17, 2000. Send letter of application, curriculum vitae, and three letters of reference to: Dr. Mary Kay Corbitt, Acting Dean, College of Arts and Sciences, Valdosta State University, Valdosta, GA 31698. Equal Opportunity/ Affirmative Action.

SCIENCE WRITER IN RESIDENCE UNIVERSITY OF ARIZONA

The University of Arizona is looking for a Science Writer in residence for spring 2001 from approximately January 3 to May 30, 2001. Science writer will work with journalism and science students and faculty and will teach two classes. Minimum qualifications are Bachelor's degree in journalism or one of the sciences and two years of experience covering science topics.

The University of Arizona will provide a \$30,000 salary, \$1,500 in relocation expenses, and \$1,500 research stipend. Applications will be reviewed starting October 15, 2000, until position is filled. Send letter of interest, résumé, and three to five clips to: Professor Jacqueline Sharkey, University of Arizona, Journalism Department, P.O. Box 210080, Tueson, AZ 85721-0080. Send inquiries to e-mail: sharkey@u.arizona.edu.

TENURE-TRACK ASSISTANT PROFESSOR Medical Center Vanderbilt University

As part of an expansion of the signal transduction program in the Department of Molecular Physiology and Biophysics at the Vanderbilt University School of Medicine, we invite applications for a tenure-track faculty position at the Assistant Professor level. Preference will be given to candidates who address fundamental questions on cell signaling in mammalian cells and whose interests complement those of existing programs. (Visit our website: http://www.mc. vanderbilt.edu/vumcdeptmpb/).

Interested applicants should forward curriculum vitae, a short summary of research plans, and three letters of recommendation by November 1, 2000, to:

Search Committee (c/o Roland Stein, Head) Department of Molecular Physiology and Biophysics Vanderbilt University School of Medicine

708 Light Hall Nashville, TN 37232-0615

Vanderbilt University is an Affirmative Action/Equal Opportunity Employer committed to increasing the representation of women and minority groups on its faculty.

QUANTITATIVE ECOLOGIST/ENTO-MOLOGIST: Permanent full-time position (GS-12; salary: \$50,000) available with U.S. Department of Agriculture Forest Service Research Unit; ecology, biology, and management of bark beetles and invasive forest insects of southern conifers in Pineville, Louisiana. Research duties include coordinating all aspects of a complex research program on dynamical systems, mathematical modeling, quantitative ecology, and/ or landscape ecology of insects, their hosts, and arthropod and fungal associates. Applicants must have knowledge of quantitative population ecology and mathematical models, skill in biometrics and nonlinear analysis, and ability to speak and write on technical subjects. Anticipated opening and closing dates: October 2-27, 2000. For further information about the position and the unit (including current and former Scientists), contact: Kier Klepzig, Project Leader, USDA Forest Service, 2500 Shreveport Highway, Pineville, LA 71360. E-mail: kklepzig@fs.fed.us; Telephone: 318-473-7238; website: www.srs. fs.fed.us/4501/. USDA is an Equal Opportunity Provider and Employer.

POSTDOCTORAL POSITION available immediately in the study of *Staphylococcus aureus* colonization and disease. Experience in cellular and molecular biology necessary. Send or e-mail curriculum vitae and three references to: Frank Lowy, M.D., Columbia University, Division of Infectious Diseases, 630 West 168th Street, Box 82, New York, NY 10032. E-mail: fl189@columbia.edu. Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS

The Department of Biological Sciences at the University of Missouri at Rolla (UMR) invites applications from outstanding individuals for two tenuretrack **ASSISTANT PROFESSOR** positions starting fall semester 2001 in the following areas: Limnology/fresh water ecological and limnological knowledge (molecular, physiological, or analytical). Developmental biology (Position Number **R53266**). Expertise in molecular/cellular mechanisms of development using an established model system.

Successful applicants will be expected to teach at the undergraduate level (zoology lecture and lab), participate in the development of a new graduate program in applied and environmental biology, and establish a funded research program involving both undergraduate and graduate students. Qualifications for the po-sition include a Doctoral degree with a minimum of two years of postdoctoral experience, evidence of excellence in teaching, and a strong record of research. Opportunities exist for research collaborations. Additional information on the positions is available at website: www.umr.edu/~biosci. Send complete application, including curriculum vitae and statements of research objectives and teaching interests, and arrange for three letters of recommendation to be sent to: Human Resource Services, Position Number (insert appropriate number), University of Missouri-Rolla, 1202 North Bishop, 1870 Miner Circle, Rolla, MO 65409-1050. Review of applications will begin on December 15, 2000, and continue until the position is filled. UMR is an Affirmative Action/ Equal Employment Opportunity Employer. Women, minorities, and persons with disabilities are encouraged to apply.

POSTDOCTORAL POSITION IN RNA PROCESSING AND EXPORT University of California, Irvine

A Postdoctoral position is available to study the mechanism of action of a multifunctional viral regulatory protein that affects cellular mRNA splicing and is required for the export of viral mRNAs. Present studies take advantage of genetic and biochemical approaches in mammalian cells and in yeast to probe interactions between this viral posttranscriptional regulator and cellular factors and to examine the functional consequences of these interactions (see Genes Dev. 12:868-879; Methods 15:95-104; J. Virol. 73: 3246-3257; Virology 257:341-351). Candidates should possess a recent Ph.D. and have a strong background in molecular biology, biochemistry, and cellular biology. Please send curriculum vitae, summary of research experience, and the names of three references to: Dr. Rozanne Sandri-Goldin, Department of Microbiology and Molecular Genetics, College of Medicine, B240 Medical Sciences I, University of California, Irvine, CA 92697-4025. Application materials may be sent electronically to e-mail: rmsandri@uci.edu. The University of California is an Equal Opportunity Employer committed to excellence through diversity.

SENIOR FACULTY POSITION NEUROSCIENCE

The University of Southern California invites applications for a TENURED POSITION at the senior level in neurobiology and gerontology. Preference will be given to established researchers in aging, neurodegeneration, and plasticity and repair. Successful applicants will have outstanding opportunities for interaction with our multidisciplinary Neuroscience Program, including Scientists with interests in synaptic plasticity, learning and memory, and neural systems. Qualified applicants should send curriculum vitae, brief statement of research interests, and arrange for three letters of reference to be sent to: Search Committee, Program in Neuroscience, University of Southern California, Los Angeles, CA 90089-2520. Screening of applications will begin December 2000. University of Southern California is an Affirmative Action/Equal Opportunity Employer.

ANNOUNCEMENTS



Award programs in molecular parasitology, malaria, and molecular pathogenic mycology.

Open to U.S. and Canadian science faculty at the scholar and new investigator levels.

The application deadline for the 2001 award series is January 16, 2001.

The Burroughs Wellcome Fund is an independent private foundation dedicated to advancing the medical sciences by supporting research and other scientific and educational activities. P.O. Box 13901 21 T.W. Alexander Dr. Research Triangle Park, NC 27709-3901 Telephone (919) 991-5100 Fax (919) 991-5160 E-mail: info@bwfund.org Web site: www.bwfund.org



AWARDS IN MOLECULAR PARASITOLOGY

Awards support scientists who will move modern molecular techniques into the study of parasites and whose work will extend parasitology research in new directions. Scholar Awards provide \$425,000 over five years and New Investigator Awards provide \$210,000 over three years. Candidates must have an M.D. or Ph.D. and hold a tenure-track faculty appointment.

AWARDS IN MALARIA RESEARCH

BWF offers two types of awards in its New Initiatives in Malaria Research program. One type, which provides up to \$400,000 over four years, is intended to support studies, including field work, that bring new ways of thinking and new experimental approaches to malaria research. The second type, which provides \$100,000 over two years, is intended to support feasibility studies and pilot work that will underpin higher-risk research projects, or to support investigators from other fields who are reorienting their research to malaria. Candidates must have an M.D. or Ph.D. and hold a tenure-track faculty appointment.

AWARDS IN MOLECULAR PATHOGENIC MYCOLOGY

Awards support scientists who will bring new experimental approaches to the study of virulent fungal pathogens. Scholar Awards provide \$425,000 over five years and New Investigator Awards provide \$210,000 over three years. Awards are open to scientists already working in mycology as well as those from other fields. Candidates must have an M.D. or Ph.D. and hold a tenure-track faculty appointment.

Please visit our Web site at www.bwfund.org for complete program information.



FACULTY POSITION IN BIOCHEMISTRY: The Department of Chemistry and Biochemistry at Arizona State University invites applications for a tenure-track faculty position in biochemistry at the assistant professor level. A Doctoral degree in biochemistry or related field and demonstrated potential for establishing a vigorous research program of national/international recognition and developing excellence in teaching at the undergraduate and graduate levels are required. Applicants must send a description of research plan, statement of teaching philosophy, list of publications, and curriculum vitae to: Professor Neal Woodbury, Chair, Biochemistry Search Committee, Department of Chemistry and Biochemistry, P.O. Box 871604, Arizona State University, Tempe, AZ 85287-1604. In addition, applicants must ensure that three letters of reference are sent to the above address. Review of applications will begin November 2, 2000, or every two weeks thereafter until the position is filled. ASU is committed to increasing faculty diversity and is an Equal Opportunity/Affirmative Action Employer.

A POSTDOCTORAL POSITION is available to study human and mouse immune responses to Borrelia burgdorferi and Treponema pallidum, the agents of Lyme disease and syphilis. The focus of the project shall be to use molecular and cellular approaches to study the interactions between innate immunity and spirochetal lipoproteins. Proficiency with tissue culture, flow cytometry, and both prokaryotic and eukaryotic recombinant DNA techniques is extremely desirable. Position includes salary (negotiable), fringe benefits, and the opportunity to work in a rapidly expanding microbial pathogenesis center located in the heart of Lyme disease country. Send two copies of curriculum vitae and the names/telephone numbers/e-mail addresses of three references to: Dr. Justin Radolf, Center Director, Center for Microbial Pathogenesis, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3710. FAX: 860-679-8130; e-mail: JRadolf@up.uchc.edu.

POSTDOCTORAL POSITIONS AGING RESEARCH UNIVERSITY OF MICHIGAN

Two Postdoctoral positions are available for studies of the molecular biology of aging. One project involves analysis of protein kinase pathways in T cells from aged mice. The other project involves analysis of gene expression using high-throughput array methods. A strong background in molecular cell biology is required. Send curriculum vitae, brief statement of research interests, and contact information for three references to: Richard Miller, University of Michigan, Box 0940, 5316 CCGCB, Ann Arbor, MI 48109. An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Positions are available from November 1, 2000, to join a group of Investigators examining calcium release processes in muscle and nonmuscle cells using electrophysiological, optical, molecular, and genetic approaches. Applicants should have a Doctoral degree and prior research experience in electrophysiology, confocal microscopy, protein biochemistry, transgenesis, or molecular biology. Please send application including curriculum vitae and three references to: Dr. Michael I. Kotlikoff, Professor and Chairman, Department of Biomedical Sciences, T4 017 VRT, Cornell University, Ithaca, NY 14853. Cornell University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL POSITION is available immediately within a highly interactive and multidisciplinary group working on neurotrophin signal transduction. We have an immediate requirement for a skilled Molecular and Cellular Biologist who will characterize a novel family of genes that we have linked to apoptotic receptor signaling and cell cycle progression (see Salehi et al., *Neuron*. 27(2):279–288, August 2000). E-mail curriculum vitae and names and e-mail addresses of three references to: Dr. Philip A. Barker. Montreal Neurological Institute, McGill University, Montreal, Quebec H3A 2B4 Canada. Telephone: 514-398-3064; FAX: 514-398-1319; email: mdpb@musica.mcgill.ca. POSITIONS OPEN



POSTDOCTORAL POSITIONS

Several positions immediately available in neurobiology are at the Mount Sinai School of Medicine. Faculty research interests span a range of topics in molecular, systems, and cognitive neuroscience (website: http://www.mssm.edu/neurobio/ for descriptions). Candidates interested in pursuing multidisciplinary projects across laboratories are particularly encouraged to apply. Applicants should direct a brief statement of research interests, curriculum vitae, and names of three references to: Postdoctoral Search Committee, Mount Sinai School of Medicine, Box 1639, One Gustave L. Levy Place, New York, NY 10029-6574. The Mount Sinai School of Medicine is an Equal Opportunity/Affirmative Action Employer.

RESEARCH POSITIONS DEPARTMENT OF DERMATOLOGY COLUMBIA UNIVERSITY Postdoctoral Positions in Dermatology

POSTDOCTORAL POSITIONS (three) available immediately for NIH-funded studies including the mechanisms of cutaneous carcinogenesis, the molecular basis of genetic blistering disorders, and the genetic basis of alopecia. Positions require commitment to research in investigative dermatology and cutaneous biology. Ph.D. or M.D. with a strong background in molecular biology techniques required. Experience with immunohistochemistry and/or carcinogenesis studies is desirable.

ASSOCIATE RESEARCH SCIENTIST

Position available to join research project related to hairless protein. Applicants must have Ph.D. or M.D./Ph.D. and a strong background in biochemistry and cell biology methods. Interest in nuclear proteins, cellular compartmentalization, transcription factors, cytoskeleton, and advanced microscopy are desirable.

Send curriculum vitae and three references to: Department of Dermatology, Columbia University, 630 West 168th Street, VC 15-1526, New York, NY 10032. E-mail: cdl1@columbia.edu; FAX: 212-305-7391.

We are an Affirmative Action/Equal Opportunity Employer. The Department is particularly interested in qualified minority and women applicants.

COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS

An ASSOCIATE RESEARCH SCIENTIST position is available to study the signal transduction and gene expression mechanisms underlying memory (*Cell* 89:115–126, 1999; *Neuron* 22:1–10, 1999). Applicants must have a Ph.D. or M.D. and at least two years of postdoctoral research experience and expertise in molecular biological and biochemical techniques.

Submit curriculum vitae and names, postal, and e-mail addresses of three references to: Dr. James H. Schwartz, Center for Neurobiology and Behavior, 1051 Riverside Drive, New York, NY 10032. Columbia University takes Affirmative Action to ensure Equal Employment Opportunity.

POSTDOCTORAL POSITION

Postdoctoral-level Molecular Biologist to study HIV-1 in human brain in a project directed at understanding the pathogenesis of neurological disease. Outstanding molecular and PCR skills are essential; expertise in gene expression profiling desirable. Send letter, curriculum vitae, and three references to: Dr. Ronald Collman, University of Pennsylvania School of Medicine, 807 Abramson, Philadelphia, PA 19104-4399. FAX: 215-573-4446. Affirmative Action/Equal Employment Opportunity.

POSITIONS OPEN

RESEARCH ENTOMOLOGIST/ MICROBIOLOGIST

The U.S. Department of Agriculture, Research, Education, and Extension, Agricultural Research Ser vice (ARS), Northern Plains Area, Bee Biology and Systematics Laboratory, is accepting applications for a permanent, full-time Research Entomologist/Microbiologist to provide expertise that will contribute directly to the USDA Alternatives to Methyl Bromide initiative and the USDA Small Farms initiative. Specific research objectives are to (1) develop novel approaches for the management of chalkbrood (Ascosphaera spp.) in commercial scale populations of the alfalfa leafcutting bee, blue orchard bee, other bee pollinator species; (2) develop chemical and/or biological and cultural (e.g., sanitation) control methods for commercial-scale bee pollinator species; and (3) research the etiology of bee diseases by using culture media and diagnostic kits for isolation, identification, and enumeration of specific microorganisms. U.S. citizenship and a Ph.D. or equivalent is desired. Salary with experience (\$50,139 to commensurate \$91,589). For information on the research program and/or position, contact: Dr. W. P. Kemp; Tele-phone: 435-797-2525; e-mail: wkemp@biology. usu.edu. A copy of the vacancy announcement will be available on the ARS website: www.ars.usda.gov/ afm/hrd/resjobs. For information on application procedures, contact: John Watterson; Telephone: 435-797-3071. Applications in response to this advertisement should be marked ARS-X0W-0342 and should be mailed to: USDA, ARS, HRD, WOB, 5601 Sunnyside Avenue, Beltsville, MD 20705-5106. Applications must be postmarked by the closing date of 31 December 2000. USDA is an Equal Opportunity Provider and Employer.

ENVIRONMENTAL SEDIMENT SPECIALIST STATE OF WASHINGTON

Washington State Department of Ecology is recruiting for a Sediment Specialist for the Toxics Cleanup Program in Bellevue. Compensation is \$40,044 to \$51,240 per year.

Oversees sediment site assessments and cleanups and provides scientific, technical, and regulatory assistance to various parties. Provides input into developing sediment management programs. Coordinates with other state and local programs and entities. Qualifications include a Bachelor's degree involv-

Qualifications include a Bachelor's degree involving major study in environmental, physical, or one of the natural sciences; environmental planning or other allied field; and five years of professional-level experience in environmental analysis or control or environmental planning (or substitution for experience with a higher degree).

Competitive benefits package. To obtain application information, please call: **Department of Ecology, Alan Jacobs, Personnel Officer, Employee Services; Telephone: 360-407-6024.** Application deadline is October 18, 2000.

The State of Washington is an Equal Opportunity Employer. Women, racial and ethnic minorities, persons of disability, persons over 40 years of age, and disabled and Vietnam veterans are encouraged to apply. Persons with a disability who need assistance in the application or testing process or those needing this announcement in an alternative format may call Telephone: 360-407-6186 or the Telecommunications Device for the Deaf; Telephone: 360-407-6206.

Dimera LLC, a new biotechnology firm with NIH funding in Portland, Oregon, seeks **POSTDOC**-**TORAL FELLOWS** to assist with digital live cell microscopy, calcium and PKC dynamic analysis, and Doppler-enhanced catheterization of primate coronary arteries. Our goal is new drug discovery and development for drugs to offer live-saving treatment of postmenopausal women. Dimera strives to provide a fun, challenging learning environment for motivated individuals. Salaries above NIH guidelines, enhanced by success bonuses, acknowledge outstanding contributions. FAX résumés to: **503-295-2757**. Visit our website: www.dimera.net.

Tenure-Track Faculty Positions in Neural Engineering at Washington University

The Department of Biomedical Engineering at Washington University in St. Louis invites applications for junior or senior level tenuretrack faculty positions in the field of Neural Engineering. We are seeking candidates with a PhD or equivalent degree in bioengineering or a closely related discipline and who have exceptionally strong expertise and interest in developing and applying engineering principles to the study of neural systems or in applying neurobiologically derived insights to problems in engineering. Areas of interest include sensory-motor processing, pattern analysis and recognition, and neuro-imaging.

These positions represent a major expansion of the department supported, in part, by recent Development and Special Awards from the Whitaker Foundation. This includes a new building for the department that is now under construction. The department is closely affiliated with the Institute of Biological and Medical Engineering, a joint enterprise of the Schools of Engineering and Medicine that includes a large and diverse neuroscience community.

Successful applicants at the junior level will be expected to establish an independent research program with extramural funding. Distinguished, senior level applicants with an outstanding record of educational and research accomplishments will be considered for one of the newly endowed chairs in the department. The successful applicant will be expected to establish research collaborations with other engineers and neuroscientists at Washington University. He/she would also be expected to develop and teach biomedical engineering courses at the undergraduate and graduate levels (see http://biomed.wustl.edu/).

Applicants should send a curriculum vitae, a statement of their ongoing research program and future goals, and names of at least three references (plus addresses, fax, and email). Applicants may respond by email to **susan@pcg.wustl.edu**, by sending their application as a ONE FILE attachment or by regular mail to:

Neural Engineering Search Committee c/o Susan Danker, Box 8108 Department of Anatomy and Neurobiology Washington University Sch Med 660 S. Euclid Ave St. Louis, MO 63110

Preference will be given to applications received before January 15, 2001.

Washington University is an equal opportunity employer.

MEETINGS

GLOBAL ALLIANCE FOR TB DRUG DEVELOPMENT

FUNDING OPPORTUNITIES

Last February in Cape Town, South Africa, 120 representatives from academia, industry, major development agencies, non-governmental organizations, and donors from around the world gathered to discuss obstacles and opportunities for the development of new drugs for tuberculosis. The main outcome of the meeting was a commitment to create a Global Alliance for TB Drug Development during the year 2000. The Global Alliance's vision is to provide new medicines, accessible to all, for the treatment of tuberculosis.

MISSION STATEMENT

Accelerate discovery and development of cost-effective new TB drugs that will: • Shorten the duration of TB treatment or otherwise simplify its completion,

- Improve the treatment of latent TB infection, or
- Be effective against MDR-TB

CALL FOR LETTERS OF INTEREST

The Global Alliance is currently seeking projects to support in tuberculosis drug R&D. The Alliance invites Letters of Interest from academic and industrial research groups (including pharmaceutical and biotechnology companies). Although projects in all phases of tuberculosis drug R&D are encouraged to submit Letters, the primary categories for consideration are:

- · Tuberculosis drug discovery projects
- · Tuberculosis drug development projects

Projects that include public-private partnerships and developing-country collaborations are strongly encouraged to apply. Please visit our Web site at **www.tballiance.org** for information required with Letters of Interest. The deadline for receipt of materials is December 15, 2000.

Please send Letters of Interest to: The Global Alliance for TB Drug Development, 420 Fifth Avenue, 21st Floor, New York, New York 10018, Attn: Di Eckerle

medicine

seeks an **Assistant Editor** to join its full-time editorial group in New York City.

SHINGTON · UNIVERSITY · IN

The position offers an exciting and challenging opportunity to enter the world of scientific publishing while remaining at the forefront of research. Members of the editorial team oversee the selection and preparation of research articles published in *Nature Medicine*; they also commission Commentaries and Reviews and write news items and editorials for the journal. They attend meetings and conferences, visit laboratories and maintain alliances with the international scientific community.

We are seeking a qualified biomedical researcher with a PhD and a broad-based interest and expertise in the areas covered in *Nature Medicine*. The ideal candidate should have postdoctoral research experience and publications in peer-reviewed journals, excellent written and oral communication skills, good standing in the community and a commitment to the communication of science.

Please submit a curriculum vitae, a concise cover letter explaining your interest in the post and a 500-word *News & Views* style article on an exciting and newsworthy recent development in any area of biomedical research, to: The Editor, *Nature Medicine*, 345 Park Avenue South, 10th Floor, New York, NY 10010-1707 (Fax: 212-683-5751; email: medicine@natureny.com)

The deadline for application is 31 October 2000.

SENIOR POSTDOCTORAL FELLOW AND RESEARCH ASSOCIATE (ASSISTANT PROFESSOR)

Our laboratory is interested in the study of the cellular and molecular biology of murine natural killer (NK) cells. The areas of investigation include differentiation of NK cells, regulation of receptor repertoire, function of activating and inhibitory receptors, and signal transduction. Techniques used in our research range from bone marrow transplantation, stem cell culture, and cloning and structure-function analysis of genes.

Postdoctoral Fellowship applicants should have either direct experience in the field of NK cell biology during their graduate training or have completed an initial Postdoctoral Fellowship. The Research Associate (Assistant Professor) position requires three to four years of postdoctoral experience and some evidence of having supervised graduate students/technicians. For both positions, previous work in the field of NK cell biology is preferred but not essential. These two positions are available from January 1, 2001.

The University of Chicago has a strong interdisciplinary program in immunology with several distinguished Immunologists. This provides excellent environment and opportunity to collaborate with other laboratories. Interested applicants should send a statement of research interests, curriculum vitae, and names of three to four references to the following address: Vinay Kumar, M.D., Professor and Chairman, Department of Pathology, Vacancy Number 2000-04, The University of Chicago, 5841 South Maryland Avenue, MC 3083, Chicago, IL 60637-1470. An Affirmative Action/Equal Opportunity Employer.

Trauma Research is looking for two POSTDOC-TORAL SCIENTISTS to study physiological and molecular mechanisms of systemic inflammation with emphases on fever and septic shock. One position is for a junior Thermophysiologist with good surgical skills. A background in electrophysiology, neuroanatomy, math, or computers is a plus. This person will perform high-volume surgeries in rats and mice, run physiological experiments with thermocouple thermometry and biotelemetry, have an opportunity to use a multilane temperature gradient, and be responsible for the animal aspect of current molecular biological projects. The second position is for a Neuroscientist or Systems Physiologist experienced in histochemistry or immunoassays. Familiarity with the biochemistry of LPS, basic microbiology, and innate immunology is an advantage. This person will conduct relatively independent research in small animals along his/her lines of excellence and apply ex vivo methods to study sepsis and trauma disease in humans. Excellent writing skills are expected. For both positions, the requirements include an advanced degree and a track record of peer-reviewed publications. The ability to think independently and dedication to work are more important than any particular skill. Both appointments are initially for one year. Titles and salaries are negotiable. Send curriculum vitae; reprints of full-length papers; description of research interests and career goals; and names, e-mail addresses, and telephone numbers of at least two references to: A. A. Romanovsky, M.D., Ph.D., Senior Staff Scientist and Director, Trauma Research, St. Joseph's Hospital and Medical Center, 350 West Thomas Road, Phoenix, AZ 85013. E-mail: aromano@chw.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the molecular mechanism of mRNA polyadenylation in yeast, its regulation, and its interaction with other processes involved in mRNA synthesis and utilization. Experience in yeast genetics, biochemistry, and/or the molecular biology of nucleic acid/ protein and protein/protein interactions is preferred. If interested, please send curriculum vitae and three reference contacts to: Dr. Claire Moore, Molecular Biology and Microbiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111. FAX: 617-636-0337; e-mail: claire.moore@tufts.edu. POSITIONS OPEN



POSTDOCTORAL POSITION UNIVERSITY OF MICHIGAN COMPREHENSIVE CANCER CENTER

The laboratory of Dr. Mark Day is seeking Postdoctoral candidates interested in studying molecular carcinogenesis of the mammary gland and prostate gland. Specific research focuses on cellular adhesion and cell cycle regulation of homeostasis in these tissues. Highly motivated individuals with a Ph.D. and experience in cellular and molecular biology, protein biochemistry, and knockout or transgenic models are encouraged to apply. Cell adhesion and cell cycle research experience would be beneficial but not required. This new laboratory is located in the recently constructed University of Michigan Comprehensive Cancer Center. Competitive salary and benefits are available. Applicants must be U.S. citizens. Send a letter explaining your research interests and curriculum vitae to: Mark L. Day, 1500 East Medical Center Drive, 6219 CCC, Ann Arbor, MI 48109-0944. E-mail: mday@umich.edu.

NEUROBIOLOGY OF MEMORY

POSTDOCTORAL POSITIONS available immediately to examine neurochemical regulation of multiple memory systems. Planned projects include in vivo microdialysis to measure neurotransmitter release and extracellular glucose levels in the brains of behaving rats and mice, pharmacological enhancement of learning and memory in aged rodents and in a mouse model of Down Syndrome, and neuroendocrine regulation of long-term potentiation in chronic preparations. The laboratory is a part of the Department of Psychology and the Neuroscience Program, with excellent postdoctoral training opportunities. To apply or for further information, please contact: Dr. Paul E. Gold, Department of Psychology, University of Illinois at Urbana-Champaign, 603 East Daniel Street, Champaign, IL 61820. E-mail: pgold@ uiuc.edu. The University of Illinois is an Affirmative Action / Equal Opportunity Employer.

POSTDOCTORAL FELLOW, RESEARCH: spinal cord regeneration. A Postdoctoral Fellow/Research Associate position is currently available within the Department of Neurosurgery, Baylor College of Medicine, to study axon regeneration in the adult mammalian central nervous system. Research projects will be primarily focused on neuron-glia interactions and development of repair strategies for spinal cord injuries (Nature 390:680-683, 1997; J. Neurosci. 19: 5810-5822, 1999). Candidates must have a Ph.D. with preference given to those with experience in using cell and molecular biology research techniques in the neurosciences. Submit curriculum vitae and mailing addresses with telephone numbers of three references to: Stephen Davies, Ph.D., Department of Neurosurgery, Baylor College of Medicine, Scurlock Tower, 6560 Fannin, Suite 944, Houston, TX 77030 U.S.A. Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.

CAREER IN OPTOMETRY, OPTOMETRIC RESEARCH, OR TEACHING

The New England College of Optometry offers a unique program for those with a Doctorate in the sciences: biology, chemistry, physics, psychology, etc. Candidates have the opportunity to obtain the Doctor of Optometry (O.D.) degree in 27 months. The program begins annually in June. Employment opportunities exist in private practice, industry, faculty positions in optometric education, and research. Contact: The Admissions Office, Department S, 424 Beacon Street, Boston, MA 02115. Telephone: 800-824-5526; e-mail: admissio@ne-optometry. edu. Additional information, see website: www. ne-optometry.edu. Application deadline: March 1, 2001

POSITIONS OPEN

THREE POSTDOCTORAL POSITIONS AVAILABLE IN BIOINFORMATICS

Available immediately. We are seeking candidates for several projects in the laboratory of Professor Patricia Babbitt (1) to develop algorithms/methods for protein superfamily analysis directed and indentification/evaluation of very distant protein relationships and investigation of structural and functional characteristics of these superfamilies, (2) continuation of a project to identify new human transporter genes and to develop bioinformatics approaches for structural and functional characterization of genes from this and other model systems, (3) development of computational definitions of enzyme function and an associated database structure for research computing and new hypothesis generation. Position Two will focus on new pharmacogenomics initiatives at University of California San Francisco in association with Professor Wolfgang Sadée. Position Three will be a joint appointment with the UCSF Computer Graphics laboratory in association with Professor Thomas Ferrin. Candidates should have a Ph.D. in bioinformatics or related field (computer science, statistics, mathematics, or biophysics) and strong programming/scripting skills. One position requires experience in database development, preferably using Oracle. Some experience in enzyme chemistry or computational biology is also desired. Send résumé and a statement of research interests to: Debbie Acoba; e-mail: ddacoba@itsa.ucsf.edu. UCSF is an Affirmative Action/Equal Opportunity Employer. The University undertakes Affirmative Action to assure Equal Employment for underutilized minorities and women, for persons with disabilities, and for Vietnam-era veterans and special disabled veterans.

BULLARD FELLOWSHIPS IN FOREST RESEARCH HARVARD UNIVERSITY

Each year Harvard University awards a limited number of Bullard Fellowships to individuals in biological, social, physical, and political sciences to pro-mote advanced study, research, or integration of subjects pertaining to forested ecosystems. The Fellowships, which include stipends up to \$30,000, are intended to provide individuals in midcareer with an opportunity to utilize the resources and to interact with personnel in any department within Harvard University in order to develop their own scientific and professional growth. In recent years Bullard Fellows have been associated with the Harvard Forest, Department of Organismic and Evolutionary Biology, and the J. F. Kennedy School of Government and have worked in areas of ecology, forest management, policy, and conservation. Fellowships are available for periods ranging from six months to one year and can begin at any time in the year. Fellowships are not intended for graduate students or recent postdoctoral candidates. Further information may be obtained from: Committee on the Charles Bullard Fund for Forest Research, Harvard University, Harvard Forest, P. O. Box 68, Petersham, MA 01366 U.S.A. E-mail: drecos@fas.harvard.edu. More information is available on the Harvard Forest website: http://LTERnet.edu/hfr. Annual deadline for applications is February 1, 2000. Applications from interna-tional scientists, women, and minorities are encouraged.

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 epidemiology 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, 2000. Website: http://www.asmusa.org/edusrc/edu23e. htm;e-mail:fellowships-careerinformation@asmusa. org or ihulede@asmusa.org.

TENURE-TRACK ASSISTANT PROFESSOR **FACULTY POSITIONS IN MAMMALOGY AND BOTANY (4)**

The Biology Department, University of Wisconsin - Stevens Point offers 4 tenure-track, ninemonth faculty positions in Mammalogy, Plant Physiology, Plant Ecology, and Plant Taxonomy, beginning August 2001. Primary responsibilities will be undergraduate teaching (24 credits/ year). After the second year there will be opportunity to develop or collaborate in other coursework appropriate to specialization. Successful candidates will also be expected to maintain a research program, student advising and other department and university service. Involvement of undergraduates in research is strongly encouraged. UWSP is a four-year, primarily undergraduate, comprehensive university with an emphasis on teaching. The Biology Department was the recipient of the University of Wisconsin Regents' award for excellence in teaching and undergraduate research. On-line course descriptions available at http://www.uwsp.edu/news/uwspcatalog/ cbiology.htm.

We require biologists with research experience, PhD dissertation in the specialization indicated, a commitment to undergraduate education, and a breadth of training commensurate with teaching in a quality undergraduate department. PhD preferred, required before tenure decision. Demonstrable teaching and research experience preferred. Postdoctoral research, publications, a successful grant history, and educational creativity will all be viewed favorably.

Mammalogist: Teaching includes an upper-level mammology course for Biology and Natural Resources majors and an introductory biology course. This position includes curation of the department mammal collection. Broad training in Mammalogy and zoology required.

Plant Physiologist: Teaching will initially be apportioned between an upper-level, lab-based course in plant physiology and an introductory biology course. Broad training in plant physiology and botany required.

Plant Ecologist: Teaching includes an introductory biology course, general ecology lecture and lab, and plant ecology. Coursework and research in terrestrial or aquatic plant ecology are required

Plant Taxonomist: Teaching includes an upperlevel vascular plant taxonomy and related courses for Biology and Natural Resources majors and possibly introductory biology courses. This person will become responsible for curation of the UWSP vascular plant herbarium [currently 150,000 specimens].

Appointment at Assistant Professor of Biology (Instructor if PhD is not completed), salary commensurate with qualifications. Complete applications must include: (1) curriculum vitae. (2) one-page statement of teaching goals and philosophy, (3) three letters submitted by persons familiar with your qualifications and (4) copies of official undergraduate and graduate transcripts. All applications, supporting materials and correspondence should be addressed to: [position title]; Attn: Dr. Robert Bell, Chair; Department of Biology; CNR Building; University of Wisconsin - Stevens Point; Stevens Point WI 54481-3897 and received by 20 November 2000. For additional information: TEL: (715) 345-2074; FAX: (715) 346-3624; email: rbell@uwsp.edu.

UWSP is an Affirmative Action/Equal Opportunity Employer and encourages applications from any and all qualified candidates.



Biacore, Inc. (http://www.biacore.com), the global leader in the development, manufacture and marketing of unique and innovative products to detect and monitor biomolecular binding, is building its team. We are currently looking for the following dedicated professionals.

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Application Scientists (2) Deadline to submit resume: October 15, 2000

Responsibilities include: consultation and problem-solving for leading scientists in academia, pharmaceutical and biotechnology industries, development and execution of training courses, product demonstrations and seminars, and the development of new applications for biomolecular characterization. B.S. to Ph.D., minimum 5 years laboratory experience in Biochemistry, Biophysics, Protein Characterization, and/or Assay Development. Strong written and verbal skills required along with a keen scientific interest and desire to work with people in a multidisciplinary setting. Instrument background and knowledge of kinetics would be a plus. Positions to be placed in Boston (A2MA) representing the Northeast and in Baltimore/Washington, DC (A2DC) representing the Mid-Atlantic. Travel required.

Associate Sales Scientist (2) Deadline to submit resume: October 15, 2000 Responsibilities include: selling capital equipment and supplies to scientists within academia. Qualify and process sales leads through the sales cycle to achieve and exceed sales budget. Develop customer contacts and support existing customers; conduct seminars and workshops; give demonstrations of hardware and software; develop knowledge of applications and products; and submit reports as necessary. Work in a team environment to satisfy customer needs. Looking for B.S. in Life Science or related field. One to two years bench experience. Sales experience a plus. Positions to be placed in Los Angeles, CA (SILA) representing the West Coast, and one position in New Jersey (S1NJ) representing the East Coast.

Please include appropriate position code(s) and ability to relocate. Send resumes with references and salary history to:

> Human Resources, Biacore, Inc. 200 Centennial Avenue, Suite 100 Piscataway, NJ 08854

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Two Post-Doctoral Positions Available To Study Cartilage Biology

COLLEGE OF MEDICINE

Post-Doctoral Position Available to Study the Development of Cartilage in a **Hollow-Fiber Bioreactor Model**

A post-doctoral position is available to study the biochemical and molecular properties of cartilage developing in a novel hollow-fiber bioreactor. This work will be a part of a collaborative study to correlate the biochemical make-up of the tissue with MRI and biomechanical properties. Various treatments will be utilized and the long-term goal is to optimize the ability to assess the proper development of cartilage in vivo to support therapeutic treatment of diseased cartilage and/or tissue engineering procedures. The successful candidate should possess a Ph.D. and have practical experience in immunocytochemistry, Northern and Western analysis with experience in cartilage biology desirable. This position is supported by a 3-year grant from the National Arthritis Foundation and includes a competitive NIH-level salary and standard benefits.

Post-Doctoral Position Available to Study the Role of Bel-2 Proteins in **Chondrocyte Biology**

An NIH funded position is available to study the role of Bel-2 proteins in the regulation of chondrocyte apoptosis and gene expression. The successful applicant will have a Ph.D. and should have experience in basic molecular and cellular biology techniques including plasmid construction, cell transfection, and Northern and Western analysis. Experience in chondrocyte biology and/or apoptosis research would be desirable. This position is supported by a 5-year grant from the National Institutes of Health and includes a competitive salary and benefits.

Both positions will be directed by Dr. Walter Horton who belongs to a multi-departmental Skeletal Biology Research Group. The facility at NEOUCOM includes fully equipped laboratories along with support for cell culture, molecular research, tissue preparation, image analysis and transgenic studies. The successful candidate will have the opportunity to join a highly collaborative group with interactions possible both within NEOUCOM and with scientists at Case Western Reserve, Cleveland Clinic, and other universities in the area. Please send your C.V., a letter detailing your research experience, and when you will be available to the Office of Human Resource, Northeastern Ohio Universities College of Medicine, 4209 State Route 44, Rootstown, Ohio 44272. NEOUCOM is an EEO/AA educator and employer.

EXCITING POSTDOCTORAL IN URBAN ECOLOGY IGERT/LTER Programs at Arizona State University

New Postdoctoral available in support of an innovative Ph.D. program (IGERT) in collaboration with Central Arizona-Phoenix LTER. Applicants can be from any area of natural or social sciences that impinges on urban ecology; they should be scholars stimulated by interdisciplinary, synthetic, interactive, collaborative, and frontier research and are innovative and aggressive to define their own careers. Funding of position is shared by LTER and IGERT programs; challenge will be to merge research and training activities seamlessly. Position begins after January 1, 2001, and is for one year with possibility for renewal. Appli-cations due October 16, 2000, and the 15th and 30th of each month thereafter until filled. Application, qualifications, and job description information available from: Philomena Bell; Telephone: 480-965-9857; e-mail: Philomena.Bell@asu.edu; websites: http:// capiter.asu.edu or http://www.asu.edu/ces/igert. htm. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS on an NIHfunded Interdisciplinary Training Grant are available to individuals interested in intracellular signaling, gene transcription, mitogenesis, lipid metabolism, and several other biological processes involved in a variety of cardiovascular diseases. Candidates will have the opportunity to work in the laboratory of one of the 13 preceptors in the Departments of Biochemistry, Medicine, Pharmacology, and Physi-ology. Visit our website: http://www.utmem. edu/pharmacology/training.html for each preceptor's research interests. Applicants must be U.S. citizens or permanent residents. Candidates must have an M.D. and/or Ph.D. degree in one of the biological sciences. Send résumé with names of three references to: Dr. Tarun B. Patel, Department of Pharmacology, University of Tennessee, The Health Science Center, 874 Union Avenue, Memphis, TN 38163. FAX: 901-448-4828. University of Tennessee is an Equal Employment. Opportunity/Affirmative Action/Title IX/Section 504/Americans With Disabilities Act Employer. Minorities and women are especially encouraged to apply.

Mayo Clinic POSTDOCTORAL POSITION with NIH training grant support is available for a Postdoctoral Fellow with an interest in the molecular mechanism of liver cancer development. The project is a collaborative effort between the Division of Gastroenterology and Hepatology and the Cancer Genetics Program of the Mayo Comprehensive Cancer Center. Ongoing studies include chromosomal fragile site cloning, microarray analysis of liver cancer, and discovery of potential therapeutic gene targets in liver carcinogenesis. Candidates must be U.S. citizens or permanent residents and have an M.D. or Ph.D. degree. Please send curriculum vitae and the names of three references to: Lewis R. Roberts, M.D., Ph.D., Division of Gastroenterology and Hepatology, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905. Telephone: 507-284-4823; e-mail: roberts.lewis@ mayo.edu. Mayo Foundation is an Affirmative Action/ Equal Opportunity Employer and Educator.

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately for a highly motivated individual to study structures of signaling proteins and their complexes using X-ray crystallography, as part of a collaborative project with **Dr. Mischa Machius** (University of Texas Southwestern Medical Center at Dallas). Candidates should have a Ph.D. in biophysics, biochemistry, or a related field and should have strong skills in molecular biology and protein chemistry. Salary is highly competitive and commensurate with experience. For immediate consideration, send curriculum vitae and names of three references to: **Rakesh Kumar**, **Ph.D.**, **Professor**, **The University of Texas M. D. Anderson Cancer Center-108**, 1515 Holcombe Boulevard, **Houston**, **TX** 77030-4095. **FAX:** 713-745-3792; e-mail: rkumar@notes.mdacc.tmc.edu.

POSTDOCTORAL RESEARCH ASSOCIATES POSITIONS MOLECULAR BIOLOGISTS Oak Ridge National Laboratory

Two Postdoctoral positions are available in the Environmental Sciences Division (website: http://www.esd.ornl.gov) at the Oak Ridge National Laboratory (ORNL; website: http://www.ornl.gov) for individuals who have training in molecular biology, biochemistry, and microbiology. Individuals will participate in functional genomics of Sheunella oneidensis MR-1 and extremophilic microorganims.

Candidates must have a Ph.D. degree with demonstrated experience in techniques such as gene cloning, gene expression, vector development, RNA isolation and analysis, and functional genomics. Additional experience is desired in bioinformatics and microarray technology. The successful applicants will work cooperatively with Scientists at ORNL, Michigan State University, Stanford University, California Technology Institute, and/or Argonne National Laboratory.

Interested candidates should send curriculum vitae, a description of research accomplishments and interests, and the names and telephone numbers of three references to: Dr. Jizhong Zhou, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6038. Telephone: 865-576-7544; FAX: 865-576-8646; e-mail: zhouj@ornl. gov; website: http://www.esd.ornl.gov/ people/zhou/zhou.html.

Applications will be accepted until November 1, 2000, or until the positions are filled. This appointment will be offered through the ORNL Postdoctoral Research Associates Program (website: http://www.orau.gov/ orise/edu/postgrad/ornlpdoc.htm). The salary will be very competitive. The program is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.

POSTDOCTORAL FELLOWS: Qualified candidates will be required to assist in the isolation of mouse ovum mutant gene and/or cell senescene genes. A Ph.D. in biological sciences with zero to two years of experience along with demonstrated knowledge of both classical and molecular genetics is required. The positions require responsibility for animal husbandry associated with the project or experience in tissue culture, DNA transfer in cultured cells, and use of comparative sequence data and embryological techniques to identify candidate genes. Please forward résumés to: Carmen Sapienza, Ph.D. and Raghbir Athwal, Ph.D., Professors of Pathology and Laboratory Medicine, Fels Institute for Cancer Research and Molecular Biology, Temple University School of Medicine, 3307 North Broad Street, Philadelphia, PA 19140; Telephone: 215-707-7373; FAX: 215-707-1454. Temple University is an Equal Opportunity/Affirmative Action Employer/Minorities/Females/Disabled/Veterans

POSTDOCTORAL POSITIONS are available immediately for Neurophysiologists to study the role of mossy fiber synaptic reorganization in epilepsy and the role of GABA in attenuation of ischemic brain damage. Experimental approaches include whole cell patch clamp recording and fluorescence/confocal imaging. Experience with electrophysiological techniques is highly desirable. Send curriculum vitae and names of three references to: Dr. J. Victor Nadler, Department of Pharmacology and Cancer Biology, Box 3813, Duke University Medical Center, Durham, NC 27710. E-mail: nadle002@acpub. duke.edu. Website: hr.duke.edu.

Duke University: an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

Five **POSTDOCTORAL POSITIONS** available at the Hormel Institute, University of Minnesota, Austin, Minnesota, to study the signal transduction in tumor promotion, chemoprevention, and early develtumor promotion, chemoprevention, and early devel-opment (*MCB* 16:157; *MCB* 16:6427, 1996; *JBC* 271:9942, 1996; *JBC* 271:3126, 1996; *JBC* 272: 4187, 1997; *JBC* 272:9962, 1997; *JBC* 272:26325, 1997; *JBC* 272:27753, 1997; *JBC* 273:32176, 1998; *JBC* 274:12229, 1989; *JBC* 274:14595, 1999; *JBC* 15389, 1999; *JBC* 29672, 1999; *JBC* 275:30611, 1999; *JBC* 275:9143, 2000; *JBC* 275:20444, 2000; *JBC* 275:0980, 2000; *DNAS* 94:5226, 1977; *DNAS* JBC 275:20980, 2000; PNAS 94:5826, 1977; PNAS 94:11957, 1997; PNAS 95:156, 1998; Cancer Res. 57:2873, 1997; Cancer Res. 57:4414, 1997; Cancer Res. 58:711, 1998; Cancer Res. 58:4102, 1998; Cancer Res. 59:1884, 1999; Cancer Res. 59:3053, 1999; Cancer Res. 59:4610, 1999). We are seeking self-motivated Ph.D.s with experience in biochemistry, molecular, and cellular biology. Experience in signal transduction functional genomics, Xenopus early development, stem cells, mouse transgenics, and knockouts is a plus. Please send your curriculum vitae and the names and telephone numbers of three references to: Dr. Zigang Dong, The Hormel Institute, University of Minnesota, 801 16th Avenue N.E., Austin, MN 55912. FAX: 507-437-9606; e-mail: ZigangDong@smig.net. These positions will remain open until qualified candidates are found. The University of Minnesota is committed to the policy that all persons shall have Equal Access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

POSTDOCTORAL FELLOWSHIPS IN COMPUTATIONAL MOLECULAR BIOLOGY

The Sloan Foundation and the U.S. Department of Energy are supporting up to 10 Postdoctoral Fellowships to catalyze career transitions into computational molecular biology. Selections will be announced by May 6, 2001, and funding can begin any time after September 1, 2001. Application deadline: February 1, 2001. You can obtain the complete announcement at website: http://www.sloan.org/science/CMB. html or by contacting: Patricia Stanley, Alfred P. Sloan Foundation, 630 Fifth Avenue, Suite 2550, New York, NY 10111. E-mail: stanley@sloan.org.

POSTDOCTORAL POSITION available immediately to participate in our rapidly expanding genomics project to identify genes that influence alcoholdrinking behavior. The project includes development of congenic rat strains, analysis of gene expression under a variety of experimental conditions using microarray technology, and real-time PCR and identification of polymorphism in candidate genes. Candidates with experience in molecular genetics and/or molecular biology should forward their curriculum vitae to: Lucinda Carr, Ph.D., Indiana University School of Medicine, 975 West Walnut Street, IB407, Indianapolis, IN 46202-5121. Affirmative Action/Equal Opportunity Employer.

A POSTDOCTORAL RESEARCH POSI-TION is available to study hormonal regulation of steroid receptor gene expression in the ovary and also to investigate their functions in normal and pathophysiological conditions. Candidates (U.S. citizens or noncitizens) with training in molecular biology and/or ovarian physiology are encouraged to apply. Send a list of references and curriculum vitae to: Dr. O. K. Park-Sarge, Department of Physiology, University of Kentucky, 800 Rose Street, Lexington, KY 40536-0084. E-mail: OKPS@pop.uky.edu.

POSTDOCTORAL POSITION at the University of California, San Francisco, in yeast genetics and cell biology with applications to human genome research. Experience in molecular biology (cDNA library construction) essential. Please send a letter, curriculum vitae, and three reference letters to: Ira Herskowitz, Biochemistry and Biophysics Department, UCSF, San Francisco, CA 94143-0448. E-mail: LBAXTER@biochem.ucsf.edu by December 1, 2000.

Syntonix PHARMACEUTICALS, INC.

Syntonix is a young, privately held biotech company engaged in applied research and development activities involving the delivery of proteins across the mucosal barrier via oral, nasal or pulmonary administration. We are growing and have recently moved into a state-of-the-art research facility (25,000 square feet) located in Waltham, MA.

If you have an entrepreneurial spirit and a desire to work as part of a small, interdisciplinary team, this is an ideal opportunity to grow with the company. We are currently seeking highlymotivated, Ph.D. level, Senior Scientists for the following positions:

Cell Biologist

Design and independently perform lab experiments to characterize and test the activity of novel immunoglobulin fusion proteins. Experience with biochemical receptor binding assays, ELISA, and cell proliferation assays is preferred. Candidates should have a Ph.D. in Cell Biology, Pharmacology, Molecular Biology, or Biochemistry.

Drug Delivery

Extensive experience in protein drug delivery technologies, preferably in an industrial setting, with focus on pulmonary, nasal and oral routes of administration. Experience with drug delivery formulations that optimize: drug absorption & bioavailability, product stabilization, permeability, sustained release kinetics, dosing frequency, etc. Education and/or training in biochemistry, protein chemistry, pharmacology, and/or receptor biology is very desirable.

PK/Drug Metabolism

Assessment of bioavailability of proteins after oral, nasal and pulmonary delivery. Experience in the analysis of absorption, distribution, metabolism and excretion (ADME) of biotherapeutic proteins is highly desirable, but we will consider individuals with small molecule experience. Working knowledge of standard analytical techniques (e.g., HPLC and LC/MS) is expected. Familiarity with experimentation in both rodent and non-human primate systems as well as pharmacokinetic analysis/modeling software packages is desirable.

Molecular Biologist/Biochemist

Experience with the characterization of receptor or enzyme complexes, i.e., protein-protein interactions, is highly desirable. Preference will be given to candidates with knowledge of using phage display technology to contribute to the design of novel and peptide ligands. Qualified candidates should have a Ph.D. in Biochemistry or related discipline with three or more years of experience in protein biochemistry, cell biology, or molecular biology.

All candidates interested in expanding their career and becoming an integral team member are invited to submit a detailed letter and resume to : Syntonix Pharmaceuticals, Inc., Jeanette Kohlbrenner, Director of Human Resources, 9 Fourth Avenue, Waltham, MA 02451; Fax (781) 547-6008; Email: humanresources@syntnx.com

For additional information, visit our website at: www.syntnx.com



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UNILEVER PLANT PATHOLOGIST

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WHO WE ARE

Unilever is the world's leading food company including several tomato processing facilities in six countries. The central research division includes a fairly young tomato breeding program to produce exclusive tomato hybrids adaptable to different environmental conditions. The breeding group is located in Stockton, California.

THE POSITION

The primary function of the position is to participate in a tomato breeding program; duties will include disease isolation, pathogen identification, exploiting gene(s) responsible for resistance. Knowledge of bacterial, fungal, and viral diseases and their interactions with the plant and environment is required. Applicant should possess the requisite background in molecular biology, genetics and molecular marker development and application.

WHO YOU ARE

You must have at least an MS (Ph.D. is preferable) in Plant Pathology or Plant Science. Ideal candidate should have at least 2-4 years experience in Plant Pathology laboratory, field experience, and molecular biology laboratory experience is a must. Preference will be given to applicants with experience in tomato pathology.

WHO TO CONTACT

If the above profile is in line with your background and you are interested in this challenging position, please mail your application with full supporting documents to:

Adel El-Sheikh, Director Agricultural Research / Technology Department 2029 E. Harding Way Stockton, CA 95205 Fax: 209-932-2010

You may also e-mail a synopsis of your position to: Adel.Elsheikh@Unilever.com

POSTDOCTORAL FELLOW POSITIONS PRINCETON UNIVERSITY Genomic and Computational Studies of Biological Networks

Two Postdoctoral positions are available in an interdisciplinary research group working to elucidate the architecture and dynamics of transcriptional regulatory networks. Technologies such as DNA microarrays are used to make genomewide observations of cellular states in bacteria and yeast. Computational and mathematical approaches are then employed to analyze such data in order to model the genetic circuitry of these organisms. Applicants with Ph.D. or cquivalent should have training and a significant track record in one of the following areas: (1) bacterial/ yeast molecular biology and genetics, (2) experimental or theoretical condensed matter physics, (3) computational biology/biophysics, or (4) computer science (theory, machine learning). Facility with computer programming is highly desirable. Please send your curriculum vitae and three letters of reference to:

Saeed Tavazoie Department of Molecular Biology Princeton University Princeton, NJ 08544 U.S.A. FAX: 609-258-1701

Princeton University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION, Penn State, University Park, Pennsylvania. Position available immediately to participate in the NIH-funded research on the neuromodulatory function underlying aging, learning, and memory of Drosophila. The current focus is to investigate the roles of dopamine and octapamine receptors that are highly enriched in the mushroom bodies, a principal brain structure for olfactory learning, in various associative behaviors. The project involves multilevel approaches including behavioral, molecular, cellular, biochemical, and genetic analyses of the mutants. For further information, please contact or send (preferably e-mail) curriculum vitae with a cover letter to: Kyung-An Han, Ph.D., Department of Biobehavioral Health, The Life Sciences Consortium/Neuroscience, Position Number S-8872, 315 Health and Human Development East, The Pennsylvania State University, University Park, PA 16802. Telephone: office: 814-865-8409; laboratory: 814-865-9265; FAX: 814-863-7525; e-mail: kxh29@psu.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION McLean Hospital and Harvard Medical School

Postdoctoral Fellow to study genetic control of catecholamines at McLean Hospital and Department of Psychiatry, Harvard Medical School. Goal is to identify transcription factors and mechanisms for hormonal and neural control of catecholamine biosynthetic enzymes and consequences of abnormal control for neuropsychiatric disorders. M.D./Ph.D. with training in molecular techniques, including cell transfection, tissue culture, enzyme and protein assays, molecular biology, and rodent models. Send curriculum vitae and three letters of recommendation to: Dr. Dona Lee Wong, McLean Hospital, MRC Number 116, 115 Mill Street, Belmont, MA 02178.

McLean Hospital is an Affirmative Action/Equal Opportunity/Americans With Disabilities Act Employer.

DUKE UNIVERSITY

Two **POSTDOCTORAL POSITIONS** are available to investigate the role of G proteins in initiation and progression of prostate cancer. Projects include study of molecular cross talk between G proteins and peptide and steroid hormone signal transduction pathways using animal and cell models. Successful candidates should have M.D. and/or Ph.D. with demonstrated ability in molecular and cellular biology and biochemistry. Please send curriculum vitae to: Dr. Y. Daaka, DUMC 2607, Duke University Medical Center, Durham, NC 27710. E-mail: daaka001@mc.duke.edu.

POSITIONS OPEN

COMPUTATIONAL BIOLOGY POSITION Mathematics and Computer Science Division Argonne National Laboratory

The Mathematics and Computer Science Division (MCS) at Argonne National Laboratory invites outstanding candidates to apply for positions in the Commcs.anl.gov/comp bio/. We are seeking POST-DOCTORAL APPOINTEES and SCIENTIFIC PROGRAMMERS to help design and implement PUMA2, a Web-based information system for genetic sequence analysis and metabolic reconstructions. The successful candidates will help develop new tools and graphical interfaces for comparative analyses. Postdoctoral candidates should have a Ph.D. degree in computer science, computational biology, or a related discipline, received not more than three years prior to the beginning of the appointments. Programmer candidates should possess a B.S. or M.S. degree. The positions require experience in one or more of the following areas: CGI or Internet programming, highvolume data processing under UNIX, scientific visualization, database design, and logical querying systems. The appointments are available immediately and are for a one-year term (renewable). Résumés should be submitted to: Susan Walker (reply to Box MCS-300055-43 for Postdoctoral appointment or Box MCS-210124-43 for Programmer), Argonne National Laboratory, Employment and Placement, 9700 South Cass Avenue, Argonne, IL 60439 and must include the names and addresses of three references. To submit résumés electronically, please e-mail: employment@anl.gov, referencing one of the above box numbers. For additional technical information, contact: Natalia Maltsev at e-mail: maltsev @mcs.anl.gov. Argonne is an Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

The Biotechnology Process Engineering Center at MIT seeks an individual to work with an interdisciplinary team of biologists, engineers, and physicians to develop enhanced bioreactor designs for human hematopoietic stem cell culture and expansion. Current projects in this NSF-funded center include identification of novel stem cell growth factors, characterization of cytokine dynamics in stem cell self-renewal and differentiation, development of hematopoietic stem cells from embryonic stem cells, and design of tissueengineered microarrays for growth of hematopoietic and hepatic stem cells.

Requirements: recent Ph.D. or M.D. with significant research experience in hematopoietic cell culture and analysis.

Interested candidates should submit a résumé and cover letter referencing Job Number 00-0859 to: Susan Shannon, MIT Human Resources Department, P.O. Box 391229, Cambridge, MA 02139-0013. To apply online: website: web.mit.edu/personnel/www/resume.htm. MIT is an Equal Opportunity/Affirmative Action Employer. MIT is a nonsmoking environment.

POSTDOCTORAL POSITION to work on the mechanisms of apoptosis and neurodegeneration in Alzheimer's disease. Studies are focused on death receptor-linked signal transduction mechanisms and caspase activation. Expertise with Fas or TNF receptors, apoptosis pathways, and mechanisms of neurodegeneration is highly desirable. Candidates with previous experience using cell culture systems and molecular biology techniques, including transfection meth-ods, will be given preference. Highly motivated candidates with a history of productivity are encouraged to apply. Salary will be based on previous experience and productivity. Applicants should send curriculum vitae, brief description of research interests, and names of three references to: Dr. C. W. Cotman, Director, Institute for Brain Aging, University of California, Irvine, CA 92697-4540.

The University of California is an Equal Opportunity Employer committed to excellence through diversity.

POSITIONS OPEN

INVERTEBRATE ZOOLOGIST

The Department of Biology at Virginia Commonwealth University invites applications for a broadly trained Invertebrate Zoologist applying molecular and/or cellular techniques in their research. Preferred areas include developmental or neurobiology, parasitology, and population genetics. Teaching responsibilities may include a diversity-based invertebrate zoology course and introductory biology alternating with a specialty course in the candidate's area of expertise. The successful applicant is expected to develop an externally funded research program, direct graduate students, and participate in a new Institute for the Study of Biological Complexity.

This is a nine-month, tenure-track position that will be filled at the rank of **ASSISTANT** or **ASSOCI-ATE PROFESSOR**. Applicants must present evidence of excellence in scholarship and teaching and the ability to teach an organism-based invertebrate zoology course. Post-doctoral experience is expected. The individual will be housed in our new Life Sciences Building and is expected to take advantage of interdisciplinary research opportunities within the Department and University. Competitive start-up funds are available.

This is one of several positions in VCU Life Sciences, a campuswide initiative focused on furthering our life science research and education. Virginia Commonwealth University has an enrollment of 24,000 students, including 700 undergraduate biology majors. The Biology Department has 30 faculty members with diverse research interests. Submit curriculum vitae, statement of research and teaching interests, and three letters of reference by December 11, 2000, to: Dr. Bonnie Brown, Department of Biology, Virginia Commonwealth University, Richmond, VA 23284-2012. See our website: www. has.vcu.edu/bio for more information. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Institution. Women, minorities, and persons with disabilities are encouraged to apply.

POSTDOCTORAL FELLOW NEUROCHEMISTRY, NEUROSCIENCE

A Postdoctoral position is available to study neurotransmitters (glutamate and catecholamine) involved in mechanisms of pain and analgesia in the central nervous system. Experience in neurochemical (HPLC) assay and electrophysiological studies is preferred. Send curriculum vitae and the names of three references to: Dr. Hui-Lin Pan, Penn State University College of Medicine, The Milton S. Hershey Medical Center, Department of Anesthesiology, P.O. Box 850, H187, Hershey, PA 17033.

DYSTONIA GRANTS: One-year grants of \$40,000 focusing on genetics, treatments, and studies of torsinA biology related to dystonia are available from: Dystonia Medical Research Foundation, One East Wacker Drive, Suite 2430, Chicago, IL 60601. Telephone: 312-755-0198; FAX: 312-803-0138; e-mail: dystonia@dystonia-foundation.org; website: www.dystonia-foundation.org. Application deadline is December 30, 2000.

EUROPEAN OPPORTUNITIES

POSTDOCTORAL RESEARCHER FOR MULTIPLEX PCR IN VETERINARY VIROLOGY

A researcher with Ph.D. degree is required who has good technical skills in molecular diagnosis. Responsibilities: utilise multiplex PCR, develop TaqMan and molecular beacon methods, and publish in scientific journals. The candidate would be in charge of a threeyear project on the development of multiplex PCR assays to detect porcine viruses. Active laboratory work is expected from the researcher, with a technician. Your application should be submitted with three letters of recommendation until October 20, 2000, to: Sándor Belák, Professor, National Veterinary Institute, Virology, Biomedical Center, Box 585, SE-751 23 Uppsala, Sweden. Telephone: 46 18 674 135; e-mail: sandor.belak@bmc.uu.se.

POSTDOCTORAL POSITION is available immediately with NIH funding to study protein/mineral relationships of enamel matrix proteins when absorbed to biological mineral. A Ph.D. in biochemistry, biophysics, or oral biology is required with experience in protein expression and purification methods. Send, FAX, or e-mail curriculum vitae and two references to: Dr. Pamela DenBesten, University of California San Francisco, Box 0640, 707 Parnassus Avenue, San Francisco, CA 94143-0640. E-mail: pkdb@itsa.ucsf.edu; FAX: 415-476-1499.

FELLOWSHIPS

THE DEPARTMENT OF MOLECULAR BIOLOGY AT PRINCETON UNIVERSITY Announces the Lewis Thomas Fellows Program in Computational and Physical Biology

A Fellowship program has been established for outstanding young scientists to work in the Department of Molecular Biology. The Program provides opportunities to exceptional individuals holding Ph.D. degrees (or the equivalent) in the areas of physics, chemistry, computer science, mathematics, or computational approaches to biology who wish to gain expertise in molecular biology. Research will be carried out in collaboration with members of the Department of Molecular Biology. The Fellows Program provides an annual stipend of \$44,000 and an annual research budget of up to \$15,000 to foster collaborative experimental research in laboratories within the Department of Molecular Biology. Fellows will be appointed for a one-year appointment, normally renewable for a second year. The application deadline is December 15, 2000, for a nominal start date of September 1, 2001. For more information about the Program and the Department of Molecular Biology, visit our website: www.molbio.princeton.edu.

Applications must include curriculum vitae, list of publications, brief statement (three pages) of research interests and goals, and the names of three individuals whom you have asked to send references. Address applications to:

Lewis Thomas Fellowship Committee Department of Molecular Biology Princeton University, Princeton, NJ 08544-1014 Contact: Secretary, Postdoctoral Fellowship Committee E-mail: nhunt@molbio.Princeton.edu

Princeton University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and members of minority groups.

BECKMAN SENIOR RESEARCH FELLOWS California Institute of Technology

The Beckman Institute at Caltech invites applications for the Arnold and Mabel Beckman Senior Research Fellowship program. This program is intended to identify, support, and help develop the next generation of outstanding Scientists. Fellows will be selected in part on the basis of a novel and independent research proposal. The field of research is open but should be relevant to the mission of the Beckman Institute: to invent methods, instrumentation, and materials that will open new avenues for fundamental research in the chemical and biological sciences. Each Fellow will be expected to carry out a research program in affiliation with one or more research groups at Caltech. Fellows will receive an annual salary of \$50,000 including a full benefits package and a research fund of \$40,000 per year.

Applications must be received by January 15, 2001, for Fellowships to begin in fall 2001. For application procedures, information that may help identify potential collaborations, and further general information about the Beckman Fellowship program, please visit our website: http://www.its. caltech.edu/~bi/fellows.html.

Caltech is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

POSITIONS OPEN

MICROBIOLOGY AND IMMUNOLOGY POSTDOCTORAL POSITION: neuroimmunopharmacology investigation of the effect of opioids on immune function in the gastrointestinal tract and on resistance to oral infection and sepsis. Effects of drugs of abuse on sIgA, TGF-B, T cell subsets. Send curriculum vitae plus names of three references to: Toby K. Eisenstein, Ph.D., Temple University School of Medicine, Department of Microbiolo gy and Immunology and Center for Substance Abuse Research, 3400 North Broad Street, Philadelphia, PA 19140. E-mail: tke@astro.ocis. temple.edu. Temple University School of Medicine.

COURSES & TRAINING

SHORT COURSE ON TIME-RESOLVED FLUORESCENCE SPECTROSCOPY. The Center for Fluorescence Spectroscopy at the University of Maryland School of Medicine is offering a short course on "Principles and Applications of Time-Resolved Fluorescence Spectroscopy" in Baltimore, Maryland, March 19-23, 2001. The course will cover basic and advanced topics in fluorometry, including time- and frequency-domain measurements, and Forster energy transfer. Advanced topics include chemical sensing, imaging, fiber optics, infrared fluorometry, two-photon excitation, instrumentation, confocal and multiphoton microscopy, protein fluorescence, DNA technology, high-throughput screening, metalligand probes, lanthanides, and immunoassays. Textbook, course materials, lunches, and refreshments will be provided. For further information, a schedule, and fees, please contact: Ms. Mary Rosenfeld or Professor J. R. Lakowicz at the CFS, Department of Biochemistry and Molecular Biology, 725 West Lombard Street, Baltimore, MD 21201. Telephone: 410-706-8409; FAX: 410-706-8408; email: cfs@cfs.umbi.umd.edu; website: http://cfs. umbi.umd.edu.





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