

Gordon Research Conferences

2003 Winter and Spring Meetings

VISIT THE *frontiers of science* GO TO A GORDON CONFERENCE

2003 WINTER / SPRING CONFERENCE FEES

	Conferee			Adult Guest		
	Single	Double	Off-Site	Single	Double	Off-Site
California	\$835	\$740	\$625	\$665	\$570	\$455
California (Grad. Res. Seminar)	\$420	\$360	\$295	\$420	\$360	\$295
Il Ciocco, Italy	\$855	\$750	\$600	\$685	\$580	\$430

Conferees attending both **Metals in Biology** and the 3-day **Graduate Research Seminar** should add \$325 to the 5-day single room rate or \$280 to the 5-day double room rate.

GRC is a nonprofit organization managed by and for the benefit of the scientific community.

The 2003 Winter and Spring Gordon Research Conferences will be held in Ventura and Buellton, California and Il Ciocco, Barga, Italy.

Attendance is limited - it is recommended that applicants apply immediately for early consideration by the Chair.

DIRECTOR

Carlyle B. Storm

DIRECTOR EMERITUS

Alexander M. Cruickshank

The Gordon Research Conferences web site at <http://www.grc.org/> contains the most up-to-date information we have for any given Conference. Be sure to take a look at the scientific program or any other information that has been posted.

Applications to any Conference can be submitted via our web site at <http://www.grc.org/attend.htm>. A printed form may be obtained from our web site or requested from:

Gordon Research Conferences
P.O. Box 984
West Kingston, RI 02892-0984

E-mail: grc@grc.org
FAX: 401-783-7644
Phone: 401-783-4011, ext. 100

The international Gordon Research Conferences were established with the continuing support of the Serono Foundation for the Advancement of Medical Science.

List of meetings, sessions and speakers:
(discussion leaders, where known, are italicized)

- **Hormonal Control of Aging: From Models to Man**
(*G. Lithgow / J. Andersen / T. Von Zglinicki / A. Bartke / J. Parks / A. Antebi*)

- **Public Perception and Societal Needs**
(J. Lewis / R. Beachy)

AGING, BIOLOGY OF

VENTURA BEACH MARRIOTT
VENTURA, CA
MAR 9-14, 2003
RUDOLPH TANZI, JOHN TOWER &
EUGENIA WANG, CO-CHAIRS
JULIE ANDERSEN, GORDON LITHGOW &
THOMAS VON ZGLINICKI, CO-VICE CHAIRS

- **Keynote Speaker**
(C. Finch)
- **Evolution of Aging – Theory**
(*G. Martin / S.N. Austad / D. Promislow / B. Charlesworth / T. Kirkwood / J. Carey*)
- **Evolution of Aging – Experiment**
(*R. Miller / M. Rose / T. Mackay / G. Boulianne / L. Kunkel*)
- **Insulin-like Signaling and Life Span**
(*M. Jazwinski / G. Ruvkun / L. Guarente / D. Riddle / M. Tatar*)
- **Mitochondria and Oxidative Stress**
(*H. Warner / D. Wallace / P. Larsen / S. Melov / E. Bergamini*)
- **Aging Diseases and Healthspan**
(*A. McCormick / S. Sisodia / G. Wick / P. Landfield / V. Askanas / N.M. Bonini*)
- **Stem Cells and Tissue Repair**
(*P. Hornsby / C. Kenyon / C. Harley / S. Goldman / R. McKay*)
- **Genomic Instability and Aging**
(*J. Campisi / J. Vijg / W.G. McGregor / L. Donehower*)

AGRICULTURAL SCIENCE

VENTURA BEACH MARRIOTT
VENTURA, CA
FEB 16-21, 2003
SARJEET GILL & JOHN RYALS, CO-CHAIRS
ANN HIRSCH & KEITH WING, CO-VICE CHAIRS

- **Agricultural Biotechnology: 20 Years On**
(*J. Ryals*)
- **Engineering Traits**
- **Insect Resistance**
(*R. Feyerisen / A. Bravo / R. French-Constant / B. McCutchen / V. Williamson*)
- **Progress and Prospects – Genomics**
(*J. Yu / M. Cherry / S. Gold*)
- **Technological Challenges to Transformation**
(*D. Somers / S. Kang / D. Preuss / B. Goldberg*)
- **Technologies and Alternatives**
(*K. Wing / A. Rafalski / D. Zamir / K. Davis / R. Greenspan*)
- **Technologies vs. Societal/Market Needs**
(*D. Tones / D. Delmer*)
- **Safety and Public Acceptance**
(*J. Cook / A. Snow / N. Ellstrand / R. Townsend / B. Hollingworth*)

ANTIMICROBIAL PEPTIDES

IL CIOCCO
BARGA, ITALY
APR 27-MAY 2, 2003
HANS-GEORG SAHL &
MARGHERITA ZANETTI, CO-CHAIRS
ANDRE OUELLETTE &
WILLIAM SHAFER, CO-VICE CHAIRS

- **Antimicrobial Peptides and Innate Immunity**
(*D. Barra / J.A. Hoffmann / R.I. Lehrer / P. Sansonetti*)
- **New AMPs from Mother Nature's Repertoire**
(*H. Vogel / A. Tossi / R.P. Ross / M.S. Gilmore / M. Anderson / P. Bulet / B. Schitteck / S.Dafre / A. Cole*)
- **Synthetic AMPs and Model Membranes**
(*K. Matsuzaki / Y. Shai / U. Seydel / R. Jelinek / P.K. Kinnunen*)
- **Controlled Maturation and in vivo Efficacy of AMPs**
(*J.M. Schröder / M.E. Selsted / H. Boman / C. Bevins / M.J. Lehane / N.H. Salzman / J. Dorin / E. Levashina*)
- **Recognition and Signalling in Innate Immunity**
(*Y. Engstom / J. Royet / B. Beutler / A. Neish / J.T. Greenberg*)
- **Microbial Counterstrategies to AMPs**
(*F. Götz / J.S. Gunn / G. Gudmundsson / E.P. Greenberg / K. Lewis*)

- **Towards Smarter Antiinfective Strategies**
(J.A. Hoffmann / R.E.W. Hancock / A. Biragyn / J.L. Dimarcq / G. Freyssinet)
- **New Roles for AMPs**
(R. Gennaro / P.S. Hiemstra / F. Blecha)
- **Hot Corner - News and Controversies**
(A.J. Ouellette / W.M. Shafer)
- **Late Breakers and New Concepts in Innate Immunity**
(A.J. Ouellette / W.M. Shafer / A.W. Segal / T. Ganz)

CAE IN POLYMER PROCESSING

HOLIDAY INN
VENTURA, CA
MAR 2-7, 2003
H.E.H. MEIJER, CHAIR

- **The Future of Polymer Processing: PP**
(Touchstones, Why Where to Go? / PP, an Integrated Solution?)
- **PP for Function: A Challenge?**
(Light-Controlled Polymer Morphologies / Processing Of Structures)
- **The Advanced State of the Art in PP**
(Complex Molding / Molding of the Complex)
- **Unstable Molecules in PP**
(Instabilities in Extensional Flow / Instabilities in Injection Molding)
- **Reptating Molecules in PP**
(Double Reptation / The Allowed Reptation)
- **Structure Development of One Phase Systems in PP**
(Top-Down Multi-Scale Modeling of Stress-Induced Crystallization / Bottom-Up Multi-Scale Modeling of Flow Induced Crystallization)
- **Structure Development of Soft Two Phase Systems in PP**
(Break-Up and Coalescence / BEM Modeling Of Two Phase Flows)
- **Structure Development of Hard Two Phase Systems in PP**
(Top-Down Modeling of Solid Particles in Viscoelastic Flows / Bottom-Up Modeling of Solid Particles in Viscoelastic Flows)
- **PP for Properties**
(Top-Down Multi-Scale Modeling of Properties / Bottom-Up Multi-Scale Modeling of Properties)
- **PP For Small: Bio and Mems Another Challenge?**
(Biomems / Microfluidics)

CAG TRIPLET REPEAT DISORDERS

IL CIOCCO
BARGA, ITALY
MAY 4-9, 2003
GILLIAN BATES, CHAIR
MICHAEL LEVINE, VICE CHAIR

- **The Clinical Presentation and Neuropathology of the Polyglutamine Disorders**
(M.-F. Chesselet / A. Durr / B. Landwehrmeyer)
- **The Spinocerebellar Ataxias**
(H. Zoghbi / J. Botas / A. La Spada / S. Pulst)
- **Molecular Pathogenesis - Gain of Function / Loss of Function**
(K. Fischbeck / E. Cattaneo / G. Sobue)
- **Triplet Repeat Instability and the Non-Polyglutamine Repeat Diseases**
(C. Ross / V. Zakian / L. Ranum)

- **Polyglutamine Repeat Diseases - Neuronal Dysfunction and Degeneration**
(P. Brundin)
- **Cellular Mechanisms in the Nucleus and Cytoplasm**
(L. Thompson / P. Pandolfi / R. Kopito)
- **Model Systems and the Development of Therapeutic Compound Screens**
(R. Morimoto / R. Wetzel / H. Paulson)
- **Late Breaking News**
(C. Johnson)
- **Experimental Therapeutics and Biomarkers**
(K. Kiebert / D. Rosas / K. Marder / R. Ferrante)
- **Keynote Speaker**
(S. Lindquist)

CANCER GENETICS & EPIGENETICS

HOLIDAY INN
VENTURA, CA
JAN 5-10, 2003
BENJAMIN TYCKO &
ROSANNA WEKSBERG, CO-CHAIRS
RALPH SCULLY, VICE CHAIR

- **Cancer Pathways**
(D. Dean / E. Fearon / W. Gu / M. Roussel)
- **Gene Silencing I**
(R. Weksberg / T. Bestor / R. MacLeod / W. Reik / S. Belinsky)
- **Chromatin and Cancer I**
(T. Magnuson / K. Ahmad / D. Reinberg / T. Kouzarides)
- **Repair and Recombination I**
(W. Borner / A. Nussenzweig / S. Jackson / M. Weitzman)
- **Breast Cancer Mechanisms**
(R. Scully / R. Baer / T. Ludwig / M. Jasin)
- **Genetic and Epigenetic Markers**
(R. Santella / M. Yu / D. Christiani / C. Ambrosone / R. Lesche)
- **Chromatin and Cancer II**
(M. Cleary / P. Pelicci / B. Weissman / F. Urnov)
- **Gene Silencing II**
(B. Tycko / E. Li / A. Feinberg / M. Oshimura / K. Ushijima / P. Jones)
- **Repair and Recombination II**
(R. Scully / S. Ganesan / B. Michel / C. Richardson)

CARTILAGE BIOLOGY & PATHOLOGY

HOLIDAY INN
VENTURA, CA
MAR 16-20, 2003
BENOIT DE CROMBRUGGHE, CHAIR
ERNST HUNZIKER &
LINDA SANDELL, CO-VICE CHAIRS

- **Mechanisms of Differentiation and Development I**
(B. Olsen / F. Long / V. Lefebvre / T. Komori / H. Akiyama)
- **Mechanisms of Differentiation and Development II**
(W. Horton / D. Ornitz / H. Kronenberg / A. Lassar)
- **Role of Extracellular Matrix in Cartilage Function**
(K. von der Mark / Y. Yamada / D. Heinegaard / L. Demer)
- **Molecular Pathology of Cartilage**
(J. Hecht / J. Esko / T. Nakajima / T. Ingvarsson)

- **Molecular Mechanisms of Cartilage Degradation**
(T. Aigner / E. Aigner / D. Kingsley / M. Warman)
- **Biomechanical Properties of Cartilage**
(A. Boskey / A. Grodzinsky / F. Guilak / C. Jacobs)
- **Mechanisms of Cartilage Remodeling and Repair**
(R. Tuan / Z. Werb / R. Cancedda / Y. Kato)

CHEMICAL & BIOLOGICAL TERRORISM DEFENSE

RANCHO SANTA BARBARA MARRIOTT
BUELLTON, CA
MAR 23-28, 2003
LYNDA KELLEY & PAUL SCHAUDIES, CO-CHAIRS
CHARLES COOKE, VICE CHAIR

- **Current Small Pox Issues**
(A. Zelicoff)
- **State-of-the-art Forensic Analysis**
(J. Smith)
- **Laboratory Automation and Surge Capacity**
(R. Meyers)
- **Advanced Diagnostics**
(A. Rudolph)
- **Medical Intervention Strategies**
(V. Fischetti)
- **Chemical Detection Technologies**
(B. Courtney)
- **Chemical Injury Treatments**
- **Novel Vaccine Strategies**
- **Vaccine Policy Issues**
(D. Franz)

CHEMICAL REACTIONS AT SURFACES

HOLIDAY INN
VENTURA, CA
FEB 16-21, 2003
HANS-JOACHIM FREUND, CHAIR
CHARLES CAMPBELL, VICE CHAIR

- **Controlling and Imaging Surface Reactions**
(H.-J. Freund / G. Ertl / W. Ho)
- **New Frontiers in Semiconductor Surface Chemistry**
(J.T. Yates, Jr. / J.C. Polanyi / M. Hines / J.M. Buriak)
- **Science of Nanoscale Objects**
(J.W. Rogers, Jr. / C.M. Lieber / U. Banin)
- **Surface Reactions in Biotechnology and Biomedical Sciences**
(M. Natan / B.D. Ratner / M. Tirrell / R. Corn)
- **Chemical and Photochemical Surface Reactions for Organo-Functionalization of Surfaces**
(J.M. White / R.J. Hamers)
- **Theoretical Studies of Surface Reactions**
(D. Dixon / M. Scheffler / J. Sauer / K.A. Fichthorn)
- **Film Growth**
(G. Thornton / H. Jonsson / C. Brechignac)
- **Catalyst Surfaces and Their Reactions**
(H. Weinberg / U. Diebold / C. Friend / R.M. Lambert)
- **New Probes for Model Catalysts**
(Y. Sun / T. Risse)
- **Surface Reactions on Electrodes, in the Atmosphere or on Oxides**
(G. Fisher / D. Kolb / J.C. Hemminger / C. Wöll)

CHRONOBIOLOGY

IL CIOCCO
BARGA, ITALY
MAY 11-16, 2003
RUSSELL FOSTER, CHAIR
MARTHA GILLETTE, VICE CHAIR

- **Disease and Dysfunction**
(C. Czeisler / M. Carskadon / A. Wirz-Justice / W. Hrushesky)
- **Circadian Entrainment I**
(K.W. Yau / J. Dunlap / E. Rosato / M. Mellow / G. Brainard / M. Hankins)
- **Circadian Entrainment II**
(W. DeGrip / R. van Gelder / R. Lucas / D. Berson)
- **Molecular Clocks I**
(J. Besharse / S. Reppert / J. Takahashi / S. Golden / M. Young / S. Honma)
- **Molecular Clocks II**
(C. Johnson / S. Kay / A. Millar / S. Blackshaw)
- **Sleep Regulation and Circadian Rhythms**
(D.-J. Dijk / C. Saper / P. Franken / C. Cirelli / C. Cajochen / I. Tobler)
- **Central and Peripheral Clocks**
(T. Kondo / U. Schibler / D. Whitmore / P. Hardin)
- **Circadian Organization at a System Level**
(E. Gwinner / S. Daan / M. Gillett / H. Piggins / J. Meijer / W. Schwartz)
- **Rhythmic Interactions**
(M. Menaker / T. Roenneberg / J. Hogenesch / A. Loudon)

ELECTROCHEMISTRY

VENTURA BEACH MARRIOTT
VENTURA, CA
JAN 12-17, 2003
MARK SPITLER, CHAIR
DANIEL BUTTRY, VICE CHAIR

- **Redox Systems**
(J. Lenhard / H. Abruna / A. Fitch)
- **Ralph Adams Symposium I – Bioelectrochemistry**
(F. Anson / P. Kissinger / M. Wightman / S. Alva)
- **Ralph Adams Symposium II – Charge Transfer at Carbon**
(T. Kuwana / R. McCreary / M.A. Ryan)
- **Ions and Electrochemistry**
(A. Bocarsly / E. Endo / H. DeLong)
- **Quantum Particles**
(C. Zoski / L. Brus / D. Vanmaekelbergh / F. Willig)
- **New Investigators**
(R. Van Effen / S. Mukherjee / M. Williams / A. Zaban)
- **Open Session**
(D. Buttry)
- **Conductive Polymers**
(M. Collinson / J.W. Schultze / J. Heinze)
- **Probes of Surface Reactions**
(J. Redepennig / E. Borguet / D. Scherson)

FIBRONECTIN, INTEGRINS & RELATED MOLECULES

VENTURA BEACH MARRIOTT
VENTURA, CA
FEB 2-7, 2003
MARTIN HUMPHRIES, CHAIR
LOUIS REICHARDT, VICE CHAIR

- **Structural Basis of Integrin Activation**
(A. Amaout / T. Springer / P. Mould / N. Kieffer)
- **Interactions of Integrins with Membrane Proteins**
(M. Hemler / P. Comoglio / A. Surprenant)
- **Mechanisms and Dynamics of Fibronectin Matrix Assembly**
(H. Erickson / R. Pankov / V. Vogel / S. Dallas)
- **Genetic Analysis of Integrin Function**
(C. Damsky / R. Hynes / R. Fassler / M. Zutter)
- **Integrins in the Nervous System**
(L. Reichardt / H. Beggs / U. Mueller / R. Davis / Y. Rao)
- **Hot Topics**
(A. Huttenlocher)
- **Cell-Matrix Contacts and Integrin Signaling to the Cytoskeleton**
(K. Yamada / M. Ginsberg / R. Horwitz / M. Schwartz)
- **Integrin Effectors and Regulators**
(N. Hogg / N. Brown / R. Brown / T. de Fougerolles)

GASEOUS IONS: STRUCTURES, ENERGETICS & REACTIONS

VENTURA BEACH MARRIOTT
VENTURA, CA
MAR 2-7, 2003
TERRANCE MCMAHON, CHAIR
WILLIAM HASE, VICE CHAIR

- **Guided Ion Beam Threshold Collision Induced Dissociation Measurements**
(M. Rodgers / P. Armentrout / L. Sunderlin)
- **Reaction Dynamics of Gaseous Ions**
(S. Anderson / R. Continetti / K. Vekey / M. Larsson)
- **Applications of Electronic Structure Methods to Ion Chemistry**
(G. Ohanessian / M. Yanez / D. Dixon)
- **Gaseous Biomolecules**
(J. Klassen / M. Jarrold / A. Heck)
- **Spectroscopy of Gaseous Ions**
(T. Baer / J. Maier / P. Kleiber / M. Johnson)
- **Reaction Mechanisms of Organic Ions**
(T. Morton / H. Audier / S. Kass)
- **Infrared Studies of Gaseous Metal Ions**
(D. Ridge / P. Maitre / M. Duncan / J. Eyler)
- **Structure and Energetics of Gaseous Ions**
(E. Grimsrud / K. Hiraoka / S. Gronert)
- **Thursday Evening Featured Speaker**
(M. Gross / N. Nibbering)

GLIAL BIOLOGY: FUNCTIONAL INTERACTIONS AMONG GLIA & NEURONS

HOLIDAY INN
VENTURA, CA
FEB 23-28, 2003
GERALD DIENEL &
G. MILLER JONAKAIT, CO-CHAIRS

- **Glial Control of Synapses and Synaptic Function**
(M. Nedergaard / B. Barres / P. Haydon / R. Robitaille)

- **Neuronal Regulation of Glial Function**
(P. Haydon / K. McCarthy / H. Kettenmann / M. Jones / M. Jonakait)
- **Glial Regulation of Neuronal Function**
(B. Barres / M. Nedergaard / A. Volterra / E. Newman)
- **Ion Channels and Transporters in Glia and Neurons**
(H. Kennenmann / C. Jahr / J. Rothstein / H. Sontheimer / D. Poulain)
- **Nutritive Interactions Between Glia and Neurons**
(G. Gibson / L. Hertz / U. Sonnewald / S. Hutson)
- **Growth Factors and Glia**
(J. Schwartz / K. Unsicker / W. Friedman / C. Dreyfus)
- **Functional Coupling and Neuronal Regulation of Glial Gap Junctions**
(K. McCarthy / E. Scemes / C. Giaume / E. Van Bockstaele)
- **Glial Roles in Brain Health and Disease**
(C. Dreyfus / F. Aloisi / R. Nitsch / T. Nakagawa / G. Gibson)
- **Plasticity, Remodeling and Transdifferentiation**
(D. Spray / G. Hatton / T. Reh)

GLYCOBIOLOGY

FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
MAR 2-7, 2003
RICHARD CUMMINGS, CHAIR
ROBERT HALTIWANGER, VICE CHAIR

- **Glycoprotein Biosynthesis and Quality Control**
(P.W. Robbins / A. Parodi / M. Aebi / A. Menon)
- **Glycoconjugates in Development and Cell Signaling**
(H. Schachter / P. Stanley / M. Fukuda / G. Hart / S. Selleck)
- **Human Genetic Disorders in Glycoconjugate Biosynthesis**
(S. Kornfeld / T. Endo / C. Hirschberg / H. Freeze)
- **Glycoconjugate Biosynthesis**
(R.L. Hill / H. Clausen / N. Taniguchi / R. Haltiwanger / J. Esko / J. Lowe / M. Lehman)
- **Glycoconjugates and Carbohydrate Binding Proteins in Innate Immunity**
(J. Marth / M. Fukuda / P. Crocker / L. Baum)
- **Chemical Approaches to Glycobiology**
(Y.C. Lee / G.-J. Boons / P.H. Seeberger / L. Kiessling)
- **Genomics, Proteomics and the Era of Glycomics**
(J. Paulson / J. Hirabayashi / K. Drickamer / A. Dell)
- **Molecular Interactions of Proteins and Carbohydrates**
(W.J. Lennarz / J. Baenziger / N. Dahms)
- **Neurobiology of Glycoconjugates**
(R.U. Margolis / R. Schnaar / M. Schachner)
- **Cancer Glycobiology**
(S.-I. Hakomori / T. Irimura / A. Varki)
- **Microbial and Parasite Glycobiology**
(A. Herscovics / S. Turco / C. Raetz / M. Ferguson)

**GRADUATE RESEARCH SEMINAR:
BIOINORGANIC CHEMISTRY**
FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
FEB 6-9, 2003
CORA MACBETH, CHAIR
JOHN MAGYAR, VICE CHAIR

- **Multinuclear Metalloenzymes**
(*C. Riordan*)
- **Metalloprotein Structure & Function**
(*T. Holman*)
- **Metal Ion Transport & Storage**
(*A. Rosenzweig*)
- **Dioxygen Activation & Processing**
(*A. Borovik*)
- **Metals in Medicine**
- **Environmental Bioinorganic Chemistry**
(*D. Newman*)

HYDROCARBON RESOURCES

HOLIDAY INN
VENTURA, CA
JAN 12-17, 2003
RIPUDAMAN MALHOTRA &
MASAKATSU NOMURA, CO-CHAIRS
RONALD PUGMIRE, VICE CHAIR

- **Advanced Analytical Techniques**
(*R. Pugmire* / *R. Winans* / *S. Kelemen*)
- **Organic Chemistry of Fuels**
(*J. Larsen* / *P. Britt* / *Y. Sato* /
R. Kandiyoti)
- **Upgrading Technologies**
(*P. Rahimi* / *I. Wiehe* / *N. Panariti*)
- **Carbon Materials**
(*L. Radoic* / *T. Kyotani* / *J. Moulijn* /
R. Ryoo / *H. Foley*)
- **Alkane Activation**
(*R. Periana* / *A. Goldman* / *G. Suess-Fink*)
- **Organic Geochemistry**
(*J.S. Larter* / *J. Whelan* /
H. Wilkes / *I. Head* / *R. Rodgers*)
- **Combustion**
(*R. Hurt* / *A. Jensen* / *B. Haynes* /
P. Smith)
- **Membrane Reactors**
(*B. Balachandran* / *A. Sammells* /
E. Wachsman / *A. Jacobson* / *R. Noble*)
- **Managing the Risk of Climate Change**
(*R. Malhotra* / *B. Flannery*)

ILICIT SUBSTANCE DETECTION: EXPLOSIVES

IL CIOCCO
BARGA, ITALY
JUN 8-13, 2003
NICK CARTWRIGHT &
SUSAN HALLOWELL, CO-CHAIRS

- **Policy Discussions**
- **New and Emerging Technologies**
(*R. Lacey*)
- **Land Mine Detection/Stand Off Detection**
- **Trace Technology**
(*R. Lareau*)
- **Bulk/Trace Technology**
(*H. Martz*)
- **Bulk Technology**
(*R. Lanza*)
- **People Screening**
(*H. Gowadia*)
- **Technology Integration/Data Fusion**
(*J. Pennella*)

INORGANIC REACTION MECHANISMS
FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
FEB 16-21, 2003
JAMES MAYER, CHAIR
WILLIAM TOLMAN, VICE CHAIR

- **Organometallics I**
(*R.G. Bergman* / *W.D. Jones* / *J.F. Hartwig*)
- **Oxidations**
(*J.E. Bercaw* / *S. Stahl* /
K.H. Theopold / *S.N. Brown* / *R. Neumann*)
- **Environmental and Inorganic**
(*A. Butler* / *G. Luther* / *P.G. Tratnyek* /
M.D. Fryzuk)
- **Electron Transfer and Photochemistry**
(*D.G. Nocera* / *C. Turro* / *F.A. Schultz* /
J.F. Endicott)
- **Materials and Polymers**
(*M.E. Thompson* / *D.R. Gamelin* /
J.M. Buriak / *W.B. Tolman*)
- **Biological and Bioinorganic
Chemistry I**
(*A.L. Crumbliss* / *K.D. Karlin* /
C.G. Riordan / *J.B. Broderick* /
D.E. Cabelli)
- **Biological and
Bioinorganic Chemistry II**
(*S. Shaik* / *D.M. Kurtz, Jr.*)
- **Organometallics II**
(*J.L. Templeton* / *G. Erker* /
P.T. Wolczanski / *J.R. Norton*)
- **Organometallics III**
(*M. Brookhart*)

**INSULIN-LIKE GROWTH FACTORS IN
PHYSIOLOGY & DISEASE**
HOLIDAY INN
VENTURA, CA
MAR 9-14, 2003
DEREK LEROITH & TERESA WOOD, CO-CHAIRS

- **IGFs: History and Future**
(*D. LeRoith* / *C.R. Kahn* / *R. Baserga*)
- **Cancer - Epidemiology &
Basic Mechanisms**
(*D. Yee* / *M. Pollak* / *S. Hankinson* /
C. Roberts)
- **IGF Signaling**
(*K. Heidenreich* / *R. O'Connor* /
D. Clemmons)
- **Clinical Aspects and Mutations**
(*R. Rosenfeld* / *G. van den Berghe* /
A. Moses / *C. Camacho-Hubner*)
- **Transgenic & Knockout Approaches**
(*T. Wood* / *D. LeRoith* / *M. Accili*)
- **IGFBPs**
(*P. Cohen* / *J. Holly* / *R. Baxter* /
C. Conover)
- **Gene Transcription and Regulation**
(*M. Adamo* / *P. Rotwein* / *H. Werner*)
- **IGFs/IGFBPs in Development &
Tissue Function**
(*J. Pell* / *D. Hill* / *T. Wood* /
J. Pintar / *C. Rosen*)
- **Newly Emerging Topics: Aging &
Life-Span**
(*D. Clemmons* / *R. Garafalo* / *C. Kenyon*)

MAMMALIAN DNA REPAIR
FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
JAN 19-24, 2003
RICHARD WOOD, CHAIR
ERROL FRIEDBERG, VICE CHAIR

- **Keynote Presentations**
(*A. Lehmann* / *S. Pääbo*)
- **Recognition of DNA Damage**
(*S. Wilson* / *G. Verdine* / *D. Barnes* /
J. Hoeijmakers / *J. Svejstrup*)
- **Repair of DNA Base Lesions**
(*T. Lindahl* / *T. Barrett* / *M. Saparbaev* /
J. Miller)
- **Encounters of DNA & RNA Polymerases
with Damage and Unusual Structures**
(*G. Walker* / *S. Jinks-Robertson* /
K. Tanaka / *C. McMurray*)
- **Sensitivity to DNA Crosslinks and
Replication Blocks**
(*R. Legerski* / *A. D'Andrea* /
C. McGowan / *S. Brill*)
- **Regulation and Signalling in
DNA Repair**
(*P. Hanawalt* / *L. Samson* / *J. Gautier* /
D. Figey / *P. Russell*)
- **Control of Access to Chromatin**
(*M. Smerdon* / *G. Almouzni* /
A. Nussenzweig / *S. Jackson*)
- **Recombination and Double-Strand
Break Repair I**
(*J. Haber* / *M. Lieber* / *S. Takeda* / *P. Sung*)
- **Recombination and Double-Strand
Break Repair II**
(*J. Tainer* / *E. Egelman* /
M. Radman / *R. Kanaar*)

METALS IN BIOLOGY
FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
FEB 2-7, 2003
F. ANN WALKER, CHAIR
ALISON BUTLER &
JOHN DAWSON, CO-VICE CHAIRS

- **Complex Multi-Center Enzymes**
(*A. Walker* / *S. Iwata* / *P. Kroneck* /
M. Chan)
- **In Celebration of the Research Interests
of Barbara Burgess**
(*T. Poulos* / *D. Sellmann* / *K. Hodgson* /
B. Hedman / *D. Dean* / *F. Armstrong* /
D. Stout)
- **Calcium Biomineralization**
(*A. Butler* / *J. Polak* / *P. Stayton* /
D. Mooney)
- **Models of Metalloproteins**
(*R. Scheidt* / *M. Darensbourg* /
C. Gorman / *C. Reed* / *P. Mascharak* /
D. Goldberg)
- **Iron Uptake and Recycling**
(*D. Dixon* / *V. Braun* / *A. Butler* / *M. Rivera*)
- **Spectroscopic Techniques,
Copper Proteins**
(*J. Dawson* / *A. Trautwein* / *A. Vila* /
C. Rensing / *P. Holland* / *S. Franklin*)
- **Carbon Bond Modification**
(*R. Banerjee* / *M. Ludwig* / *C. Drennan* /
L. Thöny-Meyer)
- **Photosynthesis**
(*R. Blankenship* / *P. Fromme* /
J. Golbeck / *A. van der Est* /
D. Britt / *Abu-Omar*)
- **Joint Session with
Graduate Research Conference**
(*A. Walker* / *V. Pecoraro*)

MODERN DEVELOPMENTS IN THERMODYNAMICS
IL CIOCCO
BARGA, ITALY
MAY 11-16, 2003
ENRICO SCIUBBA, CHAIR
CHRISTOPHER ESSEX, VICE CHAIR

- **World Energy Resources & Thermodynamics: Coping with Scarcity**
(*M.J. Moran / S. Korpela / F. Kreith / N. Lior*)
- **Thermodynamics of Emerging Energy-Conversion Technologies**
(*A. Bejan / M. Cumo / V. Naso / E. Tiezzi / G. Wall*)
- **Thermodynamics and Modern Design**
(*D. Moorehouse / C. Bruno / B. Magnussen*)
- **New Developments in Exergy Analysis**
(*R. Gaggioli / A. Lazzaretto / G. Tsatsaronis / A. Valero / M. von Spakowski*)
- **Quantum Thermodynamics**
(*R. Kosloff / J. Preskill*)
- **Phase Transitions**
(*S. Kjølstrup / D. Bedeaux / F. Stillinger*)
- **Meso-Scales Thermodynamics**
(*B. Andresen / C.V.D. Broeck*)
- **Anthro-Scales Thermodynamics**
(*J. Gordon / C. Adami / S. Gross*)
- **Fuel Cell Technology**

MOLECULAR PHARMACOLOGY
FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
FEB 9-14, 2003
DIANE BARBER, CHAIR
MICHEL BOUVIER, VICE CHAIR

- **GPCR I**
(*M. Bouvier / J. Whistler / J.-P. Pin*)
- **GPCR II**
(*B. Conklin / D. Hausler / G. Servant / O. Civelli*)
- **Propagating Signals**
(*H. Hamm / R. Ranganathan / E. Ross / J. White*)
- **Assembling Signaling Networks**
(*D. Barber / H. Hamm / J. Ferrell*)
- **Signaling Cross-Talk**
(*V. Slepak / L. Luttrell / P. Casey / J. Brugge*)
- **Localizing the Signal**
(*L. Limbird / T. Meyer / P. Devreotes / Y. Takai*)
- **Morphology, Migration and Metastasis**
(*J. Heller-Brown / A. Hall / L. Van Aelst / H. Bourne*)
- **In Vivo Functions of 7TMR and GTPases**
(*B. Kobilka / R. Moon / S. Offermanns / S. Parkhurst*)
- **Keynote Address**
(*H. Bourne*)

MULTI-DRUG EFFLUX SYSTEMS
FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
MAR 9-14, 2003
ROBERT HANCOCK &
WILLIAM SHAFER, CO-CHAIRS

- **Keynote Session: Perspectives on Mammalian and Bacterial Multidrug Efflux**
(*R. Hancock / W. Shafer / V. Ling / S. Levy*)
- **Biological and Clinical Significance of Drug Efflux Pumps**
(*M. Ouellette / Skurray / D. Sanglard / S. Bates*)

- **Molecular Basis of Drug Recognition and Transport**
(*P. Gros / W. Konings / A. Neyfakh / S. Cole*)
- **Counteracting Efflux Pumps**
(*P. Markham / O. Lomovskaya / J. Alam / D. Hooper*)
- **Structure, Function and Organization of Efflux Pumps**
(*P. Henderson / V. Koronakis / H. Nikaido / F. Sharom*)
- **Regulation Of Efflux Pumps**
(*M. Brown / K. Poole / W. Hinrichs / S. Michaelis*)
- **Exporters vs. Importers: Commonalities and Differences**
(*I.D. Goldman / M. Saier / D. Keppler*)
- **Controversies In Multi-Drug Efflux**
(*R. Hancock / A. Neyfakh / A. DiPietro / W. Konings / P. Henderson / D. Hooper / S. Bates*)
- **Glimpses into the Future and Reflections on the Past: Genomics, Bioinformatics and Evolutionary Biology**
(*T. Krulwich / K. Lewis / I. Paulsen / A. Goffeau*)

NITRIC OXIDE
VENTURA BEACH MARRIOTT
VENTURA, CA
FEB 9-14, 2003
STEVEN GROSS, CHAIR
DENNIS STUEHR, VICE CHAIR

- **Prokaryotic NO-Like Proteins**
(*B. Mayer / B. Crane / R. Loria / C.S. Raman*)
- **Mammalian NOS Structure, Function and Control**
(*D. Stuehr / L. Getzoff / S. Daff / B.S.S.M. Masters / B. Mayer*)
- **The Active Site of NOS**
(*O.W. Griffith / P.G. Wang / H.H.H. Schmidt / D. Rousseau*)
- **NOS Signaling Modules: Structural Basis and Functional Consequences**
(*S. Snyder / W. Sessa / J. Hare / C. Giulivi*)
- **Posttranslational Regulation of eNOS Activity in Health and Disease**
(*W. Sessa / R. Venema / M. Brownlee*)
- **In Vivo Chemistry and Metabolism of NO and Related Molecules**
(*J. Fukuto / J. Stamler / K.N. Houk / B. Mutus / D. Aulak*)
- **Physiological Roles of NO in Respiration**
(*J. Stamler / M. Brunori / T. McMahon / B. Gaston / C.M. Beall*)
- **NO in Disease**
(*P. Manning / D. Wink / J. Beckman / A.H. Neufeld*)
- **Keynote**
(*S. Snyder*)

ORGANIC THIN FILMS
IL CIOCCO
BARGA, ITALY
MAY 18-23, 2003
GERO DECHER, CHAIR
NICHOLAS ABBOTT &
MILAN MRKSICH, CO-VICE CHAIRS

- **Single Molecule Manipulation on Surfaces**
- **Self Assembled Monolayers**
- **Polyelectrolyte Multilayer Films**
- **Multicomponent and Multifunctional Films**

- **Biomacromolecules at Surfaces (Protein Assemblies and Protein Crystals)**
- **Sub-Micron Scale Surface Patterning**
- **Fundamental Aspects of Organic Thin Films**
- **Characterisation of Thin Films**
- **Modelling of Surface Confined Films**
- **Interaction of Thin Films with their Environment**
- **Real World Applications of Thin Films in Material Science**
- **Real World Applications of Thin Films as Biomaterials**

OXIDATIVE STRESS AND DISEASE
VENTURA BEACH MARRIOTT
VENTURA, CA
MAR 16-21, 2003
VALERIA CULOTTA, CHAIR
MARK GURNEY, VICE CHAIR

- **Oxidative Stress and Aging I**
(*B. Freeman / B. Ames / E. Stadtman*)
- **Oxidative Stress and Aging II**
(*C. Kenyon / L. Guarente / C. Clarke / Z. Hekimi / T. Hoshi*)
- **Mitochondria and Oxidative Damage**
(*D. Wallace / M. Brand / V. Dawson / W. Woodruff*)
- **Reactive Oxygen and Pathogenecity**
(*J. Imlay / F. Fang / C. Nathan / M. Dinauer / T. Segal*)
- **Therapeutic Approaches**
(*M. Patel / S. Melov / J. Groves / D. Salvemini*)
- **Diseases of Heavy Metal Overload**
(*T. Rouault / J. Gitlin / J. Kaplan / W. Sly / J. Burn*)
- **Nrf2 and Oxidative Stress Signaling**
(*K. Davies / P. Talalay / J. Johnson*)
- **Neurodegenerative Disorders and Oxidative Damage**
(*M. Gurney / F. Beal / G. Cole / D. Borchelt / L.-H. Tsai*)
- **Oxidative Stress and Cancer**
(*J. Valentine / T.T. Huang / L.-A. Macmillan-Crow / L. Marnett*)

PERIODONTAL DISEASES
VENTURA BEACH MARRIOTT
VENTURA, CA
FEB 23-28, 2003
STEVEN OFFENBACHER, CHAIR
MICHAEL CURTIS, VICE CHAIR

- **Exploitation or Microbial Genomics to Understand Pathogenesis**
- **Microbial Population Structures and Disease**
- **Diabetes and Periodontitis - Strange Attractors**
- **Diabetes as an Inflammatory Stressor**
- **Obesity as a Risk Factor**
- **Lipids, Transcriptional Regulators and Inflammation**
- **Advances in Inflammatory Modulation of Bone Metabolism**
- **Mechanisms of Bone Remodelling and Regeneration**
- **New Concepts in Re-defining Periodontal Diseases**

POLAR MARINE SCIENCE
FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
MAR 16-21, 2003
ROBIN MUENCH, CHAIR
CHRISTIANE LANCELOT, VICE CHAIR

- **Oscillations, Abrupt Changes and Long-Term Trends: The Nature of Interannual Change**
(*M. Visbeck / J. Sarmiento / C. Mauritzen*)
- **The Spatial Patterns of Long-Term Change**
(*D. Holland / R. Anderson / R. Macdonald / M. Abbott*)
- **Impacts of Change on the Deeper Ocean Waters: Convection and the Meridional Overturning Circulation**
(*R. Dickson / P. Rhines / R. Pickart*)
- **Impacts of Change on Upper Ocean Structure, the Biota and Food Web**
(*T. Trull / M. Mcphee / C. Ashjian / P. Boyd*)
- **Impacts of Change on Benthic-Pelagic Coupling Over Deep Shelves: The South**
(*U. Bathmann*)
- **Impact of a Changing Sea Ice Cover: Interactions Among Sea Ice and Planktonic and Microbial Communities**
(*G. Dieckmann / D. Thomas / K. Arrigo / S.-H. Kang*)
- **Impacts of Change on Benthic-Pelagic Coupling Over Shallow Shelves: The North**
(*C. Michel / J. Deming / K. Dunton*)
- **Impact of a Changing Sea Ice Cover: The Upper Trophic Levels**
(*V. Lytle / K. Reid / H. Eicken*)
- **Broader Impacts of Change: Food Webs**
(*A. Clarke*)

POLYMERS (WEST)

FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
JAN 5-10, 2003
TOM RUSSELL, CHAIR
EDWIN THOMAS, VICE CHAIR

- **Interfacial Instabilities**
(*C. Harrison / U. Steiner / H.H. Lee*)
- **Nature's Way**
(*D. Tirrell / J. Moore / K.L. Wooley*)
- **Mobility**
(*D. Gersappe / K.R. Shull / J. Israelachvili*)
- **Nano to Micro**
(*J. Mays / A. Balazs / G. Krausch / G. Liu*)
- **Biologically Inspired Systems**
(*M. Galvin / K.Y. Lee / D. Pochan*)
- **Dynamics**
(*E.L. Thomas / S. Herminghaus / S. Granick / D. Hoagland*)
- **Thermodynamics**
(*P. Green / J.K. Kim / A.M. Mayes*)
- **Nanostructured Materials**
(*M. Hillmyer / C. Hawker / U. Wiesner / L. Schadler*)
- **Tailored Surfaces**
(*J. Pochan / M. Chaudhury / J. Genzer*)

POLYSACCHARIDES, CHEMISTRY OF
IL CIOCCO
BARGA, ITALY
MAY 4-9, 2003
PAUL GATENHOLM, CHAIR
SHIGENORI KUGA, VICE CHAIR

- **Advanced Materials from Renewable Resources**
(*W. Glasser / C. Bastioli / G. Wegner*)
- **Advances in Characterization of Polysaccharides**
(*D. Gray / M. Rinaudo / Y. Sugiyama / K. Nichinari*)
- **Structure-Properties Relationships of Polysaccharides**
(*M. Scandola / J.-L. Jane / O. Smitsröd*)
- **Creative Chemistry and Biotransformation**
(*K. Edgar / A. Besemer / A. Ragauskas / M. Tenkanen*)
- **Synthesis and Analysis of Novel Polysaccharide Derivatives**
(*D. Klemm / M. Shelton / F. Nakatsubo*)
- **Self Assembly and Interactions of Polysaccharides**
(*S. Kelley / A. Buleon / M. Gidley / L. Salmén*)
- **Biomedical and Therapeutic Applications of Polysaccharides**
(*E. Chiellini / R. Auzély-Velty / R. Reis*)
- **Biosynthesis of Polysaccharides**
(*S. Kuga / R.M. Brown / T. Teeri / W. Bulone*)
- **Polysaccharides as Biomaterials - Health Care**
(*G. Canbäck / R. Muzarelli / S. Harding*)

PROTONS & MEMBRANE REACTIONS

FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
FEB 23-28, 2003
COLIN WRAIGHT, CHAIR
SHELAGH FERGUSON-MILLER, VICE CHAIR

- **Water and Membrane Permeability**
(*S. White / M. Gutman / T. Haines / G. Hummer / R. Stroud*)
- **Pores & Channels**
(*L. Pinto / R. Pomés / G. Voth / S. Cukierman / L. Heginbotham / R. Dützel*)
- **Gated Channels**
(*T. DeCoursey / D. Minor / F. Bezanilla / M. Sansom / H.R. Guy*)
- **Pumps & ATPases**
(*R. Fillingame / G. Scarborough / J. Walker / D. Stokes / J.B. Jackson / P. Thomas*)
- **Coupled Transporters**
(*R. Kaback / P. Henderson / T.A. Krulwich / J. Wood / G. Rudnick*)
- **Electron/Proton Coupling I**
(*R. Cukier / U. Brandt / F. Rappaport / C.R.D. Lancaster / M. Paddock / P.L. Dutton*)
- **Electron/Proton Coupling II**
(*S. Yoshikawa / R. Gennis / M. Gunner / P. Rich / A. Stuchebrukhov*)
- **Rhodopsins**
(*J. Herzfeld / J. Spudis / H. Luecke / J. Heberle / D. Oesterheld / J. Navarro*)
- **Salute to Heml Gutman**
(*O. Einarsson / D. Deamer / A. Parsegian / P. Brzezinski / W. Junge*)

QUANTITATIVE GENETICS AND GENOMICS
HOLIDAY INN
VENTURA, CA
FEB 9-14, 2003
BRUCE WALSH, CHAIR
REBECCA DOERGE, VICE CHAIR

- **Interfacing Complexity Theory and Quantitative Genetics**
(*B. Walsh / S. Kaufman / M. Cooper*)
- **Analysis of Complex Traits in Plants**
(*F. Hospital / C. Williams / D. Weigel / D. Schemske*)
- **Analysis of Human Populations**
(*B. Weir / J. Satagopa / L. Almasy*)
- **Statistical Genetics**
(*R. Doerge / D. Gianola / S. Otto / S. Knott*)
- **Evolutionary Genetics**
(*P. Phillips / M. Blows / T. Price*)
- **Analysis of Microarray Data**
(*M. Newton / C. Kendziora / D. Crawford / K. Kerr*)
- **Analysis of Complex Traits in Animals**
(*M. Dentine / B. Muir / S. Denise / J. Quackenbush*)
- **Molecular and Metabolic Mechanisms Underlying Phenotypic Variation**
(*S. Omholt / D. de Vienne / S. Rutherford*)

QUANTUM INFORMATION SCIENCE
FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
MAR 23-28, 2003
DAVID AWSCHALOM, CHAIR
BIRGITTA WHALEY, VICE CHAIR

- **Perspectives from Quantum Physics and Computer Science**
(*J. Preskill / U. Vazirani / J. Kimble*)
- **Superconductors**
(*Y. Nakamura / R. Koch / J. Martinis / T. Orlando*)
- **New Opportunities in Solids**
(*D. DiVincenzo / D. Cory / M. Roukes*)
- **Spins in Semiconductors**
(*L. Kouwenhoven / S. Tarucha / D. Loss / Y. Yamamoto*)
- **Single Electron and Single Spin Detection**
(*C. Hammel / D. Eigler / R. Schoelkopf*)
- **Nanoscale Schemes for Trapped Ions and Atoms**
(*C. Monroe / R. Blatt / J. Reichel / P. Zoller*)
- **Atomic Ensembles**
(*J. Dowling / M. Lukin / E. Polzik*)
- **Emergent Directions in Quantum Information Theory**
(*B. Whaley / H. Mabuchi / R. Hughes / M. Nielsen*)
- **New Opportunities in Optics**
(*P. Kwiat / D. Bouwmeester / E. Hu*)

RADIATION ONCOLOGY

HOLIDAY INN
VENTURA, CA
JAN 26-31, 2003
ZVI FUKS, CHAIR
ELIZABETH TRAVIS, VICE CHAIR

- **Mechanisms of Sensing DNA Damage**
(*M. Kastan / M. Lavin / K. Cimprich*)
- **Choice of Pathways in Double-Strand Break Repair**
(*S. Powell / J. Nickoloff / R. Rothstein*)
- **Fidelity of DNA Replication and Genomic Instability**
(*J. Petrini / D. Bishop / D. Roth*)

- **Cell Cycle Checkpoints**
(P. Tofilon / H. Piwnica-Worms / C. McGowan / A. Fornace)
- **Membrane Effects of Radiation**
(R. Kolesnick / W. Morgan / E. Gulbins / P. Dent)
- **Cytoplasmics and Cellular Organelle Responses to Hypoxia or DNA Damage**
(A. Giaccia / W. Zundel / K.M. Debatin / N. Denko)
- **Angiogenesis and Hypoxia in Tissue Damage**
(R.K. Jain / M.C. Simon / G. Semenza)
- **Molecular Events in the Expression of Tissue Damage**
(E. Travis / K. Flanders / Z. Fuks / J. Greenberger)
- **Targeting Signaling Pathways in the Therapeutic Response**
(G. McKenna / G. Angeli / D. Yu / R. Schmidt-Ulrich)

- **Guided RNA Modifications**
(S. Baserga / E. Bertrand / P. Dennis / M. Fournier / A. Hüttenhofer / S. Michaeli)
- **Unguided RNA Modifications**
(A. Ferré-D'Amaré / H. Grosjean / E. Phizicky)
- **Biological Roles of ADARs**
(R. Emeson / S. Heinemann / M. Jantsch / L. Keegan / K. Nishikura / P. Seeburg)
- **Mechanism, Catalysis and Regulation of ADARs**
(P. Beal / D. Lazinski / A. Macmillan / R. Reenan / C. Samuel)
- **Diverse Roles of RNA Binding Proteins in RNA Editing**
(R. Benne / G. Carmichael / L. Read / H. Smith)
- **Bioinformatics and Late-Breaking Developments**
(T. Lowe / G. Stormo)

- **Experimental II**
(T. Timusk / B. Maple / D. Bonn / T. Uemura)
- **New Phases**
(J. Orenstein / L. Forro / M. Franz / S. Chakravarty / D. Scalapino)
- **Tunneling**
(S. Davis / A. Kapitulnik / M. Vojta)
- **Theory II**
(P. Littlewood / S. Kivelson / B. Laughlin / P. Lee / A. McDonald)
- **Neutrons**
(B. Keimer / H. Mook / J. Tranquada)

RED CELLS

IL CIOCCO
BARGA, ITALY
MAY 25-30, 2003
JOEL ANN CHASIS, CHAIR
LEONARD ZON, VICE CHAIR

- **Red Cell Disorders**
(N. Andrews / T. Welles / K. Deitsch / K. Haldar)
- **Membrane Structure, Transport and Adhesion**
(P. Agre / M. Tanner / P. Low / D. Anstee / E. Evans / V. Bennett)
- **Membrane Structure and Mechanics**
(M. Nara / J. Morrow / K. Ritchie / E. Sackmann / A. Chishti / Y. Colin)
- **Regulation of Erythrocyte Membrane Protein Gene Expression**
(D. Bodine / P. Gallagher / L. Peters / J. Conboy)
- **Erythroid Gene Expression: Globin / LCR**
(D. Higgs / F. Grosveld / P. Fraser / G. Stamatoyannopoulos / M. Grodine / G. Blobel / M. Weiss / E. Bresnick)
- **Erythroid Gene Expression: Transcription**
(J. Bieker / R. Grosschedl / B. Emerson / C.-K.J. Shen)
- **Hematopoiesis**
(R. Patient / L. Zon / N. Speck / E. Dzierak / S.-I. Nishikawa / K. Choi / G. Evans / B. Peault)
- **Stem Cells**
(S. Orkin / M. Yamamoto / T. Enver / A. Migliccio / M. Baron)

SALIVARY GLANDS & EXOCRINE SECRETION

HOLIDAY INN
VENTURA, CA
FEB 2-7, 2003
DAVID CASTLE, CHAIR
JAMES MELVIN, VICE CHAIR

- **Opening of Meeting / Keynotes**
(E. Knust / D. Quisell / A. Rosen)
- **Glandular Development**
(D. Andrew / E. Gresik / M.M. Myat / G. Swift / S. Konieczny / G. Robinson)
- **Epithelial Cell Adhesion and Polarity**
(R. MacDonald / M. Kukuruzinska / S. Frisch / C. Gottardi / A. Muesch / D. Bilder)
- **Secretion and Regulation**
(J. Melvin / J. Turner / H. Kasai / E. Chapman / A. Castle / A. Menon)
- **Transport and Diseases**
(A. Menon / T. Shuttleworth / S. Milgram / P. Agre / K. Kirk / D. Cook)
- **Spatial Signaling, G-coupled Receptors, Calcium, Cyclic Nucleotides**
(I. Ambudkar / F. Dowd / D. Yule / S. Muallem / M. von Zastrow / J. Scott)
- **Domains and Rafts in Signaling**
(D. Ann / S. Soltoff / E. Ikonen / M. Linder / K. Matter / S. Tsukita)
- **Apoptosis and Autoimmune Disease in Epithelial Dysfunction**
(B. Baum / A. Rosen / L. Casciola-Rosen / R. Kolesnick / M. Walport / D. Nicholson)
- **The Grand Finale / Keynotes**
(J. Melvin / L. Tabak / T. Hunter)

- **Temperature and Global Change**
(K. Walker-Simmons / R. Sage)
- **Temperature Regulatory Networks**
(M. Thomashow / J. Kreps / J.-K. Zhu / K. Shinozaki)
- **Temperature Sensors and Transducers**
(N. Murata / D. de Mendosa / S. Inouye)
- **Cryobiology/Low Temperature Biology**
(C. Walters / G. Volk / G. Warren / E. Herman)
- **High Temperature Stress**
(E. Vierling / K. Niyogi / S. Crafts-Brandner / L. Nover / U. Lee)
- **Improving Temperature Tolerance in Crop Plants**
(Y. Castonguay / S. Laberge / P. Hayes / P. Loida / J. Zhang)
- **Early Career Scientists**
(T. Chen / T. Palva)
- **Genetics/Genomics/Metabolomics**
(C. Guy / N. Jiang / A. Schulman / J. Quackenbush)
- **Bacterial Ice Nucleation/Plant Freezing**
(M. Burke / S. Lindow)

RNA EDITING

HOLIDAY INN
VENTURA, CA
JAN 19-24, 2003
BRENDA BASS & MICHAEL GRAY, CO-CHAIRS
DONNA DRISCOLL & MAURILLE FOURNIER, CO-VICE CHAIRS

- **RNA Editing by Nucleotide Insertion and Deletion**
(J. Gott / S. Hajduk / D. Maslov / L. Simpson / B. Sollner-Webb / K. Stuart)
- **C to U Editing in Plants**
(A. Brennicke / M. Hanson / R. Maier / J. Obokata)
- **C to U Editing in Animals**
(N. Davidson / J. Greeve / R. Harris / N. Navaratnam)

SUPERCONDUCTIVITY

FOUR POINTS SHERATON: HARBORTOWN
VENTURA, CA
JAN 12-17, 2003
THOMAS TIMUSK, CHAIR
DIRK VAN DER MAREL, VICE CHAIR

- **Angle Resolved Photoemission**
(P. Johnson / J.C. Campuzano / M. Norman)
- **Optical Properties**
(D. van der Marel / D. Basov / D. Drew / G. Blumberg / S. Tajima)
- **Theory I**
(J. Carbotte / E. Abrahams / M. Walker / P. Anderson)
- **Experimental I**
(J. Franck / Y. Ando / B. Halperin / P. Ong / L. Taillefer)

TEMPERATURE STRESS IN PLANTS

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SIGNIFICANT UPDATE

Mathematica is probably the best-known mathematics software in the world. It handles numeric calculation and symbolic logic and is widely used among students, scientists, and engineers. With this release the developers have added improvements in linear programming and optimization, as well as speed and robustness for many numerical functions and symbolic simplification. For statisticians, there is an enhanced analysis of variance (ANOVA) package, and for mathematicians, a new package for combinatorics and graph theory. There are also many format and programming upgrades, including transparent JAVA integration, new XML extensions and tools, and support for XHTML export. There is even a new Author Tools package for technical publishing. The program runs on Windows (95, NT, and above), Mac OS X, Unix, and Linux.

This version presents the user with the standard workspace (called a notebook) and symbolic palette screens upon booting, including a welcome screen that invites new users to either take a 10-min tutorial or gain immediate access to the help browser or a Web site. The tutorial is an excellent quick introduction to the Mathematica syntax and reviews its more commonly used functions. For users of previous versions, learning new functions is simply a matter of skimming through the first few pages of the thin "Getting Started Manual." The program provides access to the latest edition of *The Mathematica Book*, a thorough introduction to all of the most used functions and many of the more obscure ones.

The depth and breadth of the functions available will initially overwhelm new users of the program. Many functions are not loaded at startup but are immediately accessible through the search engine associated with the help menu. Through these add-on packages, the program's functionality is greatly extended. The novice must adjust to the nuances of the program, including the case sensitivities, use of brackets and parentheses, and the oft-cryptic error messages that the program generates. After this initial learning curve, the user will find complex calculations and the generation of graphics greatly simplified. Like many packages of this type, code and multiple lines of calculation instructions may be recycled for repetitive use or buried in larger calculations.

Capabilities of the program include calculus, algebraic manipulation, differential equations, geometry, linear algebra, numerical analysis, and statistics. Two- and three-dimensional plots visualize trends and patterns in data sets. Sounds and color emphasize graphical features. Lines of code may be annotated with text and the results may be saved as a workbook, which can be updated as needed and expanded to publication length within the program. Mathematica's Internet publishing tools make Web posting easy.

—John A. Wass

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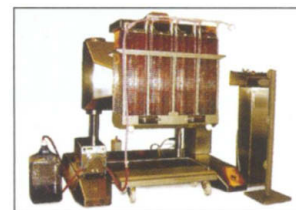
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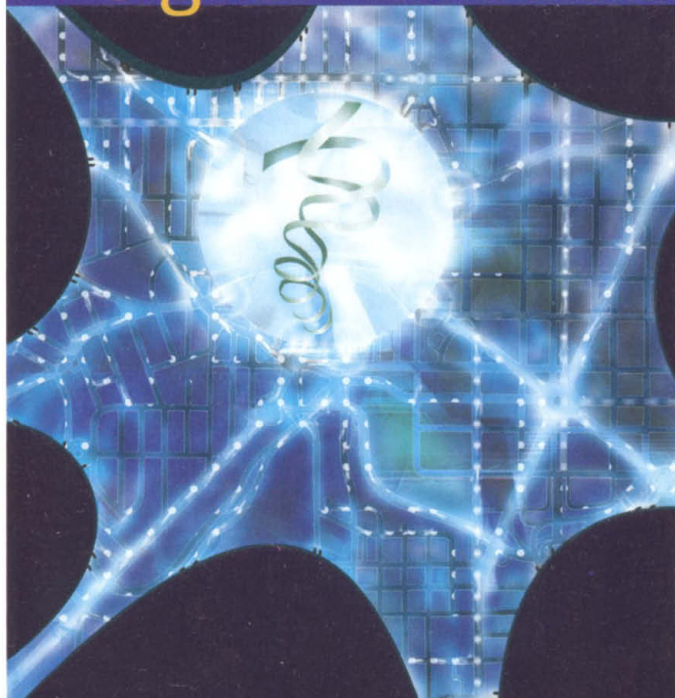
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CHAIR OF THE DEPARTMENT OF ELECTRICAL AND SYSTEMS ENGINEERING

Recommendations and applications are invited for the Chair of the Department of Electrical and Systems Engineering. The accompanying faculty appointment is at the tenured professorial level and includes a scholarly chair designation. The Committee is seeking candidates with distinguished research backgrounds interested in leading a significant department selected for growth in size and scope.

The Department has outstanding programs and research facilities as described at <http://www.seas.upenn.edu/ese>. The Department emphasizes excellence in teaching and research with close connections to departments across the School of Engineering and Applied Science and other schools including the Wharton Business School and the School of Medicine. Further information about the School can be accessed electronically at <http://www.seas.upenn.edu>.

The search will remain open until the position is filled. Applications/recommendations should be accompanied by a CV and appropriate supporting materials and sent to:



Professor David Pope
Chair of the Search Committee
c/o Department of Materials
Science and Engineering
School of Engineering and Applied Science
University of Pennsylvania
Philadelphia, PA 19104-6272

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Predix Pharmaceuticals is a drug discovery company focused on GPCR targets for development of novel therapeutics. Predix utilizes its innovative technology platform that integrates 3D GPCR receptor modeling from genomics sequences, medicinal chemistry, GPCR assay development/screening, and pharmacology for the rapid discovery and development of blockbuster drugs. Predix has an immediate opening for:

Principal Scientist, GPCR Assay Development and Screening. The ideal candidate will have a Ph.D. in biochemistry, molecular biology, molecular pharmacology, or a related field, with 5-10 years of experience in GPCR assay development and screening of compounds in a pharmaceutical or a biotech company. The candidate must be familiar with all current assay read-out systems and proficient in automation.

Predix Pharmaceuticals offers competitive compensation and benefits package and a stock options plan. For immediate consideration, please send your resume to: **Human Resources, Predix Pharmaceuticals Inc., 10K Gill St., Woburn, MA 01801. Tel: (781) 376-0821; Fax: (781) 376-0822; E-mail: dhanoa@predixpharm-us.com; www.predixpharm-us.com or www.predixpharm.com.**



POSTDOCTORAL POSITION STRUCTURAL BIOLOGY (REQ #1193)

A postdoctoral position is available to study the structure and function of proteins in intracellular signal transduction by using protein NMR spectroscopy and other physical biochemistry methods. Our recent publications: WNT signaling pathway, *Nat. Struc. Biol.* **7**, 1178-1184 (2000); Focal Adhesion Kinase, *Mol. Cell. Biol.* **22**, 2251-2760 (2002); ACP from *M. tuberculosis*, *J. Biol. Chem.* **277**, 15874-15880 (2002). Candidates with background in Structural Biology, Biomolecular NMR, Protein Chemistry, Biochemistry, Physical Chemistry and Chemical Physics are encouraged to apply.

St. Jude Children's Research Hospital is a premier center dedicated to advancing the health of children with catastrophic diseases through biomedical research. The Protein NMR Resource at St. Jude is currently equipped with two Varian INOVA 600 MHz spectrometers. An additional Bruker 800 MHz system with cryoprobe is going to be installed by the end of 2002. In addition to a highly competitive salary (\$33,592 per year or higher depending on experience), St. Jude offers postdoctoral research scientists an outstanding benefits package, including yearly professional travel funds. For consideration, please indicate REQ #1193 and contact: **Dr. Jie Zheng, Department of Structural Biology, MS 311, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105, USA. E-mail: Jie.Zheng@stjude.org**

St. Jude is an equal opportunity / affirmative action employer.

www.stjude.org

The University of Texas Pan American

The Department of Biology invites applications for the following three tenure-track positions:

Assistant Professor of Vertebrate Physiological Ecology (F02/03-09): We seek candidates with expertise in vertebrate physiological ecology. The person hired is expected to teach vertebrate physiological ecology and herpetology and assist in teaching the ecology course.

Assistant Professor of Prokaryotic Genetics (F02/03-08): We seek candidates with expertise in prokaryotic genetics. Candidates with expertise in molecular genetics are encouraged to apply. The person hired is expected to teach bacterial genetics and assist in molecular biology courses.

Assistant Professor of Microbial Ecology (F02/03-10): We seek candidates with expertise in microbial ecology. Candidates with experience in prokaryotic microbiology are encouraged to apply. The person hired is expected to teach general microbiology and assist in teaching the medical microbiology and immunology courses.

Applicants for each position must hold a Ph.D. (postdoctoral experience is desirable) and be committed to teaching excellence. Successful applicants for each position will be expected to develop externally funded research programs, develop courses in their fields of expertise, and form productive research collaborations with other faculty members. The University of Texas - Pan American is located in the subtropical Rio Grande Valley of southern Texas, an area of high biological diversity. The city of Edinburg is 72 miles west of the Gulf of Mexico and 19 miles north of the Texas-Mexico border. The University has over 14,000 students and offers modern facilities and a supportive collegial environment to foster development of academic and research careers.

Applicants for each position must send a letter of application, curriculum vitae, copies of representative publications, a one-page description of future research, a statement of teaching philosophy, plus three letters of reference (sent under separate cover) to: **Dr. Luis Materon, Search Committee Chair, Department of Biology, UTPA, 1201 W. University Drive, Edinburg, TX 78541.** Review of applications will begin on January 6, 2003. Position open until filled. The salary is negotiable based on experience. For more information, contact lmateron@panam.edu. **Note: This position is security-sensitive and subject to Texas Education Code 51.215, which authorizes the employer to obtain criminal history record information.**

For 25 years, Iogen Corporation has been dedicated to the environment as a world leader in the development and production of ecological alternatives to fossil fuel. Iogen is a small company and as such offers scientists the opportunity to make an impact on groundbreaking research and development that will completely revolutionize international fuel and energy industries.

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As the developer of the world's most commercially advanced enzymatic process for making ethanol from biomass and the owner and operator of the world's only demonstration-scale bioethanol facility, Iogen is embarking on a major scale-up of investment and moving to a new level with the creation of an exciting new industry. In partnership with Shell, the international oil company, Iogen is rolling out initiatives which will see its investment in bioethanol technology move to full commercialization.



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Successful candidates will have a PhD in an appropriate discipline, at least two years of relevant industrial or post-doctoral experience and superior leadership and communication abilities.

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For further information on Iogen Corporation or these and other career opportunities please visit Iogen at: www.ioген.ca



Tenure Track Faculty Position in Neural Engineering

The Department of Biomedical Engineering at Washington University in St. Louis invites applications for a junior or senior level tenure-track faculty position in the field of Neural Engineering. We are seeking candidates with a PhD or equivalent degree in bioengineering, or a closely related discipline, 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 specific interest include sensory-motor processing, pattern analysis and recognition, and neuroimaging.

This position will complement our two other recent faculty recruits in the area of motor control, all of which is part of a major expansion of the department supported by a Development Award from the Whitaker Foundation. A new building for the department will be completed this fall. 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.

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. Successful applicants at the junior level will be expected to establish an independent research program with extramural funding. 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). Applications by email are preferred: susan@pcg.wustl.edu, please combine the material into a **ONE FILE attachment**. Applications may also be sent by regular mail to: **Neural Engineering Search Committee, c/o Susan Danker, Box 8108, Department of Anatomy and Neurobiology, 660 S. Euclid Ave., St. Louis, MO 63110.** (AA/EOE M/F/D/V)



Washington University in St. Louis



Beam Line Scientists for High-Pressure Research in the Earth Sciences

Two beam line scientists are required to develop Earth Science use of high-pressure facilities at synchrotron radiation sources on the west coast of the United States. This is an extremely exciting time for high-pressure research in the Earth Sciences with new high-pressure, high-temperature methodologies coupled with new synchrotron techniques revolutionizing our understanding of the Earth and other planetary bodies. These positions are an opportunity for two people with a background in experimental high-pressure or Earth science research to work with some of the leading scientists in this field and to contribute to the development of this rapidly evolving subject. Experience with using synchrotron radiation will be an advantage but is not essential.

One position will be for a PhD level scientist. The expected starting salary will be between \$53,900 and \$69,700. The other position will be for a graduate or masters level scientist. The expected starting salary will be between \$36,096 and \$59,240. Both positions will be based initially at the Advanced Light Source in Berkeley, California.

These appointments are made for one year with the possibility of renewal. The main grant is renewed in five years.

Informal inquiries about these positions may be made to either **Prof. Raymond Jeanloz, Department of Earth and Planetary Science, University of California, Berkeley, CA 94720** (jeanloz@uclink.berkeley.edu) or **Dr. Simon Clark, Advanced Light Source, Lawrence Berkeley National Laboratory, Berkeley, CA 94720-4767** (smclark@lbl.gov).

Please send applications including a resume, a brief research summary and the names and email addresses of at least two referees by mail or preferably by email to Dr. Clark at the above address. The closing date for applications is 1 November 2002.

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

THE STATE UNIVERSITY OF NEW JERSEY

RUTGERS NEWARK

Director Center for Cellular Biodynamics

Rutgers University is undertaking a major new multi-disciplinary initiative in cellular biodynamics at its Newark campus. We seek a nationally recognized, well-funded, interdisciplinary senior scientist as Director who will spearhead the establishment of a highly interactive, interdisciplinary research center working on the molecular cell biology of dynamic cellular processes. The Director will be charged with recruiting several new tenure-track faculty appointees into the Department of Biological Sciences, as well as play a major role in recruiting faculty with complementary interests into other science departments. A new research building is currently being designed and will serve as the home base for the Center. Significant resources will be provided, including state-of-the-art instrumentation, excellent state-funded salaries, staff support, and competitive start-up allowances for new hires. The Department of Biological Sciences serves Rutgers University and the New Jersey Institute of Technology (NJIT) and includes faculty from both institutions. Rutgers University-Newark and NJIT are part of a cluster of adjacent institutions in University Heights, including the University of Medicine and Dentistry of New Jersey and the Public Health Research Institute, committed to research in the life sciences. Review of applications will begin on November 15, 2002.

Interested individuals are encouraged to submit a letter of interest, curriculum vitae, names of 3 references, and a statement of research interests to: **Cellular Biodynamics Search Committee, Office of the Dean, Faculty of Arts and Sciences, Rutgers University, 325 Hill Hall, University Heights, Newark, New Jersey 07102 USA. E-mail inquiries: cbsearch@andromeda.rutgers.edu.**

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Elements of AAAS Science & Technology Policy Fellowships 2003:04

He

help shape science and
technology policy

Op

a great opportunity
for accomplished and
societally-aware scien-
tists and engineers

Co

contribute scientific and
technical information

Le

learn how
government works

Un

a unique and prestigious
participatory experience

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Help shape science and technology policy in Washington, DC. Contribute scientific and technical information and external perspectives to federal 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 begin at \$58,000.

Ap

Applicants must have a PhD or an equivalent doctoral-level degree by the application deadline from any physical, biological or social science, any field of engineering, or any relevant interdisciplinary field. Individuals with a master's degree in engineering and at least three years of post-degree professional experience also may apply. U.S. citizenship is required. Federal employees are not eligible. Approximately 50 fellowships are awarded in nine different programs. Underrepresented minorities and persons with disabilities are encouraged to apply.

Be

The fellowship year **begins** September 1, 2003. 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, 2003.

Pl

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 and other federal offices.

Op

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

- Congressional Fellows
- Diplomacy Fellows
- AAAS/NIH Science Policy Fellows
- AAAS/NSF Science and Engineering Fellows
- Defense Policy Fellows
- Environmental Fellows
- AAAS/NTI Fellows in Global Security
- Roger Revelle Fellows in Global Stewardship
- Risk Policy Fellows in Health, Safety and the Environment

In

For application **instructions** and further information:
AAAS 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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American Association for the Advancement of Science

Senior Researcher and Researcher positions in protein crystallography Highthroughput Factory, RIKEN Harima Institute at SPring-8

Positions for a few researchers in protein crystallography are available in the Highthroughput Factory (HTPF) at RIKEN Harima Institute, SPring-8, Japan (<http://www.riken.go.jp/> and <http://www.spring8.or.jp/>). HTPF is operated as a five-year structural genome project from 1st April, 2002 in Japan, which is part of the RIKEN Structural Genomics/Proteomics Initiative (RSGL, <http://www.rsgl.riken.go.jp/>). The research of HTPF focuses on high throughput structure determination at dedicated HTPF building using dedicated two beam-lines BL26B1/B2 at SPring-8 with originally designed automated data collection robotics system as well as state-of-art facilities of all aspects of synchrotron crystallography. Current research targets are selected proteins from thermophilic bacteria and a few higher organisms. We are also interested in methodological development including instrumentation for high throughput structure determination through collaboration inside and outside RIKEN. HTPF is well equipped for all aspects of structural work from protein production to bioinformatics. We have a newly developed all-in-one automated crystallization and observation system, four in-house X-ray diffractometers and a powerful computational environment including a 64-cpu Linux cluster, an integrated HTPF database system with 27TB tape library and a gigabit fiber-channel system for image transfer from the beam-lines.

Candidates will be expected to have at least several years of academic or industrial post-doctoral experience and a proven outstanding record of research success in protein crystallography and to have ability to supervise a unit for structural determination composed of a few junior researchers. A background in protein chemistry, protein crystallization and/or bioinformatics is preferable. The positions are yearly contract and may extend up to the end of the project and are generally available from April 2003; an earlier starting date may be negotiable. Applications should include a full C.V. with contact information, a list of publications, a research plan, and the names and addresses of at least two referees who can be contacted prior to an interview. Successful candidates will be RIKEN HTPF senior researcher or researcher. Please send applications to:

Dr. Masashi Miyano, Director,
Drs. Naoki Kunishima and Tahir Tahirov, Team leaders,
Highthroughput Factory, RIKEN Harima Institute,
1-1-1 Kouto, Mikazuki-cho, Sayo-gun,
Hyogo 679-5148, Japan.
E-mail: miyano@spring8.or.jp
FAX: +81 791 58 2917
c/o Joo-Sook Hwang ; secretary,
E-mail: jshwang@spring8.or.jp



Keck Graduate Institute
of Applied Life Sciences

PRESIDENT

KECK GRADUATE INSTITUTE
of Applied Life Sciences
(A member of the Claremont Colleges)

Chief executive officer of young, rapidly evolving graduate school. Keck Graduate Institute (KGI) emphasizes interdisciplinary teaching and research, with an emphasis on a professional master's degree, close ties to industry, and a curriculum that combines science/technology and management/ethics delivered via an innovative pedagogy.

The President must lead KGI in pursuit of its unique mission, fostering continuing experimentation; continuing an aggressive fund effort; and building close relationships with faculty, students, industry, the other Claremont Colleges, trustees, advisors, and academic partners. Candidates should have demonstrated leadership skills, impeccable ethics, strong interpersonal skills, high energy, entrepreneurial mindset, and enthusiasm for KGI's mission. Candidates may now be in the academy or in the bioscience industry.

Respond to: **Mr. Jack Stark, Chair of the Board, Keck Graduate Institute, 535 Watson Drive, Claremont, CA 91711** or jack_stark@kgi.edu. Website: www.kgi.edu

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A Life's Calling

Can you hear it? It starts with you.

Project Manager Functional Proteomics Project

Sloan-Kettering Institute, the research arm of MSKCC, is pioneering and expanding research programs that bridge basic and clinical cancer research utilizing a wide array of new and advanced techniques. As a leader in genomic applications to help fight cancer, a special initiative has been created to focus on the coordination of functional proteomics projects within the Center.

Collaborate with scientific staff managers to establish project goals and specifications while defining resources in alignment with fiscal priorities, communicating project progress and anticipated outcomes to Project Directors. The Project Manager will support Section Managers in assessment of staff members' performance, aid in their development and form effective project teams.

To qualify, you must possess an MS or PhD in a biological science or chemistry, 1-3+ years project management experience with an emphasis in R & D and effective communication, organizational, interpersonal and PC/computer skills.

We offer an excellent salary and comprehensive benefits, including 100% tuition reimbursement. Please forward your resume and salary requirements to: **Employment Department, #02241.2R, MSKCC, 633 Third Avenue, 5th Floor, New York, NY 10017** or E-mail: 02241.2R@applyforjobsonline.com. EOF/AA



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GLOBAL OPPORTUNITIES

**CSIRO Telecommunications
and Industrial Physics,
Sydney, Australia**



Postdoctoral Fellow Artificial Photosynthesis

Ref: AS22/23

A\$52K - A\$58K + Superannuation

CSIRO Telecommunications and Industrial Physics (CTIP) participates in the Australian Artificial Photosynthesis Network, drawn from 4 CSIRO Divisions and 7 Universities. CTIP is seeking to appoint a Post Doctoral Fellow to work on the computer modelling/design of proteins which can be utilised in reproducing the natural process of photosynthesis.

Applicants should be eligible to receive, or have received, their PhD degree within the last 3 years, and should also have experience in one or more of the following areas; physics, chemistry, computing, botany, plant physiology, applied mathematics, material science.

The fellowship is for a term of 3 years.

584337

For selection documentation and details on how to apply visit

www.csiro.au/careers

Alternatively contact 1300 301 509

Australian Science, Australia's Future

ASSISTANT PROFESSOR OF HUMAN GENETICS

The Department of Human Genetics at the University of Utah School of Medicine is initiating a new, major expansion, recruiting twelve new investigators over the next six years to build upon existing strengths in Human Genetics and Developmental Biology.

We are seeking outstanding applicants at the level of Assistant Professor in the broad fields of Genetics and functional Genomics, including, but not limited to, animal models of human disease and development, genetic approaches to complex diseases, and population genetics/genetic epidemiology. Creative scientists with a record of achievement and commitment to excellence in both research and teaching are encouraged to apply. Successful candidates will receive a substantial start-up package and enjoy a stimulating and supportive research environment.

Applicants should submit curriculum vitae, a summary of research plans, relevant reprints and/or preprints, and 3 letters of reference to:

Dr. Mario R. Capecchi
Co-Chairman, Department of Human Genetics
Howard Hughes Medical Institute
University of Utah School of Medicine
15 North 2030 East, Room 5440
Salt Lake City, UT 84112-5331



The application deadline is November 15, 2002.

The University of Utah is an Equal Opportunity/Affirmative Action Employer, encourages nominations and applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.



FACULTY POSITION AT MIT, DEPARTMENT OF BIOLOGY

The Massachusetts Institute of Technology Department of Biology is seeking an outstanding scientist for a tenure track position as an **Assistant Professor**. We are interested in candidates with important research contributions, the ability to develop a significant and independent research program, and a commitment to excellence in undergraduate and graduate education.

The applicant's research program should involve physiologic, genomic, or other systems approaches to the study of cells or organisms or the interactions between cells or between organisms. Areas of interest include but are not limited to cell biology, developmental biology, neurobiology, and evolutionary biology.

Applicants should submit a curriculum vitae and a summary of current and proposed research programs and should arrange for three letters of recommendation to be sent to:

Biology Search Committee
Attn: Dr. H. Robert Horvitz
MIT Room 68-132
77 Massachusetts Avenue
Cambridge, MA 02139

Consideration of completed applications will begin on October 1, 2002.

MIT is an Affirmative Action/Equal Opportunity employer. Qualified women and minority candidates are especially encouraged to apply.



CHAIRPERSON DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS MICHIGAN STATE UNIVERSITY

Michigan State University invites applications and nominations for the position of Chairperson of the **Department of Microbiology and Molecular Genetics**. The Department is among the largest and most diverse in the nation. It is comprised of more than 40 faculty members who conduct research in a wide variety of prokaryotic and eukaryotic systems, and has outstanding undergraduate and graduate programs. Research focus areas include functional and comparative genomics; microbial physiology, ecology and evolution; cell growth and differentiation; and molecular pathogenesis. In 2002, the department moved into a new building that offers state of the art research, library and teaching facilities. The impressive new structure also houses the Departments of Physiology and Physics & Astronomy, and is physically linked to the Departments of Biochemistry & Molecular Biology and Chemistry, thereby providing extensive opportunities for interdisciplinary interactions and collaborations. Administrative ties to the Medical and Veterinary Colleges, the College of Natural Science and the Michigan Agricultural Experiment Station offer opportunities in basic, clinical and applied research, teaching and service. Further information about the Department of Microbiology and Molecular Genetics is available online at www.msu.edu/user/micmail.

The Chairperson will provide leadership for the Department and for interdisciplinary activities on the MSU campus. We seek an individual with demonstrated administrative and interpersonal skills, a strong commitment to undergraduate, graduate and professional education, an interest in and appreciation of the diverse areas of expertise in the department, and an outstanding record of research at the national and international levels. Continuation of an active research program is expected and will be supported.

Appointment will be on an annual (12 mo) basis with tenure. Applicants should submit a complete curriculum vitae. Review of applications will begin in October 2002, and will continue until the position is filled. Applications, nominations or requests for further information should be addressed to: **Dr. Susan Conrad, Search Committee Chairperson, Department of Microbiology and Molecular Genetics, 2209 Biomedical and Physical Sciences Building, Michigan State University, East Lansing, MI 48824-4320, Fax: (517) 353-8957, Tel: (517) 355-6463, Ext. 1538, Email: micmail@msu.edu**

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

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Invitrogen Corporation, headquartered in Carlsbad, CA, has outstanding opportunities for specialists in Molecular Biology, Cell Culture, Genomics, Proteomics, and Cell Biology to maintain our leadership in the fast paced biotech industry. Some of our many current openings include:

SCIENTIST - Eukaryotic Splicing

Join our Cloning & Gene Expression division. Ph.D in Biology or related field, Mammalian cell culture, RT-PCR, and retroviral experience 2+ years of industry experience is required. Project Management experience is a plus. Job # 02-C1871.

RESEARCH ASSOCIATE III - RNA Amplification

Opportunities in our Gene Discovery division. Bachelor's Degree and 5+ years of laboratory work experience or Master's degree with 2+ years of laboratory experience required. Emphasis on analysis of nucleic acids and molecular biology. Experience and familiarity using methods of detection and monitoring expression levels of DNA and RNA desired, qPCR assay development preferred. Job # 02-C1911.

RESEARCH ASSOCIATE II - Enzymology/Amplification

In our Enzymology/Amplification division, you'll work on product development of cDNA synthesis, RT-PCR, and PCR system. Requires a Bachelor's Degree in Molecular Biology or related field with 2-5 years of laboratory experience OR Master's Degree in Molecular Biology with 0-2 years of experience and experience with RT-PCR and PCR amplification, experience with tissue culture is a plus. Job # 02-C1619.

We are looking for motivated individuals who are eager to join an exciting, growing company. Please e-mail your resume to: Attn:(Insert Job #), resumes@Invitrogen.com or mail/fax to: **Invitrogen Corporation, HR, 1600 Faraday Ave., Carlsbad, CA 92008. Fax: 760-602-6600.** (Job # must be referenced for consideration.) EOE/M/F/D/V.



Norris Cotton Cancer Center Dartmouth Medical School Cancer Research Scientists

The Cancer Center at Dartmouth, one of 40 NCI-designated comprehensive cancer centers, invites applications for tenure track faculty positions at the level of Assistant Professor. Construction of a new multidisciplinary cancer research center with laboratories and clinical facilities is underway, and is slated for completion in the summer of 2003. We seek interactive scientists with research interests in any area of the basic and translational sciences relevant to the study of cancer. In addition to an appointment in the Cancer Center, recruited faculty will receive primary appointments in an appropriate department of Dartmouth Medical School, and will have teaching, clinical, and administrative opportunities and responsibilities that reflect their interests and institutional needs.

Interested applicants should submit a letter of application with a statement of career goals and a curriculum vitae to: **Dr. Mark Israel, Director, Norris Cotton Cancer Center, One Medical Center Drive, Lebanon, NH, 03756.** Letters of recommendation from three individuals should be sent to the same address. Review of applications will commence on November 1, 2002.

Dartmouth Medical School is an EO/AA employer and encourages women and minority candidates to apply.

The College of Oceanic and Atmospheric Sciences (COAS) at Oregon State University announces the availability of a tenure track faculty position in Radioisotope Geochemistry. COAS is one of the leading oceanographic and atmospheric graduate research institutions in the country with more than 200 faculty and staff members and a wide variety of assets. These include two research vessels and state-of-the-art analytical laboratories, notably a collaboratory for plasma spectrometry featuring a Nu Plasma multicollector ICP-MS (<http://wmkeck-icpms.coas.oregonstate.edu/>). We seek a colleague whose research will focus on the analysis and application of radioisotopes to marine geochemistry. These applications would emphasize studies of processes and/or tracing material sources and pathways through chemical, biological, geological, and/or physical oceanographic systems. The appointee will be expected to develop and maintain a vigorous externally funded research program, to interact with faculty colleagues, to advise and mentor graduate students, and to participate in the COAS teaching program. This faculty member would contribute to the Chemical Oceanography instructional curriculum by developing an interdisciplinary course in oceanographic applications for radioisotopes. Essential qualifications include a Ph.D. in oceanography, geochemistry, or a closely related field. The successful candidate must possess a record of significant and innovative research applying radioisotopic tools to marine geochemistry or oceanography and the clear potential to attract external funding. Research themes could include, but are not limited to: studies of particle dynamics in seawater and/or sediments; tracing the sources and fates of nutrients or pollutants; development of chronologies as part of the study of geochemical, biological, or anthropogenic processes; tracing water masses or characterizing physical processes such as groundwater infusion into estuaries and coastal environments, ocean boundary mixing, or thermohaline circulation. Interest or experience in mentoring or teaching of graduate students is also desirable. Preference will be given to candidates at the Assistant Professor level; however, applicants with an exceptional record of research achievements and other relevant experience may be considered at the Associate Professor level. This position is funded by grant, education, and general funds.

Applications should consist of a letter of interest referencing position 005-523, a detailed curriculum vitae that includes a description of current and future research interests, a list of publications, and the names and addresses of at least four references to: **Mark R. Abbott, Dean; College of Oceanic and Atmospheric Sciences; Oregon State University; 104 Ocean Admin Bldg; Corvallis, OR 97331-5503.** For full consideration, complete applications must arrive by **16 December 2002.** Inquiries about the position may be directed to **Dr. Robert Collier** by phone (541-737-4367), by electronic mail (rcollier@coas.oregonstate.edu), or by FAX (541-737-2064), or go to COAS web site at: <http://www.coas.oregonstate.edu/employment/>.

Oregon State University is an AA EOE.

ASSISTANT PROFESSOR OF BIOLOGY

DEPARTMENT OF NATURAL SCIENCES

Baruch College/CUNY has a tenure track position available beginning September 2003. We are seeking a candidate with interests in Genetics or Molecular Biology. Responsibilities will include teaching introductory and advanced courses in biology and mentoring undergraduate research projects for independent study or honors.

The successful candidate must be willing to establish a vigorous research program and be committed to excellence in undergraduate teaching and research. A Ph.D. is required.

Submit curriculum vitae and three letters of recommendation by December 1, 2002 to: **Professor Mary Jean Holland, Chair, Search Committee, Department of Natural Sciences, Baruch College/CUNY, One Bernard Baruch Way, Box A-0506, New York, NY 10010.**

An AA/EO/IRCA/ADA Employer.

BaruchCOLLEGE
The City University of New York

Assistant/Associate Professor

Department of Neurobiology Harvard Medical School

The Department of Neurobiology at Harvard Medical School invites applicants for the position of Assistant/Associate Professor. Preference will be given to candidates who study neural circuits with innovative approaches, including optical imaging, MRI, molecular biology, or electrophysiology. We have recently established a Brain Imaging Core with facilities for small-animal MRI, optical imaging, and single and multi-photon confocal microscopy. This tenure track position offers outstanding scholarly and scientific resources in a collegial and collaborative atmosphere that includes strong ties to related departments throughout Harvard, its affiliated hospitals, and the Boston neuroscience community. The position also offers the opportunity to teach exceptional graduate, medical, and health-science-technology students with strong interests in neuroscience and related technologies. Candidates must have a Ph.D., M.D., or equivalent graduate degree.

Applicants should send a letter of application with a curriculum vitae, a brief description of research interests, and the names of at least three references. They should also arrange for those references to send letters of recommendation directly. Applications should be received by December 2, 2002, and should be addressed to:

Neural Circuits Search Committee, c/o Ms. Amy Webber
Department of Neurobiology
Harvard Medical School
220 Longwood Avenue
Boston, MA 02115

Harvard Medical School is an Equal Opportunity/Affirmative Action Employer with an institutional commitment to diversity in its faculty.



NORTHWESTERN UNIVERSITY

EVANSTON AND CHICAGO, ILLINOIS

VICE PRESIDENT FOR RESEARCH

Northwestern University seeks nominations and applications for the position of Vice President for Research. The Vice President for Research is a senior central administrator with primary responsibility for the quality and vitality of Northwestern University's research enterprise. The Vice President for Research develops and implements strategies for achieving the University's research goals; capitalizes on the interdisciplinary strength of University research centers; oversees compliance with regulatory mandates; and ensures that the research infrastructure is robust and responsive to the needs of Northwestern University investigators. The Vice President's broad portfolio includes 17 University research centers and the offices and facilities providing University-wide research services. The Office of the Vice President for Research currently comprises 400 staff and a budget of over \$80 million. Northwestern's research awards exceeded \$320 million during the most recent fiscal year. The Vice President reports to the Provost and serves as a member of the President's Staff. The new Vice President will assume his/her duties as soon as possible after January 1, 2003. For full consideration, nominations and applications should be received by November 11, 2002, and should be sent to:

vpsearch@northwestern.edu

or

Secretary, Search Committee for the VP for Research
Northwestern University
633 Clark Street
Evanston, IL 60208-1119

Northwestern is an affirmative action, equal opportunity educator and employer.

Director, Environmental Technology Laboratory (ETL)

(A Senior Executive Service Position
in the Federal Government)

Department of Commerce (DOC)
National Oceanic and Atmospheric
Administration (NOAA)
Office of Oceanic and Atmospheric
Research (OAR)
Boulder, Colorado

\$128,074 - 138,200 annually

Vacancy Announcement NOAA#02-07

As Director, ETL, the incumbent is responsible for planning, coordinating and evaluating the operation of the Laboratory; providing the scientific leadership necessary to maintain the long-term viability of the laboratory in NOAA; provides expert scientific and technical direction for the formation, evolution and management of a balanced and effective research program that is responsive to NOAA needs for improved and extended weather, climate and air quality research and services; manage all operational aspects of ETL; serves as spokesperson for ETL/OAR/NOAA among top-level scientists in NOAA, other agencies and universities in meetings leading to the identification of significant research projects and the establishment of objectives.

The incumbent is required to have the following:

1. Broad understanding of the scientific foundations, research challenges and observational needs in the areas of weather, climate and air quality. The incumbent should have a solid grounding in the physical sciences and the theory, application and current state of remote sensing of atmospheric and oceanic parameters by including the application of remote sensing and supporting observations necessary to improve the understanding of complex geophysical systems.
2. Demonstrated competence in the physical sciences sufficient to perceive complex problems in a broad perspective, to coach and infuse ideas, and to participate meaningfully in direction and evaluation of atmospheric and oceanographic research. In particular, competence in atmospheric science is required to meaningfully direct the study of regional atmospheric processes over a spectrum of time scales. The incumbent must be experienced in creating and executing focused research programs that have the potential to extend science and create opportunities for new product lines and services for NOAA.
3. Demonstrated ability to perform senior-level research with particular emphasis on remote sensor development and application to the environmental sciences, and to publish significant research findings in refereed literature.

Please contact **Dede Epstein at 301-713-0530, x106** for an announcement package (**Internet address: dede.epstein@hmo.noaa.gov**), including mailing instructions-referring to the announcement number -OR- you may access the entire full-text vacancy from NOAA's Executive Resources Homepage (see below). Incomplete applications will be returned.

<http://www.rdc.noaa.gov>
This vacancy will close on
October 26, 2002

"NOAA Values a Diverse Workforce
and is an Equal Opportunity Employer"



POSITIONS OPEN

TENURE-TRACK FACULTY POSITION PLANT BIOLOGIST

The Center for Biosystems Research (CBR; website: <http://www.umbi.umd.edu/~cab/>) has a tenure-track, 100% research faculty position available at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**. The CBR, one of five research centers of the University of Maryland Biotechnology Institute, is located on the campus of the University of Maryland, College Park. CBR provides a dynamic and interdisciplinary research environment with access to several graduate training programs. Areas of research within CBR emphasize pathobiology (plant and animal), genome sciences, and biomolecular/metabolic engineering. The current position is intended to strengthen the CBR's complement of Plant Scientists; however, other highly qualified candidates with research programs consistent with CBR's research foci will be considered. The successful candidate will be expected to develop an independent, high-quality, and extramurally supported research group with interest and expertise in molecular genetics, genomics, bioinformatics, systems biology, biochemistry, or other areas relevant to modern plant biology. For full consideration, submit current curriculum vitae; selected reprints; summary of research interests; and three reference letters by December 10, 2002, to:

Faculty Search Committee
(Reference Number 300326)
Center for Biosystems Research
University of Maryland
Biotechnology Institute
Plant Sciences Building, Room 5115
College Park, MD 20742

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

TENURE-TRACK/TENURED ASSISTANT/ASSOCIATE PROFESSOR Biomedical Sciences

The University of Illinois College of Medicine at Rockford seeks one faculty person for its diversified Department of Biomedical Sciences. A Ph.D. and/or M.D. is required. Emphasis on excellence in research is deemed more critical than the field of training, although the successful candidate will be required to participate in team teaching to medical students in either pharmacology or microbiology. Current extramurally funded research is essential. Rockford is a pleasant, four-season community with affordable housing; opportunities for spousal employment; and close proximity to large urban centers and rural recreational environs. Submit curriculum vitae, a short statement of research interests, and the names and addresses of three references to: **Janet Stull-Snow, Department of Biomedical Sciences, University of Illinois College of Medicine at Rockford, 1601 Parkview Avenue, Rockford, IL 61107-1897.** Applications will be reviewed starting December 1, 2002. *The University of Illinois is an Equal Opportunity/Affirmative Action Employer.*

RESPIRATORY NEUROPHYSIOLOGY. RESEARCH ASSOCIATE position available for neurophysiological/neurohistochemical studies of brain stem mechanisms responsible for genesis and control of respiratory activity. *In vivo*, *in situ*, and *in vitro* models will be used. Work primarily with **W.M. St.-John** and colleagues at Dartmouth Medical School. Also possibility of projects within laboratory of **J.F.R. Paton** at University of Bristol, United Kingdom. Please send curriculum vitae and names of references with e-mail addresses to: **Walter M. St.-John, Professor, Department of Physiology, Dartmouth-Hitchcock Medical Center, Lebanon, NH 03756 U.S.A. E-mail: walter.m.st.john@dartmouth.edu.**

POSITIONS OPEN

ECOLOGICAL PHYSIOLOGIST Illinois State University Normal/Bloomington

Biological Sciences (website: <http://www.bioilstu.edu>) is searching for a tenure-track **ASSISTANT PROFESSOR** of ecological physiology to start August 16, 2003. The successful candidate will be expected to develop an independent, high-quality, extramurally funded research program in vertebrate ecological/evolutionary physiology with emphasis on the study of whole organisms and to contribute to training of B.S., M.S., and Ph.D. students. Teaching responsibilities will include undergraduate comparative vertebrate anatomy and graduate course(s) in area of expertise. Research using lower vertebrates as a model system is particularly attractive but a record of achievement and a promising research program are more important than the specific research area. Ph.D. required; postdoctoral experience preferred. To assure full consideration, please send applications consisting of curriculum vitae; up to three publications; three recommendation letters; and a brief statement of research goals by November 29, 2002, to: **Craig Gatto, Chair, Physiology Search Committee, Campus Box 4120, Illinois State University, Normal, IL 61790-4120. E-mail: cgatto@ilstu.edu.** Initial review of applications will begin November 29, 2002, and will continue until position is filled. *Illinois State University is an Equal Opportunity University encouraging diversity.*

ASSISTANT/ASSOCIATE PROFESSOR of molecular biology: The Department of Biological Sciences at Michigan Technological University invites applications for a tenure-track position (fall 2003) in molecular biology. The successful applicant must have postdoctoral experience, a demonstrated expertise in the use of current molecular techniques, and will be expected to establish an extramurally funded research program and supervise graduate students. Multiple opportunities for collaboration exist. The position requires a commitment to undergraduate and graduate instruction and research in molecular biology and contributions to the Department's developing bioinformatics program. Applicants should submit curriculum vitae including a statement of research interests and teaching philosophy and three letters of recommendation to: **Chair, Search Committee, Department of Biological Sciences, Michigan Technological University, 1400 Townsend Drive, Houghton, MI 49931. Telephone: 906-487-2025; e-mail: molbiolchair@mtu.edu; website: <http://www.bio.mtu.edu/>.** Review of applications will begin on December 15, 2002, and will continue until the position is filled. *Michigan Technological University is an Equal Opportunity Educational Institution/Equal Opportunity Employer.*

BIOLOGY EDUCATION Indiana State University

The Department of Life Sciences at Indiana State University invites applications for an **ASSISTANT PROFESSOR** in biology with primary teaching duties in introductory biology for majors and non-majors. Applicants must have a Ph.D. and research accomplishments in biology or biology education. Postdoctoral experience is preferred. Successful candidates will be expected to develop an active, externally funded research program including grants for improving science teaching. Send letter of application, curriculum vitae, statement of teaching interests and philosophy, statement of research interests, and no more than three current reprints to: **Dr. George S. Bakken, Search Committee, Department of Life Sciences, Indiana State University, Terre Haute, IN 47809.** Also have three letters of reference sent to the same address. Screening will begin on November 11, 2002, and will continue until the position is filled. For more information, visit website: <http://biology.indstate.edu/dls/positions.html> or direct specific inquiries to e-mail: gbakken@indstate.edu; Telephone: 812-237-2400; FAX: 812-237-4480. *Indiana State University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



ASSISTANT/ASSOCIATE/FULL PROFESSOR Neuropharmacology

The Department of Pharmacology, University of Tennessee Health Science Center (website: <http://www.utmem.edu/pharmacology>), invites applications for a full-time, tenure-track faculty position in the area of neuropharmacology. The Department is well funded and has active research programs in the areas of drug abuse, psychopharmacology, signal transduction, and cardiovascular and cancer pharmacology. Members of the Department faculty also are involved in the teaching of graduate and professional students and participate in the University's centers of excellence including the Center for the Neurobiology of Brain Diseases. The selected candidate will be provided with laboratory space, generous start-up funds, and access to core research facilities and will be expected to maintain an active research program and to contribute to the Department's teaching efforts. Candidates for the position should have an M.D. or Ph.D. in pharmacology or related discipline, postdoctoral experience, and a record of research accomplishments in neuropharmacology. Applications will be reviewed beginning October 30, 2002, but will continue to be accepted until the position is filled. Curriculum vitae, statement of research interests, and three reference letters should be sent to: **James M. O'Donnell, Ph.D., Neuropharmacology Search Committee, Department of Pharmacology, University of Tennessee Health Science Center, 874 Union Avenue, Memphis, TN 38163.** *The University of Tennessee is an Equal Opportunity/Affirmative Action/Title VI/Title IX/Section 504/Americans With Disabilities Act/Age Discrimination in Employment Act Employer.*

MOLECULAR BIOLOGIST

The Department of Surgery at the University of Cincinnati is expanding its research program in the molecular and cellular biology of inflammation in trauma, sepsis, and burn injury. A Molecular Biologist is sought for a position at the rank of **ASSISTANT PROFESSOR**. Applicants must have a Ph.D. or M.D./Ph.D., significant postdoctoral research experience, a strong publication record, and will be expected to establish and maintain a rigorous independent research program. Successful candidates will complement an established group of Investigators working with cellular and whole animal models of inflammation and burn injury. Applicants with research interests in the areas of signal transduction, gene activation, or apoptosis are preferred but individuals demonstrating high-quality research in other areas will be considered.

The Department of Surgery has state-of-the-art laboratory facilities and excellent core and shared equipment facilities. Salary and start-up support is competitive and will depend on qualifications and experience. Applications should include complete curriculum vitae with bibliography; a summary of past, present, and future research interests; and contact information (including e-mail addresses) of at least three references. Please send applications to: **Dr. Alex B. Lentsch, Department of Surgery, University of Cincinnati, 231 Albert Sabin Way, ML 0558, Cincinnati, OH 45267-0558. Telephone: 513-558-5661; FAX: 513-558-3136; e-mail: alex.lentsch@uc.edu.** *The University of Cincinnati is an Affirmative Action/Equal Opportunity Employer. Women and minorities are particularly encouraged to apply.*

Department of Health and Human Services
National Institutes of Health
National Institute on Aging



With nation-wide responsibility for improving the health and well being of all Americans, the DHHS oversees the biomedical research programs of the National Institutes of Health (NIH) and those of NIH's research institutes. The National Institute on Aging (NIA), a major research component of the NIH and the DHHS, is recruiting for a **Biologist** with extensive knowledge and experience in confocal, deconvolution or restoration microscopy to operate and manage a new deconvolution microscope facility. The work will involve interaction with principal investigators in the Laboratory of Genetics and other laboratories within the NIA's Intramural Research Program (IRP) in Baltimore, MD. Applicants should have a broad knowledge of biomedical research and molecular and cellular biological techniques as well as skills in the use of computers for data management, manipulation, and presentation. Applicants also should be well organized, able to set priorities, and interact well with a wide variety of research personnel. Bachelors and/or Master's Degree is desired.

Applications must be submitted to: **National Institute on Aging, Gerontology Research Center, Human Resources Office, Vacancy #NIA-02-041, 5600 Nathan Shock Drive, Room 1D09, Baltimore, MD 21224.** Applications must be postmarked no later than **October 30, 2002.** For application procedures and questions, applicants should call 410-558-8116.

HHS and NIH are Equal Opportunity Employers



ST. JOHN'S UNIVERSITY

The Department of Biological Sciences, St. John's University, seeks a Cell/Molecular Biologist to join our Department at the tenurable assistant professor level. The successful candidate will have demonstrated a strong commitment to undergraduate and graduate teaching, as well as the potential to develop a funded research program. Please send CV, statement of professional goals and 3 letters of reference to:

Nicole Frink
St. John's University
8000 Utopia Parkway
Jamaica, New York 11439

Or via email to: employment@stjohns.edu St. John's University is an Equal Opportunity Employer and encourages applications from women and minorities.

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St. John's University is an Equal Opportunity Employer and encourages applications from women and minorities.

*It's what we do.
It's who we are.*

Employment opportunities in PA

Merck and Co., Inc., is a leading research-driven pharmaceutical products company. Recently ranked among Fortune Magazine's "100 Best Companies to Work for in America", Merck and Co., Inc. discovers, develops, manufactures and markets a broad range of innovative products. We currently have the following positions available in our Department of Safety Assessment at Merck Research Laboratories in **West Point, PA.**

Investigative Toxicologist- Nephrotoxicity/Apoptosis

Job Code: B10000152

As an Investigative Toxicologist at Merck, you will contribute to the design of investigative toxicological studies, implement techniques and develop methodologies within Safety Assessment that are applicable to investigate mechanisms of toxicity, and provide scientific leadership for and supervision of laboratory personnel.

Candidates must possess a Ph.D. in Biochemistry, Pharmacology, Toxicology, or a related field including experience in apoptotic signaling and mechanisms of nephrotoxicity, and a minimum of 2 - 4 years' relevant postdoctoral experience in these areas.

Scientist- Proteomics

Job Code: B10000156

In this role, you will implement techniques and develop methodologies in proteomics within Safety Assessment that are applicable to investigative toxicology studies and provide scientific leadership for and supervision of laboratory personnel.

Candidates must possess a Ph.D. in Biochemistry, Pharmacology, Toxicology (or equivalent) along with demonstrated experience in the area of proteomics, including experience with associated mass spectrometry instrumentation and a minimum of 2 - 4 years' relevant postdoctoral experience.

Scientist- Metabolomics

Job Code: B10000156

The successful candidate will implement techniques and develop methodologies in metabolomics within Safety Assessment that are applicable to investigative toxicology studies and provide scientific leadership for and supervision of laboratory personnel.

Candidates must possess a Ph.D. in Biochemistry, Pharmacology, Toxicology (or equivalent) with demonstrated experience in the area of metabolomics, including experience with associated mass spectrometry instrumentation and a minimum of 2 - 4 years' relevant postdoctoral experience.

Scientist- Toxicokinetics/ Investigative Toxicology

Job Code: B10000144

In this role, you will contribute to toxicokinetic data analysis and reporting of GLP toxicology studies. You will be expected to communicate effectively with compound managers in Safety Assessment on issues related to drug disposition and toxicokinetics in toxicology studies. Additionally, you will be expected to contribute to the department's investigative toxicology programs.

Candidates must possess a Ph.D. (or equivalent) in Biochemistry, Chemistry, Toxicology or a related field with 2 - 4 years' of postdoctoral or pharmaceutical/chemical company experience in pharmacokinetics/toxicokinetics, drug disposition and investigative toxicology.

We offer a competitive salary, an outstanding benefits package and a professional work environment. **To apply please visit: www.merck.com/careers and search for the corresponding job number of the position you are interested in applying for.** We are an Equal Opportunity Employer, M/F/D/V.



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POSITIONS OPEN

TENURE-TRACK POSITIONS Department of Biological Sciences

SOUTHERN METHODIST UNIVERSITY, Dedman College, Dallas, Texas. The Department of Biological Sciences has recently moved into a new 68,000 square foot state-of-the-art facility. As part of the process to expand upon our already strong molecular biology program, two new faculty members have joined our department this year and an additional two to three positions are available for fall 2003. Candidates at the junior (ASSISTANT) or senior (ASSOCIATE or FULL PROFESSOR) levels are invited to apply. Successful candidates must have a strong record of research accomplishments in areas that utilize molecular biology, biochemistry, or cell biology and will be expected to develop vigorous, externally funded research programs. Additionally, successful candidates will have a strong commitment to undergraduate and graduate teaching. For one of the positions, preference will be given to an individual whose research examines components of oxidative stress and free radical biology. Competitive start-up funds and salaries will be offered. Candidates should forward curriculum vitae, a brief statement of research plans, and three letters of recommendation to: **Dr. Larry Ruben, Chair, Department of Biological Sciences, Southern Methodist University, Dallas, TX 75275**. The positions recruited this year begin fall semester 2003. To ensure full consideration for the positions, the applications must be postmarked by December 1, 2002, but the committee will continue to accept applications until the positions are filled. The committee will notify applicants of its employment decisions after the positions are filled. *SMU will not discriminate on the basis of race, color, religion, national origin, sex, age, disability, or veteran status. SMU also is committed to nondiscrimination on the basis of sexual orientation.*

Morehead State University seeks applications for two tenure-track positions at the rank of **ASSISTANT PROFESSOR**. Mammalogy Number 844: Teach mammalogy, herpetology, general zoology, animal natural history, and general biology. Ph.D. in zoology or related field from an accredited institution required. Microbiology Number 849: Teach medical and veterinary microbiology classes as well as general biology classes and upper-level/graduate course in area of specialization. Ph.D. in microbiology or a related field from an accredited institution required. Both positions: Advise biology majors, participate in service activities, and develop a research program involving students. A.B.D.s by August 1, 2003, considered. Excellent communication skills required. Review of applications will begin November 15, 2002, and will continue until positions are filled. To apply, submit letter of application, curriculum vitae, transcripts, teaching philosophy and research interests, and three letters of reference to: **Human Resources, Attention: (Position), MSU, HM 101, Morehead, KY 40351**. To apply online, visit <http://www.moreheadstate.edu/prospects/jobapp.html> and attach the required materials. *Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR Plant Ecology

The Department of Botany at Oklahoma State University (<http://www.okstate.edu/artsci/botany> and <http://ecology.okstate.edu>) seeks an Ecologist for a tenure-track **ASSISTANT PROFESSOR** position. Postdoctoral experience and excellence in teaching are required. Responsibilities include teaching introductory plant biology, general ecology, a graduate seminar, and establishing a productive, externally funded research program. For full consideration, submit curriculum vitae; statements of teaching philosophy and research goals; and names of three references by November 15, 2002, to: **Head, Department of Botany, Oklahoma State University, Stillwater, OK 74078**. E-mail: bjohnso@okstate.edu. Position subject to availability of funding. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

UNIVERSITY OF Nebraska Medical Center FACULTY POSITIONS CANCER RESEARCH

The Eppley Institute for Research in Cancer of the University of Nebraska Medical Center (UNMC) is seeking faculty to conduct research in three general areas. These faculty appointments are tenure track with academic rank based on candidates' qualifications.

(1) Basic cancer research: all areas of molecular, cellular, or structural biology related to cancer. (2) Cancer prevention: molecular, genetics, and/or genomics-based approaches to cancer prevention. (3) Tumor immunology: basic or clinical aspects of tumor immunology.

The Eppley Institute is an academic unit of UNMC and a key component of the UNMC Eppley Cancer Center, an NCI-designated cancer center. Both the Eppley Institute and Cancer Center are in a dynamic growth phase. Applicants should possess a Ph.D., M.D., or other terminal degree and appropriate postdoctoral training. Successful applicants will be expected to develop funded laboratory research programs, collaborate with other faculty, and participate in the pre- and postdoctoral training programs of the Eppley Institute including an NCI-funded cancer research training program and a DOD-funded breast cancer training program.

Applicants should indicate which position they are applying for and forward complete curriculum vitae, a three-page description of research accomplishments and 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 November 1, 2002, and will continue until the positions are filled. See website: <http://www.unmc.edu/Eppley/> for more information. *The University of Nebraska Medical Center is an Equal Opportunity Employer.*

Duke University/Pratt School of Engineering. **FACULTY POSITION** in the Department of Biomedical Engineering. The Pratt School of Engineering of Duke University invites applications for a tenure-track faculty position in the Department of Biomedical Engineering. Rank is open and will depend on the qualifications and experience of the candidate. Applications from candidates with interests in cardiovascular engineering extending from molecular cardiology to clinical applications are of particular interest. Candidates must have a Doctorate in biomedical engineering or a related field of science or engineering and an outstanding record of accomplishment. The successful candidate will be expected to develop an active, externally funded research program; initiate collaborative research with other faculty at Duke University and the Medical Center; and have a strong commitment to teaching at the undergraduate and graduate levels. The Pratt School of Engineering is currently undergoing a period of significant growth in faculty and physical resources. The 320,000-square-foot Center for Interdisciplinary Engineering, Medicine, and Applied Science will open in 2004, providing additional new research space for the School and Department. The Center will also house an engineering-medicine partnership space, which will provide new opportunities for translational research in biomedical engineering. Applicants should submit curriculum vitae (with address, telephone number, and e-mail address); statements of research and teaching interests; and names, addresses, telephone numbers, and e-mail addresses of three references to: **Chair, Faculty Search Committee, Department of Biomedical Engineering, Duke University, 136 Hudson Hall, Campus Box 90281, Durham, NC 27708-0281**. Applications must be received by December 15, 2002, to be given full consideration. *Duke University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOLOGY Theoretical Ecology

The Department of Biology of the College of Staten Island of The City University of New York seeks candidates for an anticipated tenure-track position in theoretical ecology as an Assistant or Associate Professor beginning September 2003. Required: Ph.D., a demonstrated commitment to research, college teaching experience, and experience in curriculum development. Postdoctoral experience and grant activity preferred. Responsibilities include teaching undergraduate and graduate courses; using simulation or analytical models to study the dynamics of ecological systems; development of a vigorous, externally funded research program; performing department and college service; and engagement in an active and productive research agenda. The ability to collaborate with department members interested in spatially explicit models, plant ecology, and ecosystems dynamics a plus. The successful candidate will present credentials appropriate for appointment to the Doctoral faculty of the CUNY Graduate School. Salary range: Assistant Professor, \$47,331 to \$61,111; Associate Professor, \$49,376 to \$73,028 commensurate with qualifications. Appointment at the Associate Professor level will require external funding. Review of applications will begin on December 1, 2002, and continue until the position is filled. Send letter of application; curriculum vitae; and the names, addresses, and telephone numbers of three references to: **Professor Jacqueline LeBlanc, Chair, Theoretical Ecology Search Committee, Department of Biology, College of Staten Island/CUNY, 2800 Victory Boulevard, Staten Island, NY 10314**. *Equal Employment Opportunity/Affirmative Action/Americans With Disabilities Act Employer.*

DEVELOPMENTAL BIOLOGY

The Department of Zoology is seeking to fill a tenure-track **ASSISTANT PROFESSOR** position in the area of developmental biology. The successful applicant will be expected to maintain an active research program, seek extramural funding, supervise student research, participate in teaching graduate and undergraduate courses, and perform service to the University and profession. The Department has state-of-the-art facilities for using molecular, cellular, and whole organism techniques and offers competitive start-up funds. The Department has 35 faculty, over 50 Ph.D./M.S. students, and approximately 1,000 majors ([website: http://zoology.muohio.edu/](http://zoology.muohio.edu/)). Miami University (enrollment 21,000) is rated nationally as a highly selective public university. Send letter of application, curriculum vitae, statement of teaching and research interests, and three letters of recommendation to: **Dr. Douglas Meikle, Chair, Department of Zoology, Miami University, Oxford, OH 45056**. Review of applications will begin on 1 December 2002 and continue until the position is filled. Ph.D. required. Position available August 2003. Telephone: 513-529-3100; e-mail: meikled@muohio.edu for more information. *Miami University offers Equal Opportunity in Employment and Education.*

FACULTY POSITION IN VIROLOGY

The Department of Molecular Genetics and Microbiology at Duke University Medical Center is seeking to recruit a tenure-track **ASSISTANT PROFESSOR** or possibly a more senior individual for a faculty position in the Center for Virology. We are particularly interested in Researchers active in the area of viral pathogenesis or oncogenesis. The facilities and support available are outstanding. Applications should include curriculum vitae, description of research accomplishments and future plans, representative publications, and three letters of recommendation. Address applications to: **Bryan R. Cullen, Virology Search Committee, Department of Molecular Genetics and Microbiology, Box 3025, 426 CARL Building, Research Drive, Duke University Medical Center, Durham, NC 27710**. *Duke University Medical Center is an Equal Opportunity Employer. Women and minority candidates are strongly encouraged to apply.*

School of Optometry Faculty Positions Available

Tenure track positions available in the School of Optometry's research & teaching programs at the University of Missouri-St. Louis. Earned doctorate or equivalent required; post-doctoral and/or residency training highly desirable. Salary/rank/tenure commensurate with experience, achievements and qualifications.

Requires demonstrated excellence in research & external funding record. Research set-up funds available. Teaching areas: etiology/management of refractive error, children's vision & literacy, pharmacology, pathology, neurological disorders, visual rehabilitation & development.

The School of Optometry offers a 4-year professional OD program, MS & PhD graduate programs, post-professional residency programs (<http://www.umsl.edu/~optometry>).

UM-St. Louis is a public, metropolitan land-grant institution committed to basic and applied research, teaching and service, and is the largest university in the region (www.umsl.edu).

Positions remain open until filled. Send curriculum vita, statement of research & teaching interests, names/addresses of three professional references to: Maria Taylor, UM-St. Louis, School of Optometry, 8001 Natural Bridge Road, St. Louis, MO 63121 (314) 516-5616.

UM-St. Louis is an equal opportunity employer dedicated to the pursuit of excellence through diversity.



ASSISTANT PROFESSOR—BIOLOGY

Duquesne University is seeking an assistant professor, tenure track, who uses molecular, cellular, or organismal approaches to explore basic physiological questions. The successful applicant is expected to establish a vigorous research program involving MS, PhD, and undergraduate students, and to teach in the biology curriculum, including a course in vertebrate physiology. We are an interactive faculty, committed to combining externally funded research with excellence in teaching. We investigate problems in a diverse range of systems and we seek individuals who complement and extend these interests. Competitive salary and start-up packages are available. Additional information about the Department can be found at: <http://www.science.duq.edu/biology>.

To apply, send a cover letter, CV, names and contact information of three references, and statements of research and teaching goals to:

Dr. Steve Thomas
Faculty Search Committee Chair
Department of Biological Sciences
Duquesne University
Pittsburgh, PA 15282

Review of applications will begin December 2, 2002.

Founded by the Holy Ghost Fathers in 1878, Duquesne University is Catholic in mission and ecumenical in spirit. The University values equality of opportunity both as an educational institution and as an employer.

UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

DEPARTMENT OF MOLECULAR GENETICS AND MICROBIOLOGY

► Bacterial Pathogenesis - Faculty Position

The Department of Molecular Genetics and Microbiology invites applications for a tenured or tenure-track faculty position in the field of bacterial pathogenesis. An outstanding record of achievement in research is expected, as is a commitment to excellence in teaching.

The University of Massachusetts Medical School (<http://www.umassmed.edu/>) is experiencing rapid growth in all academic programs and is in the midst of a five-year expansion that will add more than 100 new research faculty members. Superb resources, a generous start-up package, and recently renovated space will be provided to the successful candidate. A joint clinical appointment in infectious diseases or a related discipline is possible for individuals with clinical training.

Applications should include a Curriculum Vitae, a brief statement of research accomplishments and interests, reprints of selected publications (not to exceed three), and the names, email address and telephone numbers of three individuals whom the applicant has asked to send letters of reference.

Send application to: Dr. John Leong, Department of Molecular Genetics and Microbiology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655-0122. Please reference Job Code SM-000 when applying.



University of Massachusetts Medical School is an Equal Opportunity/Affirmative Action Employer.

Supervisory Horticulturalist Supervisory Geneticist (Plants) Supervisory Plant Pathologist

The United States Department of Agriculture, Agriculture Research Service (ARS) is seeking a Scientist and Research Leader for a position at the Plant Genetic Resources Unit (PGRU), located at the Geneva Campus of Cornell University, in Geneva, NY. The PGRU is a component of the National Plant Germplasm System (NPGS), which is responsible for the conservation of germplasm of crop plants and their wild and weedy relatives. The Unit serves as the Northeast Regional Plant Introduction Station and as the National Germplasm Repository for Apple, Grape, and Tart Cherry and is the only unit in the NPGS encompassing both functions.

The candidate will be responsible for directing all service and research activities associated with the mission of the PGRU and has full responsibility for conducting service and research functions of the Unit. The position also requires establishing and maintaining effective working relationships with other ARS research locations and with appropriate departments within the Cornell University and other institutions to efficiently accomplish the Unit's mission.

Applicants must meet mandatory qualifications as specified in the vacancy announcement. Annual salary is commensurate with relevant experience, starting at \$76,271 to \$99,150 per annum. This is a competitive, permanent appointment, and U.S. citizenship is required. Applications must be marked ARS-X2E-2568. For specific information about this vacancy, please contact Bonnie Breeden at 301-504-1341. To obtain additional information and application forms, visit our web site at <http://www.afm.ars.usda.gov/divisions/hrd/index.html>. Applications must be postmarked by November 15, 2002.

*The USDA is an Equal Opportunity Employer.
Women and Minorities are encouraged to apply.*

POSITIONS OPEN

FACULTY POSITION Plant Cell Biologist

The Department of Biological Sciences at Western Michigan University seeks applications for a tenure-track **ASSISTANT PROFESSOR** position with expertise in plant cell biology beginning fall 2003 pending budgetary approval. Those with experience in using molecular techniques to investigate developmental aspects of plant biology are particularly encouraged to apply. A Ph.D. and at least two years of relevant postdoctoral training are required. The successful candidate will be expected to participate in the teaching of undergraduate and graduate students, establish an extramurally funded program investigating a topic in plant cell biology, and serve on Departmental and University committees. Western Michigan University has new research facilities and a strong commitment to research excellence in the life sciences. Information about the Department of Biological Sciences and existing research areas is available at **website: <http://www.wmich.edu/bios>**. With a growing graduate program, the Department offers a unique opportunity for individuals seeking a balanced research and teaching career.

Applicants should submit a letter of application, curriculum vitae, statement of research and teaching philosophy, and three letters of reference to: **Dr. Bruce Bejcek, Chair, Plant Cell Biologist Search Committee, Department of Biological Sciences, 3929 Wood Hall, Western Michigan University, Kalamazoo, MI 49008-5410**. Review of applicants will begin November 15, 2002, and will continue until the position is filled.

Western Michigan University, a student-centered research university, is an Equal Opportunity/Affirmative Action Employer and encourages applications from underrepresented groups.

FACULTY POSITION HIV Research

The University of Pennsylvania Center for AIDS Research (CFAR) invites applications for a tenure-track faculty position in HIV/AIDS research. Faculty appointment will be **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** in an appropriate department in the School of Medicine. Rank will be commensurate with experience. We seek outstanding candidates to develop independent research programs in patient-based laboratory research, targeting the areas of cellular immunology, developmental therapeutics, and/or other types of translational research. The Penn CFAR has an outstanding clinical population for such studies as well as strong cores in clinical, virology, molecular, immunology, and other support areas. The University of Pennsylvania has a broad base of AIDS Investigators with vigorous programs in virology, pathogenesis, and immunology; an active ACTU; and a broad range of graduate programs. Brand-new laboratory space is adjacent to a large group of established HIV Investigators. Please send a cover letter, curriculum vitae, and two-page research summary to: **Dr. Ron Collman, CFAR Search Committee, 22 Johnson Pavilion, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-6060**. E-mail: collmanr@mail.med.upenn.edu.

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

The University of Texas at Austin (UT) is seeking to add tenure-track **ASSISTANT PROFESSORS** in bionanoscience and in nanoscale functional materials and devices starting September 1, 2003, in any appropriate departments in UT's College of Natural Science. Visit **website: <http://www.cm.utexas.edu/CNM/>** for information. Applications received after November 15, 2002, may not receive full consideration. Candidates should forward curriculum vitae, short description of research plans, a statement of teaching philosophy, and three letters of reference to: **Search Committee, CNM, Welch Hall, The University of Texas at Austin, Austin, TX 78712**. **Website: <http://www.utexas.edu>**. *Equal Employment Opportunity/Affirmative Action.*

POSITIONS OPEN



FACULTY POSITIONS Cardiovascular Research Stanford University School of Medicine

Positions are available for tenure-track faculty at the **ASSISTANT** and/or **ASSOCIATE PROFESSOR** levels in the Division of Cardiovascular Medicine at Stanford University for individuals holding M.D. or M.D./Ph.D. degrees. Individuals recruited into these positions will be expected to develop a superlative research program investigating the genetic, molecular, and cellular basis of cardiovascular development, function, or disease. Scientific interest should be in molecules within fundamental signaling pathways that regulate cell growth, differentiation, physiological adaptation, and aging in the cardiovascular system. Successful applicants will take advantage of a growing genetics and genomics infrastructure in the Donald W. Reynolds Cardiovascular Clinical Research Center and the rich research environment of Stanford and San Francisco Bay, California, area. Send curriculum vitae to: **Marcia Gibbs, Faculty Affairs, Cardiovascular Medicine, Stanford University School of Medicine, Falk CVRC 275, 300 Pasteur Drive, Stanford, CA 94305-5406**. *Stanford University is committed to increasing representation of women and minority groups on its faculty and particularly encourages applications from such candidates.*

TENURE-TRACK POSITION Magnetic Resonance

The Department of Radiology at the University of Pennsylvania's School of Medicine seeks candidates for an **ASSISTANT PROFESSOR** position in the tenure track. The successful applicant will have worked in the field of magnetic resonance. Responsibilities include developing imaging and spectroscopic techniques using multinuclear MRI methods. Applicants must have a Ph.D. degree and have demonstrated excellent qualifications in education and research. Degree in biophysics preferred and a minimum of three years of research and teaching in MRI. Experience in the following areas is desired: musculoskeletal and neuroimaging methods, sodium and spin-lock MR techniques, conducting MRI-based clinical trials, and imaging of animals at high-field scanners. Must have demonstrated ability to design MR hardware; write pulse programs in GE's EPIC, Varian, and Siemens platforms; and possess an in-depth knowledge of IDL, C, and C++ programming language.

Please submit curriculum vitae, letter of interest, and three reference letters to: **Susan Colleluori, Associate Director, Metabolic Magnetic Resonance Research and Computing Center, Department of Radiology, University of Pennsylvania, B1 Stellar-Chance Laboratories, 422 Curie Boulevard, Philadelphia, PA 19104-6100**.

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

TENURE-TRACK FACULTY POSITION Microbiology

The Department of Biology of the University of Puerto Rico at Rio Piedras invites applications for a tenure-track position in microbiology with special emphasis in microbial evolution, ecology, physiology, or genetics. The candidate is expected to develop an active research program and to teach at the graduate and undergraduate levels. Candidates must hold a Ph.D. or equivalent and have postdoctoral experience. Interested candidates should send résumé; a statement of current and future research and teaching goals; representative publications; and three letters of reference to: **Dr. Alberto M. Sabat, Box 23360, UPR Station, San Juan, PR 00931-3360** or e-mail: asabat@upr.edu. Applications will be reviewed from November 15, 2002, until the position is filled. *University of Puerto Rico is an Equal Opportunity Employer.*

POSITIONS OPEN

AN EXCITING OPPORTUNITY for Juvenile Diabetes Research

The Steele Memorial Children's Research Center at the University of Arizona seeks candidates for **ASSISTANT/ASSOCIATE PROFESSOR** or **PROFESSOR** (open rank) for the Elissa D. Eller Endowed Chair in Juvenile Diabetes and for the Section Head in Pediatric Endocrinology. In addition to the Chair, which is endowed at \$2 million, other resources include the newly constructed Angel Wing for Children with Diabetes featuring 1,400 square feet of state-of-the-art wet laboratories; a 300-square-foot clinical research laboratory; and patient care facilities. A generous start-up package and ongoing support for personnel are available. The successful candidate will lead the diabetes research program. Researchers who are interested in carrying a part-time clinical load are especially encouraged to apply.

Please see **website: <http://www.hr.arizona.edu>** for details on this position. Reference Job Number 992534 and send cover letter, curriculum vitae, a description of research goals, and the names and contact information for three references to:

**Head, Department of Pediatrics
c/o Jeannie Kuykendall
University of Arizona College of Medicine
1501 North Campbell
P.O. Box 245073
Tucson, AZ 85724-5073**

Review of application materials begins on October 25, 2002, and will continue until position is filled. *The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer; Minorities/Women/Disabled/Veterans.*

FACULTY POSITION IN BACTERIOLOGY New York University School of Medicine Department of Microbiology

The Department of Microbiology is seeking candidates for tenure-track faculty positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Applicants in the field of prokaryotic and molecular biology, bacterial pathogenesis, and persistence are particularly encouraged to apply. Our department represents a range of research strengths including mechanisms of viral and bacterial pathogenesis, host cell defense mechanisms, microbial and molecular genetics, and pathogenesis of prion particles, oncogenesis, signal transduction by growth factors and cytokines, and regulation of gene expression at the transcriptional and translational level. Recruitment is part of a schoolwide plan for development of an infectious diseases program that will complement our existing strengths in these areas. Applications should include curriculum vitae, a statement of research interests, reprints and preprints, and three letters of reference to be forwarded separately. Send applications to:

**Department of Microbiology Search Committee
Attention: Dr. Robert J. Schneider
New York University School of Medicine
550 First Avenue
New York, NY 10016
Telephone: 212-263-5341**

Application deadline: December 31, 2002. *New York University School of Medicine is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITIONS AVAILABLE at Fox Chase Cancer Center for a tenure- or tenure-track appointment in the Basic Science Division. Ph.D. or M.D. degree required. The successful applicant will receive a generous start-up package to develop a vigorous, extramurally funded research program. The research should complement and expand our current interests in mechanisms of gene regulation, cell division, and development. To apply, please send curriculum vitae, description of research plans, and three letters of recommendation to: **Dr. Anna Marie Skalka, Senior Vice President, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111**. See **website: <http://www.fccc.edu/cdb>**. *Equal Opportunity Employer.*

Postdoctoral Fellow

Two postdoctoral fellow positions are available immediately in the Laboratory of Biochemistry and Molecular Pharmacology at Memorial Sloan-Kettering Cancer Center (MSKCC) to study regulated intramembrane proteolysis, signal transduction and drug target identification using combined approaches of biochemistry, chemistry, molecular biology and cell biology.

Please send curriculum vitae, brief description of previous training, selected reprints and names of three references to: **Dr. Yueming Li, Molecular Pharmacology and Chemistry Program, MSKCC, 1275 York Avenue, RRL-617A, Box 459, New York, NY 10021** or email: liy2@mskcc.org. EOE/AA



Memorial Sloan-Kettering Cancer Center

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Department of Health and Human Services National Institutes of Health National Cancer Institute Laboratory Chief, Regulation of Cell Growth Laboratory

The Center for Cancer Research (CCR) of the National Cancer Institute (NCI) is the world's largest Center dedicated to basic, translational, and clinical aspects of cancer research. The Regulation of Cell Growth Laboratory (RCGL), a department within the CCR, is located at the Frederick, Maryland campus at Ft. Detrick. This highly collaborative scientific community includes other groups with a variety of interests in cell biology, genetics, immunology, development and structural biology.

The RCGL is now recruiting for the position of Laboratory Chief. The RCGL includes both tenured and tenure track scientists with expertise in a wide variety of areas related to regulation of basic cellular processes. RCGL investigators employ a number of different model systems and have a focus on identification and characterization of molecular targets in cancer. The Frederick campus features easy access to state-of-the-art NCI cores in areas such as mass spectroscopy, imaging, protein production and analysis, gene expression, and proteomics, as well as the potential for collaborative relations with the newly formed CCR Molecular Targets Development Program. There are close ties to the Bethesda, Maryland campus of NIH including meetings of CCR faculties, and advanced facilities for videoconferencing between campuses. There are extensive opportunities for collaboration within and outside of the NCI community.

The position of Laboratory Chief is a tenured position at the National Institutes of Health. A fully equipped, recently renovated laboratory will be provided, and there is potential for recruitment of additional tenure track scientists. Total annual compensation will be commensurate with experience, accomplishments, and education. Internationally recognized experts in basic cancer research, who would also like the opportunity to play a leadership role in applying fundamental scientific findings to disease and in mentoring of junior scientists in this dynamic atmosphere, are encouraged to apply for this Laboratory Chief position. Candidates should submit a description of research interests, curriculum vitae, bibliography, and 3 or more references to **Ms. Tanya Sappington, Administrative Officer, NCI-Frederick, Building 578, Room 14, Frederick, MD 21702**.

The Search Committee will begin reviewing completed applications after December 9, 2002. For consideration, all applications must be postmarked by December 2, 2002. Applications may also be faxed to (301) 846-6053. If you need additional information, please call **Ms. Tanya Sappington, Search Committee Executive Secretary**, at (301) 846-1072, or go to <http://ccr.cancer.gov/labs/regulation/>.



HHS and NIH are Equal Opportunity Employers



UMDNJ-
ROBERT WOOD JOHNSON
MEDICAL SCHOOL

POSTDOCTORAL OPPORTUNITY

The Department of Pharmacology is offering a Postdoctoral position to study a new class of protein kinases and their role in cell signaling and regulation of gene expression. Experience in molecular biology is required. For further information about this exciting opportunity, please visit <http://lifesci.rutgers.edu/~molbiosci/professors/ryazanov/html>.

Please send curriculum vitae and the names of three references to:
Professor A.G. Ryazanov, UMDNJ-Robert Wood Johnson Medical School, Dept. of Pharmacology, 675 Hoes Lane, Piscataway, NJ 08854. You may also e-mail to ryazanag@umdnj.edu. UMDNJ is an AA/EO Employer, M/F/D/V.



ROBERT WOOD JOHNSON MEDICAL SCHOOL
University of Medicine & Dentistry of New Jersey



Laurentian
UNIVERSITY-UNIVERSITE
Laurentienne

Laurentian University is a bilingual institution in Sudbury, Ontario, Canada, which offers a wide variety of programs at the undergraduate and graduate level. The University through the Faculty of Graduate Studies is seeking to fill a Canada Research Chair (Tier II) position which has been granted due to its previous success in attracting highly competitive research grants from the Canadian Institutes of Health Research (CIHR). The individual will have an excellent track record for research in the biomolecular sciences and will be expected to participate in a new Ph.D. program in Biomolecular Science currently being fashioned by the University for approval with the Ontario Council on Graduate Studies. Laurentian University is now accepting applications for a tenure-track appointment as

Canada Research Chair (Tier II) in Biomolecular Science

The successful applicant must be eligible for CIHR funding and will direct an independent research program in the biomolecular sciences, particularly in the areas of cellular signal transduction, apoptosis, cell cycle regulation, pharmacology, cancer research, molecular physiology, protein structure, proteomics, or functional genomics. The individual will be based in the newly established R. Samuel McLaughlin Cancer Research Laboratory at the University and will have the opportunity to interact with members of the highly successful Tumour Biology Research program at the Northeastern Ontario Regional Cancer Centre. As stipulated by the Canada Research Chair program, the successful candidate will be granted a reduced teaching load to help accelerate his or her research progress. The Chair will be expected to acquire external research support from national and/or international granting agencies and must have a Ph.D. degree with at least two years of postdoctoral experience. Bilingualism (English/French) is an asset. The successful candidate's appointment is conditional upon acceptance from the CRC Secretariat.

Applicants should submit a curriculum vitae, a summary of research experience, and a brief description of research plans. These materials and three letters of recommendation should be sent before October 31, 2002 to: **Dr. Rizwan Haq, Dean, Faculty of Science and Engineering, Laurentian University, 935 Ramsey Lake, Sudbury, Ontario, Canada, P3E 2C6.** Email: rhaq@nickel.laurentian.ca

Laurentian University is a bilingual institution and an equal opportunity employer. The University is committed to equity in employment and encourages applications from all qualified applicants including women, aboriginal peoples, members of visible minorities, and persons with disabilities. Applications will be accepted from all qualified candidates, but in accordance with Canadian immigration requirements, preference in the first instance will be given to Canadian citizens and permanent residents.

POSITIONS OPEN

TWO BIOLOGY FACULTY POSITIONS Bioinformatics and Cell Biology

Furman University invites applications for two tenure-track positions in biology at the **ASSISTANT PROFESSOR** level to begin in September 2003.

(1) We seek a Biologist with training and experience in bioinformatics to develop a teaching program in collaboration with our Computer Science Department and a three-university consortium. A recently announced external grant will support this initiative including construction of two computer laboratories, significant start-up funds, and funding for a multiyear undergraduate summer research program that the successful candidate will direct. Teaching responsibilities include bioinformatics, introductory biology, and other courses in the candidate's area of expertise.

(2) We also seek a broadly trained Cell Biologist whose teaching responsibilities will include cell biology, introductory biology, and an upper-level course in his/her specialty. The successful candidate will be expected to maintain the Department's shared cell-culture facility and include undergraduate students in an active research program that utilizes cell culture.

Candidates must have the Ph.D. and evidence of interest and excellence in teaching. Furman is a selective, independent liberal arts college of 2,600 students with a strong emphasis on engaged learning and undergraduate research. For further information, see the website: <http://alpha.furman.edu/academics/dept/biology/jobs/>. Submit curriculum vitae, statement of teaching credentials and philosophy, description of research interests, unofficial transcripts, and names and addresses (including e-mail) of three references to: **Search Committee, Department of Biology, Furman University, 3300 Poinsett Highway, Greenville, SC 29613**. Review of applications begins on October 28, 2002, and continues until the positions are filled.

The University and the Department have a strong commitment to achieving diversity among faculty and staff. We strongly encourage women and people from diverse racial, ethnic, and cultural backgrounds to apply. Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION Experimental Condensed Matter Physics

The Department of Physics and Astronomy at Dartmouth College invites applications for a tenure-track position in condensed matter physics at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. The successful candidate will be expected to establish a vigorous research program complementing research efforts in any of the areas of nanostructures, molecular materials, quantum information science, laser spectroscopy and imaging, and biophysics, balanced with a commitment to teaching at the graduate and undergraduate levels. Potential interactions with faculty in other departments including engineering, chemistry, and biology will be viewed favorably.

Applicants should submit curriculum vitae, including a full list of publications, statements of research and teaching interests, and a list of at least four references to the following address: **Faculty Search, Department of Physics and Astronomy, Dartmouth College, 6127 Wilder Laboratory, Hanover, NH 03755-3528 U.S.A.**

For full consideration, applications should arrive by December 1, 2002. *Dartmouth College is an Equal Opportunity/Affirmative Action Employer. We encourage applications from women and minority scientists.*

RESEARCH ASSISTANT PROFESSOR to participate in NIH-funded program to study pulmonary immune responses to aerosolized vaccines with emphasis on tuberculosis. Requires a Ph.D. in pharmaceutical sciences. Experience in the preparation of aerosol microparticles, their characterization and disposition, understanding of physical pharmacy, lung deposition, clearance, local pulmonary immunity, and toxicity required. Submit curriculum vitae and three references to: **Dr. Hickey, University of North Carolina-Pharmacy, CB7360 Beard Hall, Chapel Hill, NC 27599**. *University of North Carolina is an Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.*

POSITIONS OPEN

ASSISTANT SCIENTIST University of Wisconsin-Madison

Postdoctoral experience required for a Ph.D.-level position of Assistant Scientist in the Department of Surgery, Division of Cardiothoracic Surgery. The successful applicant will have experience in cellular and molecular immunology. A background in immunogenetics is preferred. The **RESEARCH SCIENTIST** is a non-tenure-track position with a five-year rolling horizon and start-up package and should be considered as academic-level **RESEARCH ASSISTANT PROFESSOR**. The applicant will join a research team headed by **Dr. Robert Love**, Director of Lung Transplant Program, University of Wisconsin-Madison, and **Dr. Will Burlingham**, Associate Professor of Surgery, Division of Transplantation. The incumbent will be expected to manage a research laboratory with a focus on autoimmunity and transplantation biology. The project involves the identification of immunogenetic mechanisms controlling autoimmunity to collagen V in patients after lung transplantation with an emphasis on developing animal models to address the issues of patient care and tolerance induction strategies. The applicant will write papers and submit grant proposals as well as direct a research laboratory. Must be eligible to apply for NIH funding. To apply, send or FAX résumé to: **Lisa Schwarze, Department of Surgery, 600 Highland Avenue, Room H4/717, Madison, WI 53792-7375. FAX: 608-262-0430.**

ASSISTANT PROFESSOR Microbial Pathogenesis/Immunopathogenesis

The Department of Biological Sciences at Louisiana State University (LSU) invites applications for a tenure-track Assistant Professor position in microbial pathogenesis or immunopathogenesis; available August 2003. Areas of interest include but are not limited to molecular mechanisms of pathogenesis utilized by microorganisms affecting any nonmammalian or mammalian system and/or the host immune responses to microbial pathogens. The Department has links with the LSU Agricultural Center, the School of Veterinary Medicine, and the Pennington Biomedical Research Center. A Ph.D. or equivalent degree in a biological science or related field and postdoctoral experience are required. The successful candidate will be expected to develop a strong, extramurally funded research program and contribute to teaching at the graduate and undergraduate levels. Review of applications will begin December 2, 2002, and will continue until a suitable candidate is identified. Send curriculum vitae, a two-to-three-page statement of research and teaching interests, three letters of recommendation, and no more than three representative publications to: **Microbial Pathogenesis/Immunopathogenesis Search, c/o Dr. Gregg S. Pettis, Department of Biological Sciences, Louisiana State University, Baton Rouge, LA 70803 U.S.A.** Reference Log Number 0369. Additional information about the Department is available at website: <http://www.biology.lsu.edu>. *LSU is an Equal Opportunity/Equal Access Employer.*

TENURE-TRACK POSITIONS Biochemistry and Physical Chemistry

Applications are invited for two tenure-track positions in the Department of Chemistry at Florida International University (FIU) in the areas of biochemistry and physical chemistry with appointments starting in fall 2003. A Ph.D. and postdoctoral experience are required. Candidates will be expected to establish an active, externally funded research program directing Ph.D., M.S., and undergraduate students. FIU is a public Research Extensive University with over 34,000 students and is located in west suburban Miami. Please see website: <http://www.fiu.edu/orgs/chemistry> for more details. Send curriculum vitae, transcripts, research plans, and three letters of reference to: **Search Committee (specify Biochemistry or Physical Chemistry), Department of Chemistry, FIU, Miami, FL 33199**. Selection process will begin December 2, 2002. *FIU is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

TWO FACULTY POSITIONS Ecology and Human Biology

Tenure-track positions are available at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in two areas. Teaching responsibilities for the Ecologist will include general ecology, biometry, contribution to the lower-division curriculum, and an upper-division or graduate course in advanced ecology. Preference will be given to Aquatic Ecologists working at the community or ecosystem level who have a strong quantitative background. Teaching responsibilities for the Human Biologist will include a two-semester course in human anatomy and physiology; a course in pathophysiology, pharmacology, or histology; and possibly another course in the candidate's area of interest. We are particularly interested in applicants with expertise in biomechanics, pathology, physiology, pharmacology, or toxicology. A Ph.D. and an active research program are expected for both positions. Start-up assistance and a lowered initial teaching load will be provided.

The University of Central Arkansas, a regional comprehensive university of about 9,000 students, has undergone about \$150 million in new construction over the past decade. Our 23 full-time biology faculty serve over 500 majors and about 20 graduate students. The Department occupies about 50,000 square feet within Lewis Science Center and we maintain an extensive equipment inventory. Conway is a prosperous city of 45,000 which hosts two other colleges and is an easy drive from both Little Rock and pristine wild areas such as the Buffalo National River and Ozark Mountains. For further information, visit website: <http://www.uca.edu/biology/>.

To apply, submit curriculum vitae, statements of teaching philosophy and research plans, three letters of reference, and a copy of graduate transcripts to: **Dr. Paul Hamilton, Department of Biology, University of Central Arkansas, Conway, AR 72035**. Application review will begin November 20, 2002, and continue until the position is filled. *An Equal Opportunity/Affirmative Action Employer.*

Beloit College seeks applications for a tenure-track position as **ASSISTANT PROFESSOR** of chemistry; Ph.D. required. Teaching includes biochemistry and participation in organic and general chemistry, and in all-college programs. The person we seek will add to the extensive and effective collaboration that exists between the Biology and Chemistry Departments and will be expected to develop an active undergraduate research program at the interface between biology and chemistry. The Department is American Chemical Society-approved in chemistry and in biochemistry. Beloit College is recognized as one of the "Science 50" group of leading liberal arts colleges. Send curriculum vitae, undergraduate and graduate transcripts, a statement of teaching and research interests, and three letters of reference to: **Professor George Lisensky, Department of Chemistry, Beloit College, 700 College Street, Beloit, WI 53511**. Review of applicants will begin November 1, 2002, and continue until the position is filled. *Beloit College is committed to cultural and ethnic diversity and urges all interested individuals to apply. Affirmative Action/Equal Employment Opportunity Employer.*

The University of Washington's Department of Bioengineering invites applications for a new **TENURE-TRACK FACULTY** position. Applicants are sought throughout the Department's research programs in biomaterials, tissue engineering, nanotechnology, medical imaging, drug delivery, molecular bioengineering, BioMEMs, and computational bioengineering (website: <http://depts.washington.edu/bioe>). Applications in other areas representing future opportunities are also encouraged. Applicants should include curriculum vitae, a proposed research program, and contact information for five references to: **Professor Patrick Stayton, c/o Heather White, Department of Bioengineering, Box 357962, University of Washington, Seattle, WA 98195**. *The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University of Washington is an Equal Opportunity/Affirmative Action Employer.*



Faculty Positions Department of Biological Sciences

The Department of Biological Sciences at Dartmouth seeks applicants for two tenure track positions, open at any level. One position is in the broadly defined area of Biochemistry/Cell Biology. The second position is in the area of Cellular/Molecular Plant Biology. The successful candidates will be expected to supervise independent research programs that will attract extramural funding and provide research training for graduate and undergraduate students. The candidates will join a group of faculty whose research involves cellular, biochemical and genetic approaches to studying problems in a number of model systems. Candidates should expect to participate in teaching at the undergraduate and graduate levels. Send a current curriculum vitae, statements of research and teaching interests, a list of referees (including FAX numbers and e-mail addresses), and arrange to have at least three letters of reference sent under separate cover to:

**Cell/Molecular Search Committee
Department of Biological Sciences
Dartmouth College
Hanover, NH 03755-3576**

A separate application for each position is not necessary. Although materials can be submitted by FAX (603-646-1347), note that the original documents are ultimately required. Application review will begin on October 15, 2002 and continue until the positions are filled. For further information about the department and graduate program, see <http://www.dartmouth.edu/~biology/>.

Women and members of minority groups are strongly encouraged to apply. Dartmouth College is an Equal Opportunity/Affirmative Action Employer.

University of California, Santa Barbara

Five Faculty Positions at Junior and Senior Levels Molecular, Cellular, and Developmental Biology Department

The Department of Molecular, Cellular, and Developmental Biology at the University of California, Santa Barbara, is undergoing a major expansion including construction of additional research facilities in a new building. We are currently accepting applications for five tenure-track faculty positions in areas that complement and strengthen existing research programs. We seek highly interactive candidates with outstanding research credentials who are applying molecular, genetic, and cell biological approaches to fundamental problems in neurobiology, microbiology, and developmental biology. Two tenure-track Assistant Professor positions are in the area of molecular biology broadly defined, and a third junior position that is shared with the Biomolecular Sciences and Engineering Program is in the area of functional genomics. One senior position is for a newly established endowed chair in the area of biochemistry and molecular biology, and the other senior position is in the area of neurosciences. These two senior positions will be filled at a rank commensurate with the qualifications and seniority of the candidate. Successful candidates will be expected to lead vigorous research programs and to participate effectively in instructional activities. A Ph.D. or equivalent degree and postdoctoral experience are required.

Submit curriculum vitae, selected reprints, and a brief research plan and arrange to have three letters of reference sent to: **Faculty Search Committee, Department of Molecular, Cellular, and Developmental Biology, University of California, Santa Barbara, CA 93106**. Review of applications will begin on November 15, 2002, and will continue until the positions are filled.

<http://www.lifesci.ucsb.edu/mcdb/departments/employment/employment.php#faculty>

UCSB is an Equal Opportunity Affirmative Action Employer.

SECTION HEAD ANTARCTIC SCIENCES NATIONAL SCIENCE FOUNDATION ARLINGTON, VA 22230

NSF's Office of Polar Programs (OPP) seeks qualified candidates for the position of Section Head, Antarctic Sciences. The incumbent coordinates and supervises the work of science Program Managers in the fields of atmospheric science, glaciology, aeronomy, astrophysics, ocean and climate systems, geology and geophysics, and biology and medicine, and also organizes multidisciplinary research programs. The incumbent reports to the Director, OPP, guides the Section in formulating and implementing its research objectives and manages its administrative, fiscal and personnel aspects.

Appointment to this Senior Executive Service position may be on a career or 2- to 3-year limited term basis, with a salary of \$125,972 to \$138,200. Alternatively, the incumbent may be assigned under the Intergovernmental Personnel Act provisions.

The announcements S20020138, which include position requirements and application procedures, are posted on NSF's Home Page at www.nsf.gov/jobs. Announcements may also be obtained by contacting **Executive Personnel** on (703) 292-8755. **Hearing impaired individuals may call TDD (703) 292-8044**. Applications must be received by November 8, 2002.

NSF is an Equal Opportunity Employer.



THE SALK INSTITUTE

Plant Biology at The Salk Institute

The Salk Institute for Biological Studies invites applications for a faculty position in Plant Molecular and Cellular Biology. Candidates must have an outstanding record of research achievement. The successful candidate is expected to develop a strong research program in the general area of modern plant biology using innovative approaches. The position is open to candidates at the Assistant Professor level. All applicants must be legally employable in the United States. The Salk offers a competitive package and excellent benefits.

Qualified candidates should send a curriculum vitae, a short statement of research interests and scientific goals, reprints of key publications, and the names and addresses of three individuals who have been asked to submit letters of recommendation to:

**Dr. Joanne Chory and Dr. Joe Ecker
Plant Biology Search Committee
Plant Biology Laboratory
The Salk Institute for Biological Studies
10010 N. Torrey Pines Rd.
La Jolla, CA 92037**

*The Salk Institute is an Affirmative Action/
Equal Opportunity Employer*

Opportunities

Postdoctoral Fellowships

The Division of Immunobiology at Cincinnati Children's Hospital Medical Center invites applications from highly motivated and creative scientists for postdoctoral fellowships. We are seeking candidates to participate in studies of the immunopathogenesis of allergic diseases. A highly competitive salary and full benefits are available to a PhD/MD with prior training in cellular or molecular immunology and/or pulmonary pathobiology. Preference will be given to applicants interested in using state-of-the-art approaches to identify and validate novel genes underlying the pathophysiology of allergic diseases. Interested candidates should submit a CV and the names of three references to:

**Marsha Wills-Karp, PhD
Division of Immunobiology
Cincinnati Children's Hospital
Medical Center
3333 Burnet Avenue ML 7038
Cincinnati, OH 45229-3039
E-mail: m.wills-karp@chmcc.org**



Visit our website at
www.cincinnatichildrens.org

Cincinnati Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.

POSITIONS OPEN

BIOLOGISTS

College of The Holy Cross

We invite applications for two tenure-track **ASSISTANT PROFESSORSHIPS** in biology. Each successful candidate will hold a Ph.D. at the time of appointment and will be expected to develop an active research program involving undergraduate students. Holy Cross is a highly selective, exclusively undergraduate, Jesuit liberal arts college (enrollment 2,700) that values excellence in both teaching and research. Applications consisting of curriculum vitae, transcripts, copies of publications, research and teaching statements, and letters from three references should be submitted no later than 8 November 2002 to: **Dr. Kornath Madhavan, Chair, Genetics Search Committee** or **Dr. Susan Berman, Chair, Evolution Search Committee, Department of Biology, College of the Holy Cross, Worcester, MA 01610.**

GENE REGULATION

A Biologist will be hired to teach a laboratory course in molecular genetics, an additional upper-division biology course compatible with current offerings, a course for nonscience majors, and to share teaching of a biology course for premedical students. Development of a research program in gene regulation (preferably eukaryotic) is expected.

EVOLUTION

An Evolutionary Biologist will be hired to teach a course in evolution, a second upper-division course in an area compatible with current offerings, and a course for nonscience majors. Individuals with expertise in conservation biology, marine biology, paleontology, or bioethics are particularly encouraged to apply. Development of a research program in evolutionary biology is expected.

The College is an Equal Opportunity Employer and complies with all federal and Massachusetts laws concerning Equal Opportunity and Affirmative Action in the workplace.

FACULTY POSITION

Cancer Biology

The Center for Cancer Research and Department of Biology at the Massachusetts Institute of Technology (MIT) seek applicants for an appointment at the level of **ASSISTANT PROFESSOR** (tenure track) in the area of cancer biology. Areas of emphasis include but are not limited to oncogene and tumor suppressor gene function; signal transduction; intercellular communication; control of genome stability; cancer genetics, genomics, and proteomics; tumor immunology; cell adhesion, migration, and metastasis; angiogenesis; and stem cell biology and differentiation in vertebrate systems. The appointment will require supervision of an active research program as well as undergraduate and graduate teaching.

Applicants should include curriculum vitae, brief summaries of past accomplishments, and future research plans. Letters of recommendation should be sent separately from three Scientists who can provide an evaluation of the candidate's accomplishments and future potential for both research and teaching. Applications and letters should be sent to:

**Cancer Biology Search Committee
E17-110, Center for Cancer Research
Massachusetts Institute of Technology
Cambridge, MA 02139**

Deadline for receipt of applications and support materials: November 15, 2002. MIT is an Affirmative Action/Equal Opportunity Employer. Qualified women and minority candidates are especially encouraged to apply.

ASSISTANT RESEARCH PROFESSOR in molecular physiology to investigate the role of caveolae/lipid rafts in cardiovascular disease. Expertise in confocal microscopy, cell biology, and protein chemistry required. Research experience in intracellular trafficking, hormone action, pathogens, and eicosanoids is necessary. Submit curriculum vitae, references, and research statement to: **Eric J. Smart, Ph.D., Department of Physiology, University of Kentucky College of Medicine, 800 Rose Street, Lexington, KY 40536-0298.**

POSITIONS OPEN

BIOLOGY DEPARTMENT CHAIR

Clarkson University

The Biology Department at Clarkson University is seeking a Department Chair. The successful candidate will have an established, externally funded research program that complements our strengths in environmental science and cell and molecular biology and a record of success in teaching at the undergraduate and graduate level. The research and teaching strengths of the Department draw from interdisciplinary interactions with other departments on campus such as the Environmental Science Ph.D. program, the undergraduate Biomolecular Science program, Cognitive Neuroscience, and our close ties with Rehabilitation Engineering and the Physical Therapy graduate program. The Chair will maintain and develop these interactions and actively seek new collaborative opportunities (e.g., a graduate program in biomolecular science). The Chair will also continue the development and growth of an outstanding undergraduate Biology program whose mission includes preparing students for successful careers in biology and the health care professions (e.g., medicine, physical therapy). Clarkson University is a small, private, technological university whose mission balances high-quality undergraduate and graduate education with excellence in research. Clarkson is located in a rural setting just outside the Adirondack Park, New York, with year-round outdoor recreational opportunities. Clarkson lies within minutes of three other universities and within two hours of Montreal and Ottawa, Canada, and Lake Placid, New York. Candidates should submit curriculum vitae, research and teaching statements, sample reprints, a statement of administrative philosophy, and at least three letters of reference to: **Search Committee, Department of Biology, Clarkson University, Potsdam, NY 13699-5825.** Review of applications will begin immediately and will continue until the position is filled. *Clarkson University is an Equal Opportunity/Affirmative Action Employer. Position Number 46-02.*

BIOINFORMATICS FACULTY POSITION

Georgia Institute of Technology

The School of Biology invites applications for a faculty position in bioinformatics at the level of **ASSISTANT PROFESSOR**. The successful candidate is expected to pursue innovative research in an area of bioinformatics such as developing methods for nucleic acid and protein sequence analysis, particularly DNA and protein function prediction, protein folding, and biomolecular evolution modeling, and have a commitment to and talent for teaching at both the undergraduate and graduate levels. The School of Biology is located on the attractive Georgia Tech campus near the College of Computing and the School of Biomedical Engineering. Georgia Tech has established graduate programs in bioinformatics and plans to expand its activities through the Center for Bioinformatics and Computational Biology ([website: http://www.biology.gatech.edu/gt_bioinfo](http://www.biology.gatech.edu/gt_bioinfo)). Review of applications will begin November 11, 2002. Curriculum vitae, research interest statement, and three reference letters should be mailed to: **Chair of Bioinformatics Search Committee, School of Biology, Georgia Institute of Technology, Atlanta, GA 30332-0230.**

SUPERVISOR

Indiana University Vector Production Facility

The Indiana University Vector Production Facility generates preclinical and clinical-grade gene therapy products. The effort is funded through a variety of sources and has been designated as a national gene vector laboratory by the NIH. The facility seeks an individual with prior supervisory experience with a thorough understanding of laboratory procedures and FDA regulations related to the production of clinical materials. Interested individuals should send curriculum vitae to: **Kenneth Cornetta, M.D., Indiana University School of Medicine, IN 130, 975 West Walnut Street, Indianapolis, IN 46202.** E-mail: kcornett@iupui.edu. *Indiana University is an Equal Employment Opportunity/Affirmative Action Employer; Minorities/Females/Disabled.*

POSITIONS OPEN

NEUROBIOLOGIST

University of Wyoming

The Department of Zoology and Physiology at the University of Wyoming invites applications for a tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. We seek candidates whose research takes a systems approach to the study of neural function. Applicants are expected to have a strong neuroscience background and postdoctoral experience. The successful candidate will be expected to integrate with departmental programs as well as with the graduate neuroscience program and the NIH Centers of Biomedical Research Excellence. Research interests of the Cardiovascular Center include the neural control of blood pressure and gene expression in brain and heart as it relates to cardiovascular function. Applicants must have a Ph.D. or equivalent degree and have research interests in the neural control of systems that impact on homeostatic mechanisms or that use novel models and integrative approaches. Strong research skills in one or more of the following disciplines are preferred: molecular/cellular neuroscience, regulatory neurophysiology, or neuroendocrinology. The successful candidate will be expected to develop an externally funded research program and to teach and advise at the undergraduate and graduate levels. There are additional opportunities for interaction with Cell Signaling Center of Biomedical Research Excellence. Access to an outstanding microscopy core facility and cooperative DNA microarray facility is available. Salary and start-up are competitive. Interested applicants should send complete curriculum vitae, a two-page letter explaining research interests, three representative publications, and arrange for three letters of recommendation to be sent to: **Neurobiology Search Committee, Department of Zoology and Physiology, University of Wyoming, Laramie, WY 82071.** FAX: 307-766-5625; [website: http://uwadmnweb.uwyo.edu/Zoology/](http://uwadmnweb.uwyo.edu/Zoology/); <http://uwadmnweb.uwyo.edu/NeuroScience/>; <http://uwadmnweb.uwyo.edu/Cardio-Cobre>. Review of completed applications will begin November 1, 2002. *The University of Wyoming is a Carnegie Foundation Research/Doctoral Extensive Institution. The University of Wyoming is an Affirmative Action/Equal Employment Opportunity Employer.*

TENURE-TRACK

BIOCHEMISTRY POSITION

University of California at Santa Barbara
Department of Chemistry and Biochemistry

The Department announces a tenure-track position in bioanalytical chemistry at the **ASSISTANT PROFESSOR** level for appointment July 1, 2003. Candidates with an outstanding record of teaching and research are encouraged to apply. The successful candidate will engage in the innovative development and application of novel analytical techniques for the investigation of basic biochemical and biophysical mechanisms at the molecular level. Potential areas of research interest include but are not limited to applications to genomics and proteomics and/or development of state-of-the-art spectroscopic or microscopic tools and applications. A Ph.D. is required at time of appointment. Send curriculum vitae, up to five selected reprints, brief research plan, and three letters of recommendation to: **Chair of Bioanalytical Chemistry Search Committee, Department of Chemistry and Biochemistry, University of California, Santa Barbara, CA 93106-9510.** Position is open until filled; however, applications completed by November 1, 2002, will be given preference. *UCSB is an Equal Opportunity Employer.*

ASSOCIATE PROFESSOR, Georgia Institute of Technology, School of Applied Physiology. Primary consideration will be given to applicants with experience in the cellular mechanisms of skeletal muscle biology with application to systems physiology. For more information, e-mail: robert.gregor@ap.gatech.edu; Telephone: 404-894-3986. See detailed ad at [website: http://www.ap.gatech.edu](http://www.ap.gatech.edu).

Equal Employment Opportunity/Affirmative Action.



**Hematologist Oncologist
Rochester, Minnesota**

The Department of Hematology and Internal Medicine is seeking a **BC/BE Hematologist Oncologist** with laboratory-based research experience related to multiple myeloma, with particular focus on bone marrow microenvironment and bone marrow angiogenesis. Laboratory experience in the use of replicating viral vectors for cancer therapy is desirable. The applicant must be experienced in clinical trial design and conduct and in the care of patients with multiple myeloma and amyloidosis. The individual should have a proven track record in blood and marrow transplantation related research. Formal training in clinical research is a requisite.

Salary will be determined by the successful candidate's experience. There is an attractive benefits package. Mayo Clinic Rochester is a non-profit, physician led, clinical practice integrated with education and research in a unified multi-campus system.

Submit curriculum vitae and copies of first authored publications to:

**Dr M.A. Gertz
Department of Hematology and Internal Medicine
Mayo Clinic
200 First Street SW
Rochester, MN 55905**

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

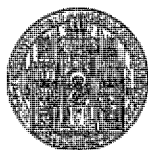
UNIVERSITY OF MINNESOTA

Department of Biochemistry, Molecular Biology, and Biophysics Tenure-Track Assistant Professor Positions

In conjunction with the completion of the new Molecular and Cellular Biology Building, and as part of campuswide initiatives in genomics and proteomics, the Department of Biochemistry, Molecular Biology, and Biophysics invites applications for three full-time, tenure-track Assistant Professor positions to begin on or around July 1, 2003. We seek candidates whose expertise complements existing strength in signal transduction, proteomics, genome expression, and dynamics, but investigators in all areas are encouraged to apply. For more details about the Department please consult: <http://cbs.umn.edu/BMBB/>. Successful candidates will be expected to develop strong, externally funded research programs and contribute to the undergraduate, graduate, and professional teaching programs of the department. The ability to interact collaboratively among a variety of disciplines will be strongly encouraged. All candidates must have a PhD and/or MD degree. Desired experience includes at least two years of postdoctoral experience and a strong publication record. Successful candidates will receive a substantial start-up package to establish their laboratories and a salary commensurate with education and experience. We will begin reviewing applications on November 1, 2002, and applications will be accepted until the positions are filled.

Please send curriculum vitae, a two page statement of current and future research, and three letters of recommendation that consider both research and teaching potential to the **Faculty Search Committee, c/o Ms. Ann Johnson, Department of Biochemistry, Molecular Biology and Biophysics, University of Minnesota, 6-155 Jackson Hall, 321 Church Street S.E., Minneapolis, MN 55455** or as an attachment to swans143@umn.edu.

*The University of Minnesota is an Equal Opportunity
Educator and Employer.*



University of Heidelberg

The **Zentrum für Molekulare Biologie Heidelberg (ZMBH)** at the University of Heidelberg, invites applications from young scientists for a

Group Leader Position

The successful candidate will have the opportunity to establish an independent research group. It is expected that his research program will complement the ZMBH's research activities which focus on biochemistry and molecular biology of cells (prokaryotes and eukaryotes), molecular mechanisms of differentiation and development and molecular biology of pathogenic processes. It would be highly desirable if the future holder of this position would broaden the present scientific spectrum at the ZMBH with state-of-the-art methods of molecular cell biology, biochemistry or biophysics. A detailed outline of the research and teaching activities of the ZMBH can be found at <http://www.zmbh.uni-heidelberg.de>.

Payment will be according to BAT Ia. The position is limited to five years, with a possible extension of up to 3 years. Acceptance for a permanent position is not excluded. The holder of the position is expected to participate in the department's teaching program. Financial support for personnel and consumables is available for the candidate to set up an independent research group.

The ZMBH offers excellent central facilities which include cell sorting, high performance mass spectrometry and light microscopy, biocomputing and centralised administrative services which the holder of the position will benefit from.

Further details may be obtained from Prof. Dr. Bernd Bukau, Tel. 0049-6221-54 6795, Fax 0049-6221-54 5507. Applications should be sent to the **Director of the ZMBH, Im Neuenheimer Feld 282, D-69120 Heidelberg by 15.11.2002.**

Hall Distinguished Professorship in Molecular Medicine Reproductive-Developmental Biologist University of Kansas Medical Center

The Department of Molecular and Integrative Physiology within the School of Medicine is seeking an outstanding reproductive-developmental biologist utilizing molecular and physiological approaches to study important questions related to reproductive biology. This endowed position rank is supported by the Hall Family Distinguished Professorship in Molecular Medicine, will be a tenure track position and have an appropriate faculty rank. The successful candidate (M.D., D.V.M., and/or Ph.D.) will have an excellent track record of extramural grant support and publications. The individual will have an integral role in the activities of existing NIH-funded Centers in Reproductive Sciences and in Mental Retardation and Developmental Disorders. New laboratory space, generous start-up funds and continuous endowed research support are available. In addition, this position offers an opportunity to participate in graduate and medical education relevant to their area of expertise.

Applications should include a CV and names and addresses of 5 references. Nominations for this position are encouraged. Credentials should include M.D., D.V.M., and/or Ph.D. The nominations and applications with a cover letter should be sent to: **Paul Terranova (pterrano@kumc.edu), Director, Center for Reproductive Sciences, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, Kansas 66160**. Anticipated appointment date is as early as January 1, 2003. Application review will begin in October 2002 and continue until the position is filled. Relevant web sites are: www2.kumc.edu/crs; www2.kumc.edu/mrrc; www.kumc.edu/instruction/medicine/physiology.

*The University of Kansas Medical Center is proud to be an Equal
Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR Molecular Diagnostics/Biomedical Sciences Department of Health Sciences University of Wisconsin-Milwaukee

UW-Milwaukee is a premier research university serving approximately 24,000 students. We are seeking an individual to enhance a dynamic research environment in clinical laboratory sciences consistent with our mission as an urban university. The successful candidate will contribute to the academic mission of the University and College of Health Sciences while enhancing the research and scholarship of the Department. The successful candidate will be expected to establish a productive, extramurally funded research program as well as participate in collaborations. The position involves teaching in the undergraduate and graduate programs and mentoring graduate student research. A Ph.D. in molecular, cellular, microbiology, or related field with excellent interpersonal communication skills, a commitment to education, and a willingness to work collaboratively is required.

Application and salary: Salary is competitive and dependent upon qualifications. The position is a nine-month faculty appointment with opportunity for summer support. Start date: August 2003. A full position description and the Clery statement are available (website: <http://www.uwm.edu/Dept/BUSOFC/>). Interested individuals must send a cover letter, curriculum vitae, and three letters of recommendation to: Ms. Geri Schramm, Program Assistant, University of Wisconsin-Milwaukee, Department of Health Sciences, P.O. Box 413, Milwaukee, WI 53201-0413.

Applications will be reviewed beginning November 1, 2002, and continue until the position is filled. UWM is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

BOTANIST, ASSISTANT or ASSOCIATE PROFESSOR (tenure track). Applicants should be broadly trained in botany, possess a Ph.D., have excellent communication skills, and be committed to undergraduate education. Teaching responsibilities will include majors introductory biology and upper-level organismal botany courses. Candidates must have experience in teaching undergraduates and potential to conduct research involving undergraduates. Faculty also advise students and serve on departmental and university committees. The successful candidate will join an interdisciplinary faculty who teach and conduct scholarly activity in a rapidly growing biology program. Preference will be given to candidates who complement current faculty expertise. Biology faculty have a primary commitment to undergraduate education and are in the process of implementing a new M.S. degree program. A complete application consists of a letter of application, curriculum vitae, unofficial transcripts, statements of teaching philosophy and research interests, and names and contact information of three references. Review of candidate files will begin 11 November 2002. Applications will be accepted until the position is filled. Submit materials to: Dr. Terry M. Trier, Chair, Botany Search Committee, Biology Department, Grand Valley State University, Allendale, MI 49401-9403. E-mail: triert@gvsu.edu; Telephone: 616-895-2476; FAX: 616-895-3446; website: <http://www.gvsu.edu/biology>. Grand Valley State University is an Affirmative Action/Americans With Disabilities Act/Equal Opportunity Employer.

INSTRUCTOR

Long-term track position. Begin August 2003. M.S. required; primary teaching responsibility undergraduate anatomy/physiology (A/P) laboratories; occasional opportunity to teach lecture courses. Experience in small college preferred. Liberal arts environment. Responsibilities include academic advising, committee work; no release time or expectation for research. Strong record of teaching excellence. Letter stating interests; complete résumé; transcripts; and three letters of reference due prior to November 11, 2002, to: Sr. John Karen Frei, Dean, School of Natural and Health Sciences, Barry University, Miami Shores, FL 33161.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSORSHIP Cell Injury and Regeneration Medical University of South Carolina

The Department of Pharmaceutical Sciences invites applications for a tenure-track faculty position to join a multidisciplinary basic and translational research group focused on cell injury, death, and regeneration. Applicants with research programs in epithelial cell signaling, adhesion molecules and stress biology, or proteomics are particularly encouraged to apply. The Department of Pharmaceutical Sciences is under new leadership and is undergoing dramatic growth with the addition of five faculty members over the next three years. Opportunities exist for collaborations across campus and in the Hollings Cancer Center, Neuroscience Institute, and Gazes Cardiac Research Institute. Competitive salary, benefits, and start-up package and renovated laboratory space are available. MUSC, located in the beautiful oceanside historic district of Charleston, South Carolina, receives over \$130 million per year in competitive research funding. The successful applicant is expected to develop an independent research program and to participate in graduate and professional teaching. Applications will be reviewed beginning November 22, 2002, and will continue until the position is filled. Applicants should submit curriculum vitae, statement of research interests, and four letters of reference to: Dr. Rick Schnellmann, Department of Pharmaceutical Sciences, Medical University of South Carolina, 280 Calhoun Street, P.O.B. 250140, Charleston, SC 29425. Telephone: 843-792-3754; e-mail: schnell@musc.edu. MUSC is an Equal Opportunity Employer.

FACULTY POSITION Department of Materials Science and Engineering The Johns Hopkins University

The Johns Hopkins University invites applications for a tenured faculty position at the rank of **FULL PROFESSOR** in the Department of Materials Science and Engineering. The successful candidate will be expected to develop an innovative research program and to teach at both the undergraduate and graduate level. Applicants should have a Ph.D. in materials science and engineering or related field and must have demonstrated ability to establish an internationally recognized research program. Applicants should submit a detailed résumé; a statement of research plans and teaching interests; and the names, addresses (including e-mail), and telephone numbers of three references to: Chair, Search Committee, Department of Materials Science and Engineering, 102 Maryland Hall, The Johns Hopkins University, Baltimore, MD 21218. Information on the Department of Materials Science and Engineering can be found at website: <http://www.jhu.edu/~matsci/>. To ensure full consideration, applications should be received by December 15, 2002. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

DIRECTOR OF CONSERVATION SCIENCE Central America

The Nature Conservancy seeks practicing Scientist to lead interdisciplinary team of scientific/technical conservation planners in Central America. Build strategic scientific field capacity; forge partnerships; develop innovative methods, analyses, and decision frameworks for identifying targets/sites and key threats; develop threat abatement strategies; measure success. Ph.D. preferred; three years in conservation and in developing practical applications of scientific concepts. Partnership/team-building skills; English/Spanish/travel essential. Located within region. Send cover letter and résumé in English by November 15, 2002, to: The Nature Conservancy, Human Resources Department CH, 4245 North Fairfax Drive, Arlington, VA 22203. E-mail: careers@tnc.org (type job title in subject line). Equal Opportunity Employer.

POSITIONS OPEN

TERRESTRIAL ECOSYSTEM ECOLOGIST, ASSISTANT or ASSOCIATE PROFESSOR (tenure track). Applicants should be broadly trained in ecology, possess an earned Ph.D., have excellent communication skills, and be committed to undergraduate education. Teaching responsibilities will include introductory environmental science, an advanced pollution course, and other established courses in area of expertise. The successful candidate will join an interdisciplinary faculty in a rapidly expanding biology program. Biology faculty have a primary commitment to undergraduate education and are in the process of implementing a new M.S. degree program. Experience in pollution or ecotoxicology research desirable. Preference will be given to candidates with experience teaching undergraduates and who can involve undergraduates in their research. Faculty also advise students and contribute to university and community service. A complete application consists of a letter of application, curriculum vitae, unofficial copies of all transcripts, statements of teaching philosophy and research interests, and names and contact information of three references. Review of candidate files will begin 11 November 2002. Applications will be accepted until the position is filled. Submit materials to: Dr. Joseph J. Jacquot, Chair, Ecology Search Committee, Biology Department, Grand Valley State University, Allendale, MI 49401-9403. E-mail: jacquot@gvsu.edu; Telephone: 616-895-3523; FAX: 616-895-3446; website: <http://www.gvsu.edu/biology>. Grand Valley State University is an Affirmative Action/Americans With Disabilities Act/Equal Opportunity Employer.

The Cornell University Astronomy Department invites applications for a tenure-track **ASSISTANT PROFESSOR** position in its Infrared Astrophysics group. Preference will be given to individuals with research interests and expertise in both infrared instrumentation and space and ground-based observational infrared astronomy. The successful applicant will have the opportunity to participate in the SIRTf Infrared Spectrograph (IRS) team at Cornell as well as the Department's project to explore building a 15 meter-class telescope in the high Atacama Desert in northern Chile. The Infrared Astrophysics group at Cornell is actively involved in a large number of research and instrumentation projects including instruments for SIRTf, SOFIA, Palomar Observatory, JCMT, and AST/RO. Cornell facilities include the Palomar 200-inch telescope (25% of the observing time) and group members are regularly awarded observing time at other national and international observatories. Cornell operates the Arecibo Observatory in Puerto Rico for the National Science Foundation. Applicants should send a statement of research interests and prior experience, curriculum vitae, and the names of three individuals to be contacted for references to: Laurie McCall, 228 Space Sciences Building, Cornell University, Ithaca, NY 14853. Applications will be reviewed beginning November 15, 2002, and will be accepted until January 15, 2003. The expected start date for this position is approximately July 1, 2003. Cornell University is an Affirmative Action/Equal Opportunity Employer.

ORGANIC CHEMISTRY University of California at Santa Barbara

The Department of Chemistry and Biochemistry at UC Santa Barbara invites applications for a faculty position in organic chemistry effective July 2003. Applicants at the **ASSISTANT PROFESSOR** level as well as more senior tenured faculty within the broad field of organic chemistry are encouraged to apply. A Ph.D. is required for this position. Applicants should send a statement of interest along with curriculum vitae and a summary of research plans. For junior applicants, three letters of recommendation should also be submitted. Applications received by December 2, 2002, given preference. The search will continue until the position is filled. Applications should be addressed to: Chair, Organic Search Committee, Department of Chemistry and Biochemistry, University of California, Santa Barbara, CA 93106-9510. UCSB is an Equal Opportunity/Affirmative Action Employer.

**Molecular Biologist/Cell Biologist
Radiation Effects Research Foundation
Hiroshima and Nagasaki, Japan**

The US National Academies is currently seeking a biologist to work in the Hiroshima Laboratory of the Radiation Effects Research Foundation (RERF). The Foundation is engaged in the continuing mortality and morbidity follow-up and clinical/laboratory studies of atomic-bomb survivors and their children. RERF's findings on the continuing cancer risks are the primary basis for worldwide radiation protection standards. Innovative multi-disciplinary molecular and cellular research is needed to clarify the mechanisms by which radiation exposure leads to cancer and non-cancer diseases. The appointee will have the opportunity to utilize RERF's unique and valuable resources of biologic materials and to collaborate in molecular mechanistic studies in genetics, cellular and molecular biology, immunology, and biochemistry, but will be expected to play a major role in an important study of the effects of ionizing radiation on DNA methylation patterns in mammalian genomes. To do this the appointee will be expected to learn and employ a number of novel techniques of DNA methylation analysis, and to participate in the development of additional and more sensitive methods of analysis. A particular area of interest already under active investigation involves the possible role of radiation-induced epigenetic change in carcinogenesis. The appointee will have the opportunity to participate in several such studies.

For this position, we require a Ph.D. or equivalent degree (M.D., D.V.M., Sc.D., D.Phil.) with training and recent laboratory experience in molecular biology, evidence of an interest in molecular mechanisms of carcinogenesis, especially epigenetics and or radiation biology, and of productivity in relevant research areas. We offer a competitive salary that is commensurate with experience and supplemented by relocation, cost-of-living, health care, home leave, and other substantial benefits. Typical assignments are for two years, with extensions possible. Please send your resume and the names and addresses of at least three references to: **Dr. Evan B. Douple, Board on Radiation Effects Research, National Academies, 500 5th Street, NW, Washington, D.C. 20001. (FAX: 202-334-1639; e-mail: edouple@nas.edu)**

EOE

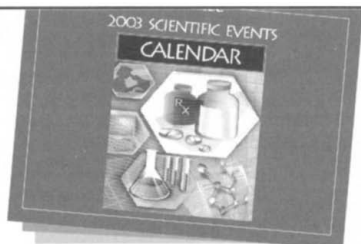
**TENURE-TRACK FACULTY POSITION
IN
PHYSIOLOGY**

The Department of Molecular Biomedical Sciences in the College of Veterinary Medicine at North Carolina State University invites applications for a tenure track faculty position at the ASSISTANT PROFESSOR level in Physiology. Individuals using molecular approaches to study biologically significant questions in physiology are particularly encouraged to apply. The successful applicant will join a growing Department (<http://www.cvm.ncsu.edu/apr>) and College with a focus on Genomics. North Carolina State University's strengths include major research programs in Genomics, a state-of-the-art Genome Research Laboratory (<http://www.cals.ncsu.edu/grl>), University-wide graduate programs in Physiology and Functional Genomics (<http://genomics.ncsu.edu/>), a multimillion dollar training grant for graduate education in genomic sciences from the National Science Foundation, and proximity to Research Triangle Park and the National Institute of Environmental Health Sciences (NIEHS). Applicants must have a Ph.D. and/or DVM and 3 years of postdoctoral research experience, and are expected to establish an independent, extramurally funded research program. The successful applicant will also be expected to participate in the veterinary physiology curriculum and in a graduate course on gastro-intestinal physiology.

Applicants should submit a CV, statement of research plans, and arrange to have three letters of reference sent to: **Dr. John Gadsby, Department of Molecular Biomedical Sciences, College of Veterinary Medicine, North Carolina State University, 4700 Hillsborough Street, Raleigh, NC 27606.** Or by e-mail: john_gadsby@ncsu.edu. Review of applications will begin on November 1, 2002, and continue until the position is filled.

North Carolina State University is an Equal Opportunity/Affirmative Action Employer. Individuals with disabilities desiring accommodations in the application process should contact Penny Austin, by email at: penny_austin@ncsu.edu, by phone at: 919/513-6220, by fax at: 919/513-6465, or by TTY number at: 919/515-9617.

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For full details contact:

In the U.S. Kathleen Clark	In Europe Richard Walters
phone 202-326-6555	phone +44 (0) 1223 326 500
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e-mail kclark@aaas.org	e-mail rwalters@science-int.co.uk

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OHSU

**OREGON HEALTH & SCIENCE UNIVERSITY
ANNOUNCES A NEW DEPARTMENT OF
BIOMEDICAL ENGINEERING
AND THE SEARCH FOR ITS FIRST CHAIR**

THE POSITION: The OGI School of Science & Engineering at OHSU seeks a leader for its new Department of Biomedical Engineering.

RESPONSIBILITIES: Develop a unique focus for research and training; recruit outstanding faculty and students; develop interdisciplinary educational programs; build collaborative linkages with the larger university; foster partnerships with the regional biotech community; secure external programmatic funding and encourage technology transfer and commercialization of research discoveries.

QUALIFICATIONS: A strong background in engineering or another quantitative science and relevant experience within a biomedical field; a record of success as an independent scholar; an entrepreneurial spirit; capacity to represent the department effectively to external constituencies; familiarity with commercializing intellectual property, a commitment to translational research and successful technology transfer; an understanding of a research university's role in the economic development of its region and state; a record of successful fiscal management and academic credentials suitable for a senior faculty appointment.

THE INSTITUTION: OHSU includes the first medical school west of the Mississippi and Oregon's first dental and nursing schools. Located in Portland, it serves 2600 students. Its annual research budget is \$160 million. In July 2001, OHSU expanded, by merger, with The Oregon Graduate Institute of Science and Technology. As OHSU's new School of Science and Engineering, OGI serves 300 students. Its annual research budget is nearly \$20 million. Additional information about both institutions is available at www.ogi.edu and www.ohsu.edu.

APPLICATIONS: The search has begun and will continue until the position is filled, ideally in early spring 2003. Confidential inquiries and requests for a Position Specification should be directed to the consultant assisting the search committee, **E. Kay Dawson**, by email (preferred) at ekdawson@qwest.net, or by telephone at **503.292.4889**. Applicants should submit a cover letter responsive to the Position Specification, a curriculum vitae, and the names of five references to the search committee chair, **Dr. Misha Pavel, OGI School of Science & Engineering, 20000 NW Walker Road, Beaverton, OR 97006-8921.**

OHSU IS AN EO/AA INSTITUTION.

POSITIONS OPEN

MICROBIOLOGIST

A tenure-track position is available for a microbiologist at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Funding for this position is supplemented by a \$200,000 NIH award through the Arkansas Biomedical Research Infrastructure Network (BRIN). Significant start-up assistance and a lowered initial teaching load will be provided. Preference will be given to candidates with interests in microbial genetics. Teaching responsibilities include general microbiology and may include an upper-division or graduate course and contribution to the lower-division curriculum. A Ph.D. and an active research program involving students are expected.

The University of Central Arkansas, a regional comprehensive university of about 9,000 students, has undergone about \$150 million in new construction over the past decade. Our 23 full-time biology faculty serve over 500 majors and about 20 Master's-level graduate students. The Department occupies over 50,000 square feet and we maintain an extensive equipment inventory. An SEM facility was recently added and we are installing a laser confocal microscope. Conway is a prosperous city of 45,000 that hosts two other colleges and is an easy drive from both Little Rock and pristine wild areas such as the Buffalo National River and Ozark Mountains. For further information, visit [website: http://www.uca.edu/biology/](http://www.uca.edu/biology/).

To apply, submit curriculum vitae statements of teaching philosophy and research plans, and the names of three references to: **Dr. Paul Hamilton, Department of Biology, University of Central Arkansas, Conway, AR 72035**. Application review will begin November 20, 2002, and continue until the position is filled. *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION Molecular Biology

As a part of the ongoing expansion of the School of Biology at Georgia Institute of Technology, applications are invited for a tenure-track faculty position in molecular biology at the **ASSISTANT/ASSOCIATE PROFESSOR** level. While outstanding applicants in all areas of molecular biology will be considered, candidates emphasizing genetic and/or genomic approaches to study processes such as cell signaling; cell cycle; or macromolecular structure, biosynthesis, folding, and interactions are especially sought. The successful candidate is expected to establish a strong, independent research program and teach in the undergraduate and graduate programs. Faculty research areas, core facilities, and interactions with other units in the Institute and in Atlanta, Georgia, are described at [website: http://www.biology/gatech.edu](http://www.biology/gatech.edu). Applications will be considered beginning November 11, 2002. Curriculum vitae, descriptions of research and teaching interests, and three letters of reference should be mailed to: **Molecular Biology Search Committee, School of Biology, Georgia Institute of Technology, 310 Ferst Drive, Atlanta, GA 30332-0230**. *Georgia Tech is an Affirmative Action/Equal Opportunity Employer.*

Biology ASSISTANT PROFESSOR (two positions). Hamline University invites applications for two tenure-track positions at the Assistant Professor level to begin September 2003. We seek candidates with research interests in neuroscience, immunology, endocrinology, microbiology, developmental biology, or physiology. Applicants must be committed to undergraduate teaching and to developing an active research program involving undergraduates. A Ph.D. is required. For more information, visit our [website: http://www.hamline.edu/depts/biology](http://www.hamline.edu/depts/biology).

Send cover letter, curriculum vitae, teaching philosophy, research plans, and three letters of recommendation to: **Presley Martin, Chair, Biology Department, Hamline University, 1536 Hewitt Avenue, Saint Paul, MN 55104**. E-mail: pmartin@hamline.edu. Application review begins November 8, 2002. *Hamline University is an Equal Educational/Employment Institution. Members of underrepresented groups are strongly encouraged to apply.*

POSITIONS OPEN

BIOCHEMISTRY ASSISTANT PROFESSOR POSITION University of North Texas Denton, Texas

The Department of Biological Sciences ([website: http://www.biol.unt.edu](http://www.biol.unt.edu)) invites applications for a tenure-track position in biochemistry beginning September 2003. Successful candidates will be expected to contribute to a strong research program and participate in instruction at the undergraduate and graduate levels. We are especially interested in candidates having expertise in eukaryotic signal transduction, although candidates with expertise in other areas will be seriously considered. The Department offers excellent opportunities to interact with funded research faculty in the areas of plant science, microbiology, biotechnology, and structural biology.

Located in the Dallas-Fort Worth metroplex, the University of North Texas is a growing institution with an enrollment of over 30,000 students. The Department is growing rapidly and has a strong research focus. Excellent research facilities, competitive salary, and generous start-up funds are available. The Department offers undergraduate and graduate (M.S./Ph.D.) degrees in biology, biochemistry, molecular biology, and environmental sciences. Submit curriculum vitae, names of three references, reprints, and statement of research goals to: **Dr. Rebecca Dickstein, Biochemistry Search Committee, Department of Biological Sciences, P.O. Box 305220, University of North Texas, Denton, TX 76203-5220**. Review of applications will begin on November 15, 2002, and continue until a suitable candidate is found. *The University of North Texas is an Equal Opportunity/Affirmative Action Institution committed to diversity in its Employment and Educational programs, thereby creating a welcoming environment for everyone.*

ANIMAL BEHAVIOR/SENSORY ECOLOGY

The Section of Integrative Biology seeks an **ASSISTANT PROFESSOR** in animal behavior/sensory ecology. We are particularly interested in candidates whose research integrates underlying sensory mechanisms of behavior with considerations of how the animals interact with the environment. The primary undergraduate teaching responsibility will be in animal behavior. The position requires a Ph.D. (awarded prior to September 2003). Applicants should send curriculum vitae; a statement of teaching animal behavior/sensory ecology and research interests; no more than five reprints or preprints; and have at least three letters of recommendation sent to: **Animal Behavior/Sensory Ecology Search, Integrative Biology, 1 University Station C0930, University of Texas, Austin, TX 78712-0253 U.S.A.** by December 10, 2002. For more detailed information, see [website: http://www.biosci.utexas.edu/jobs/](http://www.biosci.utexas.edu/jobs/).

University of Texas, Austin, is an Equal Employment Opportunity/Affirmative Action Employer.

VASCULAR BIOLOGY

The La Jolla Institute for Molecular Medicine (LJIMM) is seeking candidates for **ASSISTANT** and **ASSOCIATE PROFESSOR** positions in the Division of Vascular Biology with expertise in the areas of developmental vascular biology or pulmonary vascular biology, specifically pulmonary inflammation, asthma/allergy, or pulmonary endothelial cell specific gene expression. Candidates must have a Ph.D. or M.D. (or equivalent), an established research program, and have competed successfully for research funding at the national level. LJIMM is an independent, not-for-profit academic research institute located in the Golden Triangle of La Jolla, California. For consideration, please submit curriculum vitae, names of three references, and a description of research program to: **Dr. Eugene Levin, La Jolla Institute for Molecular Medicine, 4570 Executive Drive, Suite 100, San Diego, CA 92121**. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS

The Biological Sciences Department at California Polytechnic State University is seeking two tenure-track positions at the **ASSISTANT PROFESSOR** rank beginning September 2003 as listed below.

ANIMAL GENETICIST (Recruitment Code Number 4519). Primary teaching responsibilities will include human, classical, and molecular genetics in major and nonmajor courses. Other teaching responsibilities may include bioinformatics, introductory biology, and other undergraduate and graduate courses as appropriate to background and training. Experience with human or other animal model systems (e.g., *C. elegans*, *Drosophila*, zebrafish) is desirable.

RESTORATION ECOLOGIST (Recruitment Code Number 4521). Primary teaching responsibilities will include restoration ecology, community and habitat restoration, community or landscape ecology, plant diversity and/or general ecology, and other undergraduate and graduate courses as appropriate to background and training. Experience in field applications of habitat restoration, habitat fragmentation, GAP analysis, and/or GIS is desirable.

The successful candidates must have a strong commitment to undergraduate teaching, curriculum development, and implementation of a student-centered research program. Ph.D. in related field required at time of hiring. Postdoctoral or equivalent experience desirable. Salary is commensurate with qualifications and experience. Review of applications will begin November 15, 2002; applications received after this date may still be considered. Applicants should submit curriculum vitae, statement of teaching philosophy, statement of professional goals, Cal Poly Faculty Applicant Information form, and arrange to have official graduate transcripts and three letters of recommendation sent to: **Dr. V. L. Holland, Chair, Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA 93407**. Please refer to Recruitment Code Number 4519 (Animal Geneticist) or Recruitment Code Number 4521 (Restoration Ecologist) on all correspondence. **Telephone: 805-756-5241; e-mail: rwagner@calpoly.edu** with your mailing address to request a Cal Poly Faculty Applicant Information form. For more information, visit our [website: http://www.bio.calpoly.edu](http://www.bio.calpoly.edu).

Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of all qualified individuals. Equal Employment Opportunity Employer.

IMMUNOLOGIST/MICROBIOLOGIST

Tenure-track **ASSISTANT PROFESSOR**, Ph.D. in biology, immunology, microbiology, or an appropriate subdiscipline in biology completed by July 31, 2003. Graduate coursework in immunology and microbiology and research experience in immunology or microbiology required. Preference given to applicants with research experience in immunology and experience in microbiology. A strong commitment to college teaching, prior teaching at the college level, and experience working with diverse groups desired. Duties: teaching undergraduate and graduate courses in immunology, teaching general microbiology, teaching introductory biology courses, engaging in scholarly activities, advising, supervising undergraduate and Master's research, serving on Department and University committees, and engaging in community service. Duties may also include participation in Department and University programs designed to recruit and retain students in science. Submit curriculum vitae, all transcripts, names and telephone numbers of three references, statements of teaching and scholarly interests. Applicants must also have three letters of recommendation sent to: **Mary Ann Reihman, Chair, Biological Sciences, California State University, Sacramento, CA 95819-6077**. **Website: <http://www.csus.edu/bios>**. To ensure consideration, applications should be received by December 2, 2002; position open until filled. *Affirmative Action/Equal Employment Opportunity.*

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UNIVERSITY OF REGINA

**Faculty of Science
Canada Research Chair**

The Faculty of Science invites applications for a Tier II Canada Research Chair to be appointed at the rank of Assistant Professor (tenure-track) on July 1, 2003. We seek expertise in the general area of energy and the environment, with specialization in biogeochemistry, fuel or environmental chemistry, prairie ecosystems or climate change. Candidates must be emerging researchers (2-6 years from a Ph.D.) with the potential to achieve international recognition as a leader in their fields in five to ten years. The successful candidate is expected to provide leadership in research-related activities, including teaching, graduate supervision, and the development of collaborative research initiatives.

Infrastructure support includes the new Environmental Quality Analysis Laboratory (<http://uregina.ca/eqal/>) and the Petroleum Technology Research Centre, both located at the University of Regina, as well as the Canadian Light Source Facility in Saskatoon.

Applications must include a curriculum vitae, a research plan, and the names and addresses of three referees. The closing date for applications is December 15, 2002.

Further information about the Faculty of Science and Canada Research Chairs can be viewed at www.uregina.ca/science and www.chairs.gc.ca.

The University of Regina is committed to employment equity and welcomes diversity in the workplace. Applications are encouraged from all qualified individuals, including women, members of visible minorities, aboriginal persons, and persons with disabilities.



**UNIVERSITY OF
REGINA**

Contact Information:

S. D. Wilson • Assistant Dean of Science (Research)
University of Regina, Regina, Saskatchewan
S4S 0A2, Canada • E-mail: scott.wilson@uregina.ca



**Pharmaceutical
R&D Opportunities
in India**

Nicholas Piramal India Ltd. (NPIL) is a Rs. 1600 crore value-based, world-class healthcare company that has grown to become India's No. 2 by acquiring the Indian operations of Nicholas Labs, Roche, Boehringer Mannheim, Rhone Poulenc & ICI Pharma, as well as through partnerships with leading global companies. Our R&D centre, with 30 years of international standing, was acquired from Aventis. Located in Mumbai, and now rechristened Quest Institute of LifeSciences (QILS), the centre is staffed by top-notch R&D professionals and provides a stimulating interdisciplinary work-environment with state-of-the-art research infrastructure. We are engaged in major R&D initiatives in New Drug Discovery, Herbal Drugs, Chemical Process Development, Genomics, Formulation Development and Clinical Research.

To strengthen the efforts in New Drug Discovery Research and Herbal Drug Research at QILS, we are looking for committed researchers to take up challenging responsibilities in the following areas of expertise / specialisation:

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**COLUMBIA UNIVERSITY
Department of Pathology
CELL BIOLOGIST**

Tenure-track faculty positions at the junior and senior level are available. Areas of interest include light and electron microscopic **imaging**, cell **motility**, **membrane trafficking**, cellular **neurobiology**, **virology**, cell biology of **disease** genes, and **cell cycle** regulation, though candidates with expertise in other aspects of normal and abnormal cell biology will also be considered. Ph.D. or M.D. degree required.

Candidates should submit one copy of c.v. with 2-page-maximum summary of research background and plans, and have 3 letters of reference submitted to Richard Vallee, Ph.D., Department of Pathology, Division of Cell and Molecular Biology, Columbia University, College of Physicians and Surgeons, Room 15-409, 630 West 168th Street, New York, NY 10032.

Deadline for submissions is **December 1**, but applications will be evaluated as they are received. Additional information may be obtained at <http://pathology.cpmc.columbia.edu/academic.html>.

We are an affirmative action, equal opportunity employer.

POSITIONS OPEN

FACULTY POSITION IN BIOLOGY Joint Science Department The Claremont Colleges

The Joint Science Department of Claremont McKenna, Pitzer, and Scripps Colleges seeks a broadly trained Cell Biologist for a tenure-track position. Preferred area of interest includes but is not limited to immunology. Appointment will be made at the ASSISTANT PROFESSOR level to begin July 2003. Teaching responsibilities will include participation in our introductory biology sequence, a course for non-science majors, and advanced undergraduate courses including cell biology with laboratory. The successful candidate will be expected to sustain an active research program involving undergraduates. A Ph.D. degree, prior teaching experience, and a record of scholarly publication are required. Postdoctoral experience is preferred.

The Biology program is part of the Joint Science Department ([website: http://www.jsd.claremont.edu](http://www.jsd.claremont.edu)), an interdisciplinary department that serves three selective liberal arts colleges in The Claremont Colleges consortium. The Joint Science faculty consists of 12 Biologists, seven Chemists, and four Physicists. The Department offers major programs in these fields and various interdisciplinary topics.

Send curriculum vitae, statements outlining teaching interests and philosophy, and a statement of research interests to: **Dr. Robin Justice, W. M. Keck Science Center, 925 North Mills Avenue, Claremont, CA 91711. E-mail: rjustice@jsd.claremont.edu.** Arrange to have three letters of recommendation sent to the same address. Review of applications will begin on November 4, 2002, and continue until the position is filled.

In a continuing effort to enrich its academic environment and provide Equal Educational and Employment Opportunities. The Claremont Colleges actively encourage applications from women and members of historically underrepresented social groups in higher education.

CHAIR/DEPARTMENT OF CELL BIOLOGY AND ANATOMY Announcement of Search

The University of Miami School of Medicine invites nominations and applications for the position of Chair in the Department of Cell Biology and Anatomy. Candidates should lead a nationally recognized, well-funded research program in an area of cell biology and should have exceptional leadership skills and the ability to recruit and develop an outstanding faculty. Candidates should also be accomplished in teaching in a medical school environment. The Department participates in the first-year curriculum for medical students. It offers a Ph.D. program in molecular, cell, and developmental biology; contributes to interdisciplinary biomedical studies programs; and is expected to collaborate with other areas of the University. This position represents an excellent opportunity to build a thriving department dedicated to excellence in research and education.

Interested parties should submit curriculum vitae, statement of future research plans, and the names and addresses of four references to:

W. Dalton Dietrich, Ph.D.
Chairman, Search Committee
The Miami Project to Cure Paralysis
University of Miami School of Medicine
P.O. Box 016960 (R-48)
Miami, FL 33101
Telephone: 305-243-2297
FAX: 305-243-3207
E-mail: ddietrich@miami.edu

The University of Miami is building a culturally diverse faculty and strongly encourages applications from women and minority candidates. The University of Miami is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION Clinical Molecular Genetics

The Center for Human Genetics and Munroe-Meyer Institute at the University of Nebraska Medical Center are inviting applications for an ABMG Board-certified/Board-eligible **CLINICAL MOLECULAR GENETICIST**. The Center for Human Molecular Genetics has a research priority for the identification of genes and characterization of mutations affecting complex developmental and neurosensory disorders and/or neoplastic disease; the Munroe-Meyer Institute has a strong program in clinical genetics and clinical cytogenetics to complement such research endeavors. The individual filling this position will develop clinical molecular tests for genetic disorders; interact with the current genetics faculty in the development of postgraduate training programs; and maintain an active, extramurally funded research program. Salary and position will be commensurate with experience and qualifications. Information regarding existing clinical and research programs at the Munroe-Meyer Institute and the University of Nebraska Medical Center can be found at [websites: http://www.unmc.edu/mmi](http://www.unmc.edu/mmi), <http://www.unmc.edu/services/geneticslab>, and <http://www.unmc.edu/2/research/research.htm>.

Applicants should send curriculum vitae a brief description of his/her research strengths, and three letters of reference to:

Shelley D. Smith, Ph.D., FACMG
Professor of Pediatrics
Interim Director, Center for Human
Molecular Genetics
Munroe-Meyer Institute, UNMC
985455 Nebraska Medical Center
Omaha, NE 68198-5455

ASSISTANT PROFESSOR ANIMAL PHYSIOLOGIST MARINE MICROBIOLOGIST

The Department of Biological Sciences at University of North Carolina at Wilmington invites applications for two tenure-track positions beginning in August 2003. Candidates in any subdisciplines of the areas of animal physiology and marine microbiology are encouraged to apply. Duties will include undergraduate teaching, maintaining an active research program, and directing graduate students. Candidates must have a Ph.D. and postdoctoral experience. A state-of-the-art science building and the recently completed Center for Marine Science provide excellent support for terrestrial and marine research. For additional information, see [websites: http://www.uncwil.edu/bio](http://www.uncwil.edu/bio) and <http://www.uncwil.edu/cmsr>. Send curriculum vitae, a brief research and teaching statement, copies of all transcripts, the names of three references, and selected reprints to: **Neil Hadley (Animal Physiology) or Joe Pawlik (Marine Microbiology), Department of Biological Sciences, University of North Carolina at Wilmington, Wilmington, NC 28403-3297.** Application materials received by November 8, 2002, will receive priority consideration but applications will be accepted until the position is filled. *UNC Wilmington is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.*

ASSISTANT PROFESSOR, microbiology (environmental emphasis), Mansfield University. Tenure-track for fall 2003. Teach microbiology for health sciences and general biology for nonmajors. Ph.D. in biology or related field required for tenure. A.B.D. considered (Doctorate required for continued employment). Complete job posting at [website: http://www.mnsfld.edu/depts/resource/F708.htm](http://www.mnsfld.edu/depts/resource/F708.htm). Submit curriculum vitae; statement of teaching philosophy and research interests; copies of undergraduate/graduate transcripts; and names, addresses, telephone numbers, and e-mail addresses of three references to: **F708, 111 Alumni Hall, Mansfield University, Mansfield, PA 16933.** Postmark deadline: January 10, 2003. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

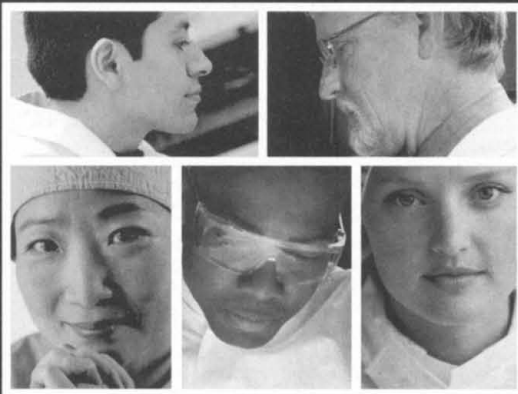
TENURE-TRACK FACULTY POSITION Aquatic Animal Health

The Department of Pathobiological Sciences (PBS) at the Louisiana State University School (LSU) of Veterinary Medicine invites applications for a tenure-track position in aquatic animal disease for August 2002. Applications are sought from candidates with research interests that strengthen or complement the research within the Cooperative Aquatic Animal Health Research Program (CAHRP) in the areas of immunology, microbiology, or pathology. The successful candidate will teach graduate and veterinary students in aquatic animal health and in a collateral basic science area and participate as a diagnostician in the Louisiana Aquatic Animal Diagnostic Laboratory. The Department has excellent aquatic animal wet laboratory facilities and houses modern research laboratories enhanced by centralized core facilities for nucleic acid sequencing, hybridoma production, flow cytometry, quantitative PCR and microarray analyses, laser capture microdissection, and fluorescence and electron microscopy. The Department also has close ties with the Aquaculture Research Facility in the LSU Agricultural Center. More information on the Department is available at [website: http://www.vetmed.lsu.edu/pbs/](http://www.vetmed.lsu.edu/pbs/) or contact: **Dr. Ron Thune, PBS Department Head; Telephone: 225-578-9680; e-mail: thune@mail.vetmed.lsu.edu.**

Applicants must possess a Ph.D. in an area related to aquatic animal disease pathogenesis at the cellular and/or the molecular level. Applicants with a D.V.M. degree and/or postdoctoral training related to molecular pathogenesis are preferred. Highly competitive salary and start-up packages are available for qualified applicants. Appointment will be at the ASSISTANT or ASSOCIATE PROFESSOR levels depending on experience. Interested candidates should submit curriculum vitae; a statement of research interests along with future research goals; and the names, postal and e-mail addresses, and telephone numbers of at least three references to the address below. Review of the applications will begin on September 15, 2002, and will continue until the position is filled. Submit application to: **Dr. Richard Cooper, Search Committee Chair, Department of Pathobiological Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803.**

PSYCHOLOGY/BEHAVIORAL NEUROSCIENCE 2002 Job Advertisement

ASSISTANT PROFESSOR in psychology/behavioral neuroscience beginning fall 2003. The Department of Psychological and Brain Sciences at Dartmouth College plans to make a tenure-track appointment at the rank of Assistant Professor (with opportunity for a senior appointment under special circumstances). The successful candidate is expected to provide high-quality teaching at the undergraduate and graduate level and to have exhibited excellence in independent research. Applications from candidates using animals as an experimental model in any area broadly defined as behavioral neuroscience are welcome. Current areas of research include learning/memory, spatial cognition, hormones/behavior, and sensory/motor integration. Behavioral neuroscience is one of several areas of expertise within the Department that focuses on experimental psychology. The Department is housed in a new state-of-the-art research and teaching facility that includes excellent space for animal research. Please send a letter of application stating your research interests, curriculum vitae, two to three representative journal reprints or manuscripts, and arrange for three letters of recommendation to be sent to: **Jeffrey Taube, Chair, Behavioral Neuroscience Search Committee, Dartmouth College, Department of Psychological and Brain Sciences, 6207 Moore Hall, Hanover, NH 03755.** Review of applications will begin November 1, 2002. *With an even distribution of male and female students and over a quarter of the undergraduate student population from minority groups, Dartmouth is committed to diversity and encourages applications from women and minorities. Dartmouth College is an Equal Opportunity/Affirmative Action Employer.*



DIVERSITY

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¹ *Science* June 2002 BPA Publisher's Statement.

² *Science* Harvey Research Readership surveys: 14 January 2000, 4 February 2000, 4 June 1999 (Japan) as applied to *Science* June 2002 BPA Publisher's Statement, publisher's own data.

POSITIONS OPEN

ASSISTANT PROFESSOR AQUATIC BIOLOGIST Wright State University

The Department of Biological Sciences at Wright State University invites applications for a tenure-track Assistant Professor position in aquatic biology. To best complement current strengths in our Department, preference will be given to those specializing in aquatic community ecology, fish biology, or aquatic toxicology. Research approaches ranging from organism biology to molecular biology will be considered. Candidates must have a Doctorate by the job start date and postdoctoral experience is preferred. We expect the successful candidate to establish an externally funded research program and to teach aquatic biology core courses and an advanced specialty course. The candidate will also be expected to participate in a new interdepartmental Doctoral program in environmental sciences. We offer undergraduate programs in biology, environmental health, exercise science, and medical technology; M.Sc. programs in biology and environmental sciences; and we participate in a Doctoral program in biomedical sciences. Wright State University is ideally located for studies in aquatic biology with easy access to collaborative studies with a variety of aquatic habitats and collaborating institutions. More information about our Department can be found at [website: http://biology.wright.edu](http://biology.wright.edu). Applications including curriculum vitae, names and e-mail addresses, contact information for three references, and statements of research and of teaching interests should be sent to: **Aquatic Biology Search Committee, Department of Biological Sciences, Wright State University, Dayton, OH 45435-0001**. Review of applications will begin on December 1, 2002, and continue until the position is filled. *Wright State University is an Equal Opportunity/Affirmative Action Employer. Candidates from groups underrepresented in academic science are strongly encouraged to apply.*

The Biology Department at Grand Valley State University is seeking a **PLANT MOLECULAR BIOLOGIST** (tenure track) to join an interdisciplinary faculty and rapidly expanding program. Teaching responsibilities will include cell and molecular biology (team taught) and introductory biology. Opportunities exist for new course development. Successful candidates will be broadly trained Biologists with a Ph.D. and interest and experience in approaching problems in plant biology from a molecular perspective. Preference will be given to candidates who have demonstrated success in teaching and research involving undergraduates. Excellent communication skills are required. A complete application consists of an application letter; curriculum vitae; unofficial transcripts; statements of teaching and research interests, goals, and expectations; and names and addresses of three references. Review of candidate files will begin 11 November 2002. Applications will be accepted until the position is filled. Submit materials to: **Dr. Patrick A. Thorpe, Chair, Plant Molecular Biology Search Committee, Biology Department, Grand Valley State University, Allendale, MI 49401-9403**. E-mail: thorpep@gvsu.edu; Telephone: 616-895-3175; FAX: 616-895-3446; [website: http://www.gvsu.edu/biology](http://www.gvsu.edu/biology). *Grand Valley State University is an Affirmative Action/Americans With Disabilities Act/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

SENIOR SCIENTIST

AmCytte, Inc., a leader in cell/tissue transplantation, is seeking highly qualified individuals to conduct cell biology, molecular biology, and biochemistry research related to the growth and differentiation of pancreatic cells to develop cell therapies for the control of diabetes and its complications. Must possess Ph.D. in cell biology or related field. AmCytte is privately held and well financed. The Company operates in a modern, spacious, and well-equipped facility located in Santa Monica, California. We offer a competitive salary and benefit package. Interested candidates should contact us via e-mail: hrcodel23@amcyte.com; FAX: 310-453-6178.

POSITIONS OPEN

ASSISTANT PROFESSOR OF GENOMICS College of Agricultural Sciences and Life Sciences Consortium Pennsylvania State University

Tenure-track position available for an Assistant Professor of genomics with a starting date of May 1, 2003, or as negotiated. This position has a 75% research and 25% teaching responsibility. Research responsibilities involve the integration of functional genomics into the study of mammalian biology. Experience in the investigation of the regulation and function of genes using state-of-the-art technology is required. Demonstrated competence in expression profiling and/or comparative genomics is desirable. The successful applicant is expected to develop an internationally recognized, extramurally funded research program that focuses on basic science issues of relevance to mammalian development. Use of experimental animal systems for the functional analysis is desirable. The study of food animal genomics is encouraged but other areas of focus will be considered. Exciting opportunities exist for interacting with colleagues in the Department, the Life Sciences Consortium, and the newly formed Genome Study Center. The Teaching component will involve undergraduate and graduate teaching in the areas of genomics, mammalian development, animal biotechnology, or the candidate's expertise. Applicants must have a Ph.D. in animal science, molecular biology, genetics, or related discipline and a minimum of two years of postdoctoral training. A demonstrated ability to procure external funding is desirable. Salary is competitive and commensurate with background and experience. An attractive benefits package is available. Submit letter of application, curriculum vitae, academic transcripts, a statement of research and teaching interests, and have three professional reference letters sent to: **Dr. C. S. Shashikant, Chair, Search Committee, Department of Dairy and Animal Science, Position Number S-14338, 324 Henning Building, The Pennsylvania State University, University Park, PA 16802**. Application deadline: December 1, 2002, or until a qualified candidate is identified. *Affirmative Action/Equal Opportunity Employer.*

INTEGRATED SCIENCE. ASSISTANT/ASSOCIATE PROFESSOR (tenure track). Applicants must possess a Ph.D. in one of the following: biology, chemistry, geology, physics, or science education. The academic appointment will be in the science department that most closely matches the person's academic background. Teaching responsibilities will include integrated science courses for preservice science teachers and courses in one's area of expertise. Preference will be given to candidates who present evidence of demonstrated success in teaching science and integrated science courses. Excellent communication skills are required. A complete application consists of an application letter; curriculum vitae; unofficial transcripts; statements of teaching and research interests, goals, and expectations; and names, telephone, and e-mail addresses of three references. Review of candidate files will begin November 18, 2002. Applications will be accepted until the position is filled. Submit materials to: **Paul A. Huizenga, Chair, Integrated Science Education Search Committee, Biology Department, Grand Valley State University, 1 Campus Drive, Allendale, MI 49401-9403**. E-mail: huizengp@gvsu.edu; Telephone: 616-895-2472; FAX: 616-895-3446; [website: http://www.gvsu.edu/biology](http://www.gvsu.edu/biology). *Grand Valley State University is an Affirmative Action/Americans With Disabilities Act/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

POSTDOCTORAL POSITION to study apoptosis regulation in prostate cancer cells in available for an enthusiastic Ph.D. Scientist. Desire to work independently; background in protein biochemistry, molecular biology, tissue culture, and animal models is a plus. Send research interests, curriculum vitae, and three references to: **Dr. George Kulik, Department of Cancer Biology, Medical Center Boulevard, Winston-Salem, NC 27103**. E-mail: gkulik@wfubmc.edu. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

TEMPLE UNIVERSITY, Department of Mechanical Engineering, **ASSISTANT/ASSOCIATE/FULL PROFESSOR** positions. As part of a major faculty recruitment effort in the College of Engineering at Temple University, the Department of Mechanical Engineering is searching for outstanding individuals to join the Department as tenured or tenure-track faculty. The College has developed a graduate program in bioengineering, and new faculty in mechanical engineering will be expected to be instrumental in contributing to this program. Individuals are being sought with expertise in the areas of biomechanics, bio-Mems, nanotechnology, design, or modeling but outstanding candidates in other bioengineering subspecialties will also be considered. Successful candidates are expected to have a Ph.D. degree in mechanical, materials, or bioengineering and to have or to be able to develop significant research programs and provide effective instruction at both undergraduate and graduate levels in mechanical engineering. Opportunities exist for collaboration with outstanding faculty in the School of Medicine and the College of Science and Technology. Joint courtesy appointments are possible. Salaries for new faculty are highly competitive and resources have been allocated for start-up. The College of Engineering offers Bachelor's, Master's, and Ph.D. degrees in mechanical, electrical and computer, and civil engineering. Applicants should submit curriculum vitae, a representative publication, a statement of research interests and plans, a description of teaching philosophy, and the names and addresses of four individuals who may be contacted for references. Materials should be sent to: **Search Committee Chair, Office of the Dean, College of Engineering, Temple University, 1947 North 12th Street, Philadelphia, PA 19122**. Information about Temple University is available at [website: http://www.temple.edu](http://www.temple.edu).

Temple University is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from women and minorities.

The Department of Biology at the University of Colorado at Colorado Springs (UCCS) invites applications for a tenure-track **ASSISTANT PROFESSOR** position in cell biology beginning August 2003. The Department has strong academic and research programs in metabolism, biochemistry, molecular biology, cell biology, physiology, and immunology. Candidates should have a Ph.D. in cell biology with postdoctoral experience. The successful candidate will be expected to develop a strong, externally funded research program; teach at the undergraduate and graduate levels; and direct graduate students. Teaching responsibilities include undergraduate cell biology. Review of applications will begin December 2002 and continue until the position is filled. Please submit curriculum vitae, statement of teaching philosophy and research objectives, and three letters of reference to: **Dr. Robert Melamede, Chair, UCCS, Bio-SB1, Colorado Springs, CO 80918**. Telephone: 719-262-3266; FAX: 719-262-3047; e-mail: rjackson@uccs.edu; [website: http://www.uccs.edu](http://www.uccs.edu). *The University of Colorado is an Equal Opportunity/Affirmative Action Employer and encourages a diversity of applicants.*

Highly motivated **SENIOR RESEARCH SPECIALIST** being sought to work on reproductive development of trees. Primary responsibilities include construction of gene expression cassettes and characterization of transgenic plants. Experience in manipulation of DNA, especially PCR and ligation aspects of gene construction, is essential. Experience with plants useful but not necessary. Master's degree in molecular genetics or a related field or Bachelor's degree plus two years of minimum relevant experience. To apply, send résumé listing educational background and qualifications plus three letters of reference to: **Position Number ARB0002, ArborGen, Box 840001, Summerville, SC 29484-8401**. Applications will be considered until November 1, 2002, or until a suitable applicant is found. *Equal Opportunity Employer.*



**POSTDOCTORAL RESEARCH FELLOW
Transplantation Biology and
Department of BMB
Rochester, Minnesota, U.S.A**

Applicants must have a Ph.D. and/or M.D. and should have experience in the fields of developmental and cell biology, genetics, signal transduction, molecular biology, biochemistry or genomics. Experiences with *Drosophila* forward and reverse genetic screens, genetics and microinjection, and mutant characterization is required or highly desired.

Salary will be determined by the successful candidate's experience. There is an attractive benefit package. Mayo Clinic is a not-for-profit organization. Mayo integrates research with clinical practice and education in a multi-campus environment. For further information please visit <http://www.mayo.edu/research/>.

Applications, including curriculum vitae and bibliography, summary of past accomplishments, and the names of three references, should be sent to:

Dr. Amy H. Tang
Assistant Professor of Surgery and BMB
Transplantation Biology & Department of BMB
Medical Sciences Bldg. 2-85
200 First Street SW
Rochester, MN 55905
Tel: 507-538-0313; Fax: 507-284-4957
tang.amy@mayo.edu

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

**Department of Health and Human Services
National Institutes of Health
National Institute on Aging**



With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research institutes.

The National Institute on Aging (NIA), a major research component of the NIH and the DHHS, is recruiting for a **Bioinformaticist** for a **Staff Scientist** position at Developmental Genomics and Aging Section (DGAS), Laboratory of Genetics (LG). The incumbent will be responsible for broad bioinformatics needs of the Section, assist and advise the Chief, DGAS, and provide high-level technical and conceptual expertise to achieve the scientific goals of the DGAS. Our laboratory is interested in sequence analyses for the mouse cDNA/EST project, microarray data analysis, and computer simulations of gene networks during mouse development and aging. When required, provides consultation, technical review, and analysis of bioinformatics needs by other groups in the LG and other NIA offices, as well as other collaborating research scientists outside of NIH. The candidates must have extensive knowledge and experience in statistics with particular emphasis on biological applications, computer science, including ability to write scripts/programs, large-scale computer simulations of biological systems, and biological sciences with the emphasis of molecular and cellular biology, genetics, and population biology. The successful individual will possess a Ph.D. in one of these relevant areas.

Please send a curriculum vitae and three letters of recommendation to the **National Institute on Aging, Gerontology Research Center, Human Resources Office, Vacancy #NIA-02-040, 5600 Nathan Shock Drive, Room 1D09, Baltimore, MD 21224**. Applications must be postmarked no later than **October 30, 2002**. For application procedures and questions, applicants should call **410-558-8116**.



HHS and NIH are Equal Opportunity Employers



**CORNELL UNIVERSITY
Weill Medical College**

**Department of
Pharmacology**

The Weill Medical College of Cornell University invites applicants for the position of Assistant Professor in the Department of Pharmacology.

The Weill Medical College is located in Manhattan's Upper East Side, adjacent to the Memorial Sloan-Kettering Cancer Center and the Rockefeller University, and is affiliated with the New York Presbyterian Hospital. This rich scientific environment provides many unique and unparalleled research opportunities.

The primary qualification for the position is a record of research excellence and a high potential for imaginative research in any area of modern biology. The applicant's research program may involve, but is not limited to, chemical biology, molecular biology, cell biology, cancer biology, molecular neuroscience, mechanistic approaches toward genomics or proteomics, structural biology, or computational biology.

Applicants should send a curriculum vitae, a statement of research interests and future research plans, and arrange to have three letters of reference sent to: **Chair, Pharmacology Search Committee, Department of Pharmacology, 1300 York Avenue, Box 70, New York, NY 10021; Fax: 212.746.8858.**

*Equal Opportunity/Affirmative Action
Minorities/Females/Disabled/Veterans*

**NEW JERSEY
MEDICAL SCHOOL**

**ASSOCIATE OR FULL
PROFESSOR**

Qualified individuals are invited to apply for a tenure tract position at the level of Associate or Full Professor in the Department of Cell Biology and Molecular Medicine at the University of Medicine and Dentistry of New Jersey-New Jersey Medical School. The successful candidate will help to create the department's basic science cancer biology program. Candidates should have a distinguished scientific record with demonstrated scientific leadership and experience in academic administration in a research university setting. A thorough understanding of federal and corporate funding opportunities, demonstrated experience in the development of collaborative research ventures, and sensitivity to the research needs of the wide variety of disciplines represented at major research universities are also expected. Salary will be commensurate with background and experience.

Interested applicants should send their CV together with a publication list and three letters of recommendation to: **Chair, Department of Cell Biology and Molecular Medicine, UMDNJ, New Jersey Medical School, 185 S. Orange Avenue, MSB G609, PO Box 1709, Newark, New Jersey 07101-1709**. UMDNJ is a AAEO Employer. M/F/D/V.



**NEW JERSEY
MEDICAL SCHOOL**
University of Medicine & Dentistry of New Jersey

**UNIVERSITY OF PITTSBURGH
NAMED PROFESSORSHIP IN
EXPERIMENTAL BIOLOGICAL PHYSICS**

The Department of Physics and Astronomy of the University of Pittsburgh is searching for an established experimental researcher in biological physics to assume a Mellon Professorship. This tenured appointment, which is subject to budgetary approval, would begin with the Fall Term 2003 or thereafter. The successful candidate will have an outstanding record of research accomplishments and will likely have an established record as an educator having demonstrated teaching effectiveness at both the graduate and undergraduate levels. Applicants should also have a demonstrated ability to build and successfully fund a creative, independent and broad-based research program, to provide cohesion with existing efforts and to initiate new directions. Potential for interactions with faculty and researchers in the natural and life sciences, engineering, and the School of Medicine and the Medical Center of the University of Pittsburgh will be considered favorably. The relevant research can be in any area of biology-inspired physics at the interface between physics and biological science. An associated search for a junior faculty member will be constituted as soon as practicable. Please send a curriculum vitae, bibliography, statement of research interests and proposed directions, and a list of references to: **David Jasnow, Chair, Department of Physics and Astronomy, 100 Allen Hall, University of Pittsburgh, Pittsburgh, PA 15260**. Applications should be received before January 1, 2003 to ensure full consideration. Nominations are welcome. *The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer. Women and members of minority groups under-represented in academia are especially encouraged to apply.*

POSITIONS OPEN

NANOSPHERE, INC. is a rapidly growing biotechnology company developing molecular diagnostic systems. Located just north of Chicago, Illinois, we are at an exciting stage in our development and have several open positions for Scientists in the following areas:

PRODUCT DEVELOPMENT SCIENTIST: We are seeking a Ph.D. in microbiology, molecular biology, or equivalent to assume a key role in design, evaluation, development, and optimization of assay protocols and reagents for our nanoparticle-based assay systems. A minimum of three years of industrial experience including project management and supervisory functions in cross-functional teams is required. Strong analytical and problem-solving skills, experience in experimental design and statistical analysis, and formal project and product documentation in a medical IVD environment are highly desirable.

APPLIED RESEARCH SCIENTISTS: We are seeking candidates at all levels with formal training in life science disciplines with significant laboratory experience. For Ph.D.-level candidates, competency in molecular biology and experience with DNA hybridization and/or antibody-based multiplex assay systems is expected. A background in the development of high-sensitivity assays for biomolecule detection involving chemistry and instrumentation as well as a sound background in physical chemistry and image analysis is preferred.

For all applicants, we expect excellent interpersonal, presentation, and communication skills. The ability to work independently as well as cooperatively in a small team environment, evidence of creativity, and the strong desire to make significant contributions intellectually as well as at the bench are critical. Nanosphere offers a competitive salary and benefits package, which includes stock options. Please FAX résumés to **FAX: 847-562-8886** or send via e-mail: **info@nanosphere-inc.com**.

SENIOR STRUCTURAL CELL BIOLOGIST

We seek an outstanding Senior Structural Cell Biologist to fill a tenured faculty position at the rank of **ASSOCIATE** or **FULL PROFESSOR**. This position will be filled by a Scientist with broad interests in using electron microscopic techniques in the study of cells, macromolecules, and/or supramolecular complexes. Preference will be given to candidates with the proclivity to become the Director of the Boulder Laboratory of 3-D Fine Structure (**website: <http://bio3d.colorado.edu/>**), a world-class electron microscopy facility. Interested candidates should submit curriculum vitae, representative recent publications, and the names of three individuals willing to supply a reference if the committee were to inquire. Please send these materials to:

**Structural Cell Biology Search
Department of MCD Biology
University of Colorado
Boulder, CO 80309-0347**

Applications will be reviewed beginning December 1, 2002, and continue until the position is filled.

The University of Colorado at Boulder is committed to diversity and Equality in Education and Employment.

TRINITY COLLEGE: ASSISTANT PROFESSOR IN PSYCHOBIOLOGY. The Department of Psychology seeks to fill a tenure-track position in behavioral neuroscience. Four-fifths of the FTEs of this position are in the Psychology Department with one-fifth in the Neuroscience program. The position will start in August 2003. We are looking for a Ph.D. (or Ph.D. expected) in behavioral neuroscience who will develop and maintain a program of excellent empirical research and who will engage bright, motivated students in the research. The successful candidate will teach courses in biological psychology and neuroscience and will contribute to such service courses as the First-Year Seminar and General Psychology. Send curriculum vitae; a statement of your research and teaching interests; three letters of reference; evidence of teaching effectiveness; and representative research papers to **Dr. William Mace, Department of Psychology, Trinity College, Hartford, CT 06106** before October 15, 2002. Trinity College is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN



NATIONAL PROGRAM LEADER Genomics/Animal Biotechnology

The U.S. Department of Agriculture, Agricultural Research Service, National Program Staff, in Beltsville, Maryland, is seeking a National Program Leader for Genomics and Food Animal Production. The position is responsible for planning, leading, coordinating, and implementing agricultural research programs relating to animal genomics; germplasm improvement and preservation; animal reproduction including gamete biology, molecular biology, or physiology; and animal biotechnology. The position is being offered at the GS-14 and/or GS-15 level. Salary commensurate with experience (GS-14: \$78,265 to \$101,742 per year; GS-15: \$92,060 to \$119,682 per year). *Candidates must be U.S. citizens.* These positions have specific education and experience requirements and factors that must be addressed. In order to ensure submission of a complete application, applicants must request a copy of the announcement by calling: **Telephone: 301-504-1482** or by printing it from the Internet at **website: <http://www.afm.ars.usda.gov/divisions/hrd/hrdhomepage/empopp.htm>** under ARS Job Opportunities (click on Research Scientist Vacancies). The Vacancy Announcement number for this position is **ARS-X2E-3001**. This announcement closes November 4, 2002. *USDA/ARS is an Equal Opportunity Employer and Provider.*

The U.S. Army Natick Soldier Center is seeking applicants for the position of **RESEARCH ANTHROPOLOGIST** (biological anthropology). This exciting research position is responsible for planning and conducting studies in the areas of physical anthropology, anthropometry, morphometry, and human variation. Typical research and development studies relate to the analysis of human size and shape variation and the application of these data to the design and sizing of military clothing and equipment systems. Analyses also relate to the design and development of Army and other Department of Defense material systems with the primary objective of increasing overall personnel accommodation and improving the compatibility and fit of vehicle, aircraft, and weapon systems for all soldiers. The position is located in Natick, Massachusetts. The salary range is \$47,341 to \$56,738 depending upon level of experience. We also offer a competitive benefits package. Interested candidates must respond to the Job Announcement posted at **website: <http://cpol.army.mil>** (select employment search, Army vacancies; request Announcement DBU201870.) Please note that this announcement closes on October 23, 2002. For a copy of the announcement or for additional information on the position, please contact: **Bev Lange; Telephone: 508-233-5107**.

ASSISTANT SCIENTIST POSITION

The Department of Microbiology and Immunology, Indiana University School of Medicine, is seeking a motivated and productive candidate with a Ph.D. or M.D./Ph.D. for the nontenure-track position of Assistant Scientist to work in the area of gene transfer and gene expression. Candidates must have molecular and cell biology, biochemistry, and immunology experience and publications in the area of hematopoietic stem cells and gene transfer. A minimum of seven years of postdoctoral experience is required. Applicants should send their curriculum vitae and contact information for three references to: **Dr. Hal E. Broxmeyer, Chairman and Professor, Department of Microbiology and Immunology, Scientific Director, The Walther Oncology Center, Indiana University School of Medicine, 635 North Barnhill Drive, Room 420, Indianapolis, IN 46202-5120**. Indiana University is an Affirmative Action/Equal Opportunity Employer; Minorities/Females/Disabled.

POSITIONS OPEN

TWO RESEARCH POSITIONS

**Bone and Joint Center
Department of Orthopaedic Surgery
Henry Ford Health System**

HEAD, BIOCHEMISTRY: Qualifications include completion of a Ph.D. in biochemistry, cell biology, or molecular biology that is related to some aspect of the musculoskeletal system.

SOFT TISSUE MUSCULOSKELETAL RESEARCH: Qualifications include a Ph.D. in bioengineering, biology, anatomy, or a related field with an emphasis on the biological and mechanical behavior of musculoskeletal soft tissues *in vivo*. Experience in motion analysis desirable.

The successful applicants will join a multidisciplinary team of five independently NIH-funded investigators with complementary programs examining various aspects of the musculoskeletal system. Clinical collaborations are with a strong, active orthopaedics group. The research team has expertise in motion analysis, biomechanics, musculoskeletal modeling, computational mechanics, animal models, anatomy, cell biology, histology, biochemistry, and molecular biology. The Center houses a unique stereo X-ray system designed for human *in vivo* measurement of bone, joint, and soft tissue dynamics at rates up to 1,000 images per second.

The applicants will be expected to develop independent, NIH-funded research programs and to participate in the research of other Investigators in the Bone and Joint Center. Preference will be given to applicants with postdoctoral experience and demonstrated strong research potential.

Applicants should send their résumé, a statement of their current and long-term research goals, and the names and addresses of three references to the address below. Consideration of applicants will continue until the positions are filled. **David P. Fyhrie, Ph.D., Director of Research, Bone and Joint Center, E and R 2015, Department of Orthopaedic Surgery, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202. Telephone: 313-916-3591; FAX: 313-916-8064; E-mail: fyhrie@bjc.hfh.edu.**

Henry Ford Health System is an Equal Opportunity Employer.

Physicians' Education Resource is searching for an **ASSISTANT PUBLISHING MANAGER/MEDICAL WRITER** to join its team. Candidates will assist in the management of a team of Editors as well as help manage the team's critical publishing timelines. In addition, candidates will create original content, review literature for the most up-to-date information in cancer research, select art, and read and edit medical newsletters for content. Qualifications include a Ph.D. in a biomedical science or a Pharm.D. Experience in medical publishing and management would be a plus. We offer medical/dental/life/401(K) plans. Send résumé and salary requirements to: **Barb Schmaedeke, Human Resources Manager, 3535 Worth Street, Number 4802, Dallas, TX 75246. E-mail: barbaras@baylorhealth.edu. We are an Equal Opportunity Employer.**

DEVELOPMENTAL BIOLOGIST

Rhodes College Biology Department seeks applicants for a one-year sabbatical replacement position in cellular developmental biology beginning August of 2003. Candidates must have a Ph.D. and a strong interest in teaching at the undergraduate level. Teaching responsibilities will include an upper-level course in the cellular mechanisms of development and participation in the introductory biology sequence. Applicants should submit a letter of application; curriculum vitae; statements of teaching philosophy and research goals; and three letters of recommendation by December 15, 2002, to: **Dr. Chuck Stinemetz, Department of Biology, Rhodes College, 2000 North Parkway, Memphis, TN 38112**.



7 FACULTY POSITIONS IN NEUROSCIENCE, MOLECULAR BIOLOGY, MICROBIOLOGY AND BIOTECHNOLOGY

As part of campus initiatives in neurosciences, molecular biology and biotechnology, the Department of Biological Sciences invites applications for 7 faculty positions. Candidates should hold a Ph.D., develop extramurally funded research and contribute to undergraduate and graduate education (BS, MS and Ph.D.). We seek individuals with expertise in the following areas, which will complement that of the existing faculty:

MOLECULAR GENETICS/GENOMICS
Two Assistant Professors in Eukaryotic Molecular Genetics/Genomics, with interests in areas such as, but not limited to, gene regulation, cellular differentiation and signal transduction.

MOLECULAR NEUROSCIENCE: SIGNAL TRANSDUCTION

Assistant or Associate Professor: with interests in receptor-mediated cell signaling or gene regulation.

BIOTECHNOLOGY MICROBIOLOGY AND MOLECULAR BIOLOGY

4 Assistant or Associate Professors: Applicants should apply for one position, however, the search committee may consider applicants for other positions depending on qualifications and synergy with the existing faculty.

Prokaryotic Molecular Genetics: with interests in genomics, bioinformatics, global gene expression, and studies of basic genetic processes.

Eukaryotic Microbiology: with interest in molecular or genetic analysis of model eukaryotic microorganisms.

Metabolic Biochemistry: with interest in metabolic engineering, protein structure and function, and genomic analysis of metabolism.

Host-Microbe Interactions: with interests in molecular analysis of host-pathogen or symbiotic interactions.

Applications should include a curriculum vitae, a concise statement of research and teaching goals and recent reprints. Please arrange to have three letters of reference, as well as the application sent to: **Chair of the named-position search committee, Department of Biological Sciences, University of Wisconsin-Milwaukee, PO Box 413, Milwaukee, WI 53201.** The review of applications will commence on November 1, 2002 and continue until the positions are filled. More detailed information about these positions, existing faculty and the University may be found at: www.uwm.edu/Dept/Biology/.

The University of Wisconsin-Milwaukee is an EO/AA Employer.

Middle Tennessee State University, the largest unit in the Tennessee Board of Regents System with over 21,000 students, invites applications for five tenure-track positions in Biology. The department offers several degree options for the baccalaureate and master's degrees and is committed to quality classroom teaching as well as faculty involvement in research and service outreach activities. Research responsibilities include directing undergraduate and graduate students, and pursuit of extramural funding. Rank is open for all positions, commensurate with experience, and the doctorate is required by the August 2003 start date. Post-doctoral experience is preferred. Application reviews begin November 11, 2002. Send application letter referencing position number, curriculum vitae, statements of teaching philosophy/research interests, proof of employment eligibility, copies of transcripts, and three current letters of reference to the committee chairs listed below. Official transcripts (not issued to student) of all college work will be required prior to interview. The University is in the process of seeking a Phi Beta Kappa Chapter, and Phi Beta Kappa graduates are encouraged to apply. Information on Middle Tennessee State University can be found at <http://www.mtsu.edu>.

Cell Biology/Physiology - Teaching responsibilities may include Cell and Molecular Biology, Human Anatomy/Physiology, and Introductory Biology. Position #103040, **Dr. Gore Ervin, Committee Chair, Box 60, MTSU, Murfreesboro, TN 37132.** Additional information: E-mail mervin@mtsu.edu.

Clinical Microbiology - Teaching responsibilities may include Clinical Microbiology, General Microbiology, and Introductory Biology. Position #103170, **Dr. Wayne Rosing, Committee Chair, Box 60, MTSU, Murfreesboro, TN 37132.** Additional information: E-mail wrosing@mtsu.edu.

Marine Biology - Teaching responsibilities may include Marine Biology, Ecology, and Introductory Biology. The successful candidate is expected to have or develop a working relationship with a marine biology field station. MTSU is an affiliate of the Gulf Coast Research Laboratory. Position #103180, **Dr. Dennis Mullen, Committee Chair, Box 60, MTSU, Murfreesboro, TN 37132.** Additional information: E-mail dmullen@mtsu.edu.

Plant Molecular Biologist - Teaching responsibilities may include Genetics, Introductory Biology, and develop a Plant Biotechnology course. The successful candidate will have a broad background in botany with research interests in agricultural and/or non-agricultural plant molecular biology. Position #103370, **Dr. Philip M. Mathis, Committee Chair, Box 60, MTSU, Murfreesboro, TN 37132.** Additional information: E-mail pmathis@mtsu.edu.

Molecular Systematics - Teaching responsibilities may include Genetics, Introductory Biology, and a course in the candidate's area of expertise. The successful candidate will use modern molecular techniques to investigate phylogeny, systematics, and evolution; organismic specialty open. Position #103500, **Dr. Jeffery Walck, Committee Chair, Box 60, MTSU, Murfreesboro, TN 37132.** Additional information: E-mail jwalck@mtsu.edu.

EO/AA/ADA Employer.

Chair Department of Microbiology/ Immunology

The Kirksville College of Osteopathic Medicine (KCOM) is seeking an outstanding scientist and leader to head its Microbiology/Immunology Department starting July 1, 2003. KCOM, the founding college of osteopathic medicine, was established in 1892 in Kirksville, Missouri, a picturesque Northeast Missouri community, and home to Truman State University and KCOM.

Applicants should possess a Ph.D. or equivalent, graduate training in microbiology and/or immunology, or commensurate training and experience, have a strong record of research, including publications and extramural funding, evidence of positive teaching abilities, and a record of administrative experience. This tenure-track position is at the Associate or Professor level, with salary commensurate with the rank and credentials of the successful candidate. The successful candidate will lead the Department, whose faculty are engaged in varied research, teaching medical students, mentoring graduate students, and service to the institution.

Submit a Letter of Application with a current and complete curriculum vitae, including at least 3 references. Experiences and plans not covered in the vitae should be included in the Letter of Application. Mail applications to:

Robert J. Theobald, Jr., Ph.D.
Chair, Microbiology Search Committee
KCOM
800 West Jefferson Street
Kirksville, Missouri 63501

KCOM is an Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH FELLOW

A postdoctoral position is available to work in the area of signal transduction in immune cells and inflammatory diseases. We are looking for an M.D. or Ph.D. with experience in basic techniques of molecular biology and immunology. Familiarity with signal transduction studies is desirable, but not essential.

Forward CV and 3 references to:
National Jewish Medical
and Research Center
Rafeul Alam, M.D., Ph.D.
1400 Jackson St.
Denver, CO 80206
alam@njc.org
AA/EOE

**NATIONAL
JEWISH**
Medical and Research Center

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATES (1) ESTUARINE WETLAND ECOLOGIST: Florida International University is seeking a Wetland Ecologist or Mangrove Ecologist to work in estuarine wetlands of Everglades National Park as part of the FCE LTER program ([website: http://fcelter.fiu.edu](http://fcelter.fiu.edu)). The position is jointly funded through FIU and The Ecology Center, University of Louisiana-Lafayette. The successful applicant should have experience in estuarine wetlands, preferably specializing in mangrove ecology. The position will involve field work, modeling, and data synthesis and will be based in South Florida. (2) **WETLAND ECOSYSTEM ECOLOGIST:** Florida International University is seeking a Wetland Ecosystem Ecologist to conduct synthesis work with the FCE LTER program ([website: http://fcelter.fiu.edu](http://fcelter.fiu.edu)) and other multidisciplinary projects in the Florida Everglades. The successful applicant should have ecosystem-level experience in wetlands or shallow aquatic systems; modeling experience will be helpful.

Salary will be commensurate with experience, and a Ph.D. is required for both positions. Applications will be accepted until positions have been filled. Applicants should send a statement of research interests, curriculum vitae, and three references to: **Daniel L. Childers, Wetland Ecosystem Ecology Laboratory, Department of Biological Sciences and SERC, Florida International University, University Park, OE 167, Miami, FL 33199.** For additional information, contact: **Dan Childers; Telephone: 305-348-3101; e-mail: childers@fiu.edu** or **Robert Twilley; Telephone: 337-482-6146; e-mail: rtwilley@louisiana.edu.**

FIU is an Equal Opportunity Institution that encourages diversity.

DIRECTOR OF THE GENOMICS AND PROTEOMICS FACILITY The University of Oregon

The Biosciences faculty at the University of Oregon is seeking a Director for its Genomics and Proteomics Facility. The Director will instruct and assist users of equipment in the facility, actively participate in the Facility's mass spectrometry/proteomics efforts, and provide overall direction for the Facility. The Director will conduct collaborative research with faculty and students and may also conduct an independent research program as duties allow. Candidates must hold a Ph.D. and have extensive training in mass spectrometry/proteomics or a closely related area and should have experience as a laboratory or unit leader in mass spectrometry/proteomics. Additional experience in one or more of the following areas is also desired: protein chemistry, HPLC and 2-D electrophoresis, genomics, and molecular biology. Interested persons should forward curriculum vitae; a statement of relevant research experience and interests; and arrange for three letters of recommendation to be sent by October 31, 2002, to: **Tom H. Stevens, Director, Genomics/Proteomics Search, Institute of Molecular Biology, University of Oregon, Eugene, OR 97403-1229.**

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

RESEARCH ASSISTANT PROFESSOR

The Toxicology Research Laboratory, a GLP facility at the University of Illinois at Chicago, is seeking a Research Assistant Professor to participate in varied safety assessment studies on new drugs. The individual should have a Ph.D. and a background and/or experience in general toxicology. Additional experience in reproductive and developmental toxicology, molecular biology, and pharmacokinetics would be useful. The individual would also have the opportunity to participate in basic research programs. For fullest consideration, submit curriculum vitae and names of three references by November 11, 2002, to: **Dr. Alex Lyubimov, Toxicology Research Laboratory, Department of Pharmacology (M/C 868), UIC, 1940 West Taylor Street, Chicago, IL 60612. E-mail: lyubimov@uic.edu.** University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

HEALTH SCIENCE SPECIALIST U.S. Department of Veterans Affairs Medical Research Service

Department of Veterans Affairs (VA) is recruiting for the position of Health Science Specialist to be located at VA Central Office, Washington, D.C. The Health Science Specialist will be responsible for administering the scientific review of medical research proposals. Candidates must have a Ph.D. degree with a research background in the etiology, pathogenesis, or treatment of human disease. Experience in human experimentation and grant writing and/or review is desirable. Applicants with IRB experience will receive special consideration. *Applications will only be accepted from U.S. citizens.* Position is at the GS-13 level. Benefits package and limited relocation assistance available. Applicants should send recent curriculum vitae and a letter summarizing research and administrative experience to:

**Director, Medical Research Service (121F)
VA Central Office
810 Vermont Avenue, N.W.
Washington, DC 20420**

Applications will be accepted until November 1, 2002. For further information, contact: **LeRoy Frey, Ph.D.; Telephone: 202-408-3630; e-mail: leroy.frey@hq.med.va.gov.** VA is an Equal Opportunity Employer. Reasonable accommodation will be made for applicants with disabilities.

INSTRUCTOR The University of Texas Southwestern Medical Center at Dallas Nephrology Division

M.D. or M.D./Ph.D. with clinical background and experience in nephrology and basic science experience in renal physiology, biochemistry, and molecular biology. This individual will be expected to work with a Senior Investigator on collaborative projects and supervise Postdoctoral Researchers. Aside from dependent efforts, the individual will be expected to spend time constructing independent projects and to compete for independent funding. For information, contact: **Dr. Orson Moe, Nephrology Division, UT Southwestern, 5323 Harry Hines Boulevard, Dallas, TX 75390-8856. Telephone: 214-648-3152; FAX: 214-648-2071; e-mail: orson.moe@utsouthwestern.edu; website: http://www.swmed.edu/home_pages/nephrology/faculty/moe.html.** UT Southwestern is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR Australian Institute of Bioengineering and Nanotechnology (AIBN) The University of Queensland Brisbane, Australia

We seek to appoint an outstanding individual with an appropriate track record to establish the Institute in its early stages of development. The appointee will take a leading role in promoting the future direction of the AIBN, provide scholarly leadership in the field of tissue engineering and nanotechnology, promote the disciplines of bioengineering and nanotechnology, and develop collaborative links with industry and with other areas of the University. The Director may wish to develop his or her internationally recognized research program as part of the Institute. Visit [web-site: http://www.jobsatUQ.net](http://www.jobsatUQ.net) to obtain a copy of the position description and selection criteria. Applications close: 18 November 2002. Reference Number: 1015279.

SAIC is seeking **MOLECULAR BIOLOGISTS** to assist in the development of microarray-based diagnostics. Candidates must have solid experience with cDNA microarray spotting, hybridization, and analysis. A B.S. or M.S. degree in molecular biology is required with one to five years of experience. Entry-level Ph.D.s with relevant postdoctoral experience will also be considered. Please send résumé with cover letter including minimum salary requirements to email: streshr3@saic.com.

POSITIONS OPEN

EXPERIMENTAL PHYSICIST

JILA, a premier academic research institute administered jointly by NIST and the University of Colorado, is searching for outstanding Scientists at both the senior and junior level. Successful applicants would be expected to establish an internationally recognized research program involving graduate, undergraduate, and postdoctoral students and to participate in departmental teaching responsibilities. Particular interest will be toward candidates applying advanced techniques to exciting new areas of chemical physics and/or biomolecular science, building on JILA's strengths in optical and molecular sciences, laser technology, and precision measurement. More information about JILA can be found at [website: http://jilawww.colorado.edu](http://jilawww.colorado.edu).

Interested persons should send curriculum vitae and a detailed research proposal (two to three pages) as well as arrange for three letters of recommendation to be sent to: **Search Committee, JILA, 440 UCB, University of Colorado, Boulder, CO 80309-0440.** Application review will begin October 15, 2002, and will continue until the position is filled. For further information, contact: **Professor Ellen Zweibel, JILA Chair; e-mail: chair@jila.colorado.edu; Telephone: 303-492-6787.**

The University of Colorado at Boulder and NIST are both committed to diversity and Equality in Education and Employment. U. S. citizenship preferred. JILA has a number of exceptionally successful Researchers from underrepresented groups and encourages applications from women and minority Researchers.

POSTDOCTORAL POSITION(S) available to study topics related to cardiovascular tissue engineering. One area pertains to endothelial biology: adhesion, thrombogenicity, quiescence, and manipulation of phenotype with gene transfer approaches. Background in endothelial biology, molecular techniques, and retroviral constructs necessary. A second area relates to exploiting adult stem cells for tissue engineering purposes; a background in isolation, purification, and manipulation of adult stem cells is necessary. Please respond with curriculum vitae and two references to: **Laura E. Niklason, M.D., Ph.D., Room 136 Hudson Hall, Research Drive at Science Drive, Duke University, Durham, NC 27708. Telephone: 919-660-5149; FAX: 919-684-5777; e-mail: willi154@mc.duke.edu.**

TENURE-TRACK POSITION MRI OF HUMAN BRAIN AT NIH

The intramural program in the National Institute of Neurological Disorders and Stroke, NIH, is searching for a tenure-track Scientist interested in research in neuroimaging using MRI in humans. Outstanding candidates in any area of the neurosciences or neurological disorders that makes significant use of MRI will be considered. The position is associated with the recently formed Laboratory of Functional and Molecular Imaging (LFMI). LFMI has access to outstanding MRI resources including 1.5T, 3T, and 7T MRI systems for humans; a 4.7T MRI system dedicated for nonhuman primates; and a variety of MRI for smaller animals. There is an outstanding cognitive neuroscience environment at NIH and an outstanding environment for neuroimaging studies of a variety of diseases of the central nervous system. Candidates with a strong interest in specific aspects of brain function or disease that can be studied by MRI and/or with interest in development of specific MRI or image processing techniques are particularly encouraged to apply. Interested candidates should send curriculum vitae; statement of research interests, accomplishments, and future goals; and three letters of recommendation to: **Chair, Search Committee for MRI of Human Brain Function, National Institute of Neurological Disorders and Stroke, 10 Center Drive, Building 10, Room B1D118, MSC 1065, Bethesda, MD 20892. E-mail: irelandj@ninds.nih.gov** by January 15, 2003. The National Institutes of Health is an Equal Opportunity Employer.



DIRECTOR
WWAMI Medical Education Program at the University of Idaho, Washington State University,
and the University of Washington School of Medicine

The University of Idaho (UI) and Washington State University (WSU) seek a scholar and educator of exceptional ability to serve as Director of the Program in Basic Medical Sciences at the two universities. The WWAMI (Washington, Wyoming, Alaska, Montana, Idaho) Medical Education Program is operated in cooperation with the University of Washington School of Medicine (UWSOM) and includes education of nearly 40 first-year UWSOM medical students, as well as clinical and outreach programs throughout Idaho and eastern Washington. The Director leads this medical education program at two growing, dynamic, research-oriented universities that are only eight miles apart. Both universities are committed to sustaining an ethnically and culturally diverse community in a stimulating educational environment.

The Director is responsible for administering a first year medical curriculum at the UI and WSU, coordinating the program's curriculum with that of the UWSOM, ensuring a productive research environment for WWAMI faculty at the UI and WSU, guiding and counseling first year medical students, and budgeting of funds allocated to the program from state, private and federal sources. The Director also participates in teaching first year medical school courses, and has the opportunity to continue in his/her own active research and graduate education program. The Director will work closely with the WWAMI clinical education centers in Idaho and eastern Washington, and with the Area Health Education Centers (AHEC) in the two states. Additionally, the Director will continue and extend outreach activities in K-12 programs and pre-medical clinical opportunities. Finally, the Director will work closely with the medical communities, state governors' offices, legislators, and public and private health care organizations in Idaho and Washington. The Director will report to the Offices of the Provost at both the UI and WSU, and have an academic rank and salary that is commensurate with prior experience. He/she will also be an Assistant Dean at the University of Washington School of Medicine, and will report to its Dean through the Associate Dean for Academic Affairs. There, the Director will have an affiliate academic appointment in an appropriate department of the UWSOM. Minimum qualifications include an M.D., Ph.D. or equivalent degree in a basic science related to human medicine, demonstrated excellence in teaching medical students and in research. The successful candidate will also have demonstrated excellence in interpersonal communication, as well as an aptitude for the management of budgets, personnel and other resources. The individual must also have a genuine interest in leading a regional medical education program.

A full position description and list of qualifications may be obtained by contacting a Search Committee Chair, or the UI or WSU WWAMI Office websites at <http://www.its.uidaho.edu/wwami> or <http://www.wwami.wsu.edu>. Nominations and applications are requested. Screening of candidates will begin November 30, 2002, and will continue until the position is filled. Please submit a letter of application, including curriculum vitae with contact information for three references to: **Larry Forney, Ph.D. and Ron Brosemer, Ph.D., Co-Chairs, Director Search Committee, University of Idaho, PO Box 444207, Moscow, ID 83844-4207; Email: lforney@uidaho.edu or xaire@wsu.edu.**

To enrich education through diversity the University of Idaho and Washington State University are Equal Opportunity/Affirmative Action Employers.



The U.S. Environmental Protection Agency (EPA), Office of Research and Development (ORD), National Health and Environmental Effects Research Laboratory (NHEERL), **Gulf Ecology Division (GED)** in Gulf Breeze, Florida, is seeking qualified **Post-doctoral Candidates** for the following projects:

GED-5/1/02-77: Effects of Environmental Stressors on Growth, Reproduction, and Development in Estuarine Fish and Invertebrates. A Ph.D. in Toxicology, Molecular Biology, Biological Sciences or a related field, expertise in molecular biology and molecular techniques is preferred.

GED-5/1/02-78: Assessment of the Interactions and Relationships Among Environmental Stressors and Estuarine Condition. A Ph.D. in Ecology, Biological or Marine Sciences or a related field, and expertise in quantitative ecology, mathematical modeling of environmental data, statistics, or biostatistics is preferred.

GED-5/1/02-84: Assessment of the Effects of Watershed/landscape Characteristics on Estuarine Condition. A Ph.D. in Landscape Ecology, Ecology, Biological or Marine Sciences or a related field, and expertise in quantitative ecology, mathematical modeling of environmental data, statistics, GIS, or landscape analysis is preferred.

GED-5/1/02-85: Modeling of the Population-Level Outcomes of Growth and Reproductive Effects of Contaminants. A Ph.D. in Toxicology, Ecology, Biological or Marine Sciences or a related field, and expertise in the use of ecological and/or simulation models to address ecological problems is preferred.

HOW TO APPLY: Application instructions, full project descriptions, and further information on the U.S. EPA Post Doctoral Program and NHEERL Gulf Ecology Division are available at the following web site:

<http://www.epa.gov/nheerl/postdocs/>

The U.S. EPA is an Equal Opportunity Employer

School of Optometry Biomedical Sciences Faculty Position

The University of Missouri-St. Louis School of Optometry has immediate faculty opening to teach several areas of basic science courses including pathology, microbiology, immunology, histology and physiology. Scholarly/research activity encouraged. Rank/salary commensurate with training and qualifications.

The School of Optometry offers a four-year professional O.D. program, M.S. & Ph.D. graduate programs, post-professional residency programs (<http://www.umsl.edu/~optometry>). UM-St. Louis is a public, metropolitan land-grant institution committed to basic and applied research, teaching and service. With nearly 16,000 students and more than 900 faculty, UM-St. Louis is the largest university in the region (www.umsl.edu). Fortune magazine recently rated the area the nation's third best place to live and work (www.explorestlouis.com).

Positions remain open until filled. Applicants should send a curriculum vita, statement of research & teaching interests, and names/addresses of three professional references to: Maria Taylor, UM-St. Louis, School of Optometry, 8001 Natural Bridge Road, St. Louis, MO 63121 (314) 516-5616.

UM-St. Louis is an equal opportunity employer dedicated to the pursuit of excellence through diversity.



POSITIONS OPEN

Department of Health and Human Services, National Institutes of Health, **POSTDOCTORAL VISITING/RESEARCH FELLOW** through a J-1 VISA (*non-U.S. citizen only*). The Immunogenetics Section of the Department of Transfusion Medicine, Warren G. Magnuson Clinical Center, NIH, has a junior-level research position available for individuals with a Doctoral degree in molecular biology/genetics or biochemistry interested in a research project aimed at the identification of predictors of immune rejection of cancer and/or organ transplants. The field involves the utilization of genomics and functional genomic tools for the identification of polymorphic sequences and/or genetic profiles associated with different pathologic conditions and responses to treatment. Prospective candidates for this two-year award at \$30,000 per year should forward their curriculum vitae and three references to: **Dr. Francesco M. Marincola, Director, Immunogenetics Program, Department of Transfusion Medicine, CC, National Institutes of Health, Building 10, Room 1C711 (MSC 1184), 10 Center Drive, Bethesda, MD 20892. E-mail: fmarincola@cc.nih.gov. NIH is an Equal Opportunity Employer.**

ASSISTANT, ASSOCIATE, FULL PROFESSOR Cell or Evolutionary Biology

The Department of Applied Biology and Biomedical Engineering at Rose-Hulman Institute of Technology invites applications from broadly trained Microbial, Cell, or Evolutionary Biologists for a tenure-track appointment (rank open) to begin August 2003. A Ph.D. and a strong commitment to undergraduate teaching and research are required. Rose-Hulman is a premier independent college of engineering and science. Our program in applied biology is new and evolving. Therefore, a unique opportunity exists for new faculty to help shape our curriculum and overall program of applied biology. More detail about the open position can be found at website: <http://www.rose-hulman.edu/Class/BioMed/ABBE/jobad2002.htm>. Send a letter of application, curriculum vitae, a statement that describes your teaching and research philosophies, and three current letters of recommendation to: **Dr. Lee Waite, CM148, Rose-Hulman Institute of Technology, 5500 Wabash Avenue, Terre Haute, IN 47803.** Review of applications will begin November 1, 2002.

GENETICS/MOLECULAR BIOLOGIST, ASSISTANT PROFESSOR: Northwest Missouri State University, Maryville, Missouri. Ph.D. (or A.B.D.) with an emphasis in genetics and biotechnology. Teaching load with 12-13 hours during the fall and spring trimesters consisting of a combination of introductory genetics, molecular genetics, plant physiology, senior seminar, general biology, and general botany laboratories. Most courses must include hands-on laboratory activities. An interest in establishing undergraduate/graduate research is highly desirable. Other expectations include academic advising, committee work, and other duties as assigned. For complete details, visit website: <http://www.nwmissouri.edu/HR/humanres.html>. Northwest is an Equal Opportunity Employer.

POSTDOCTORAL POSITION, NEURAL/IMMUNE INTERACTIONS. Position available immediately to investigate sympathetic modulation of immune function in aging. Experience working with animals, immunohistochemistry, receptor pharmacology, immunology, and molecular techniques is desirable. Funding is through an NIH grant. Ph.D. or equivalent required, and candidate must be a U.S. citizen or permanent resident. To apply, send curriculum vitae and references with names and addresses to: **Denise Bellinger, Department of Pathology and Human Anatomy, Loma Linda University School of Medicine, 11021 Campus Street, Loma Linda, CA 92399. E-mail: dbellinger@som.llu.edu.**

POSITIONS OPEN

PULMONARY SCIENTISTS AND CLINICIANS

The University of South Alabama College of Medicine has recently announced the formation of an interdisciplinary Center for Lung Biology whose objective is to enhance clinical, translational, and basic research in the pulmonary sciences. As part of this initiative, the Department of Medicine is recruiting three or four Pulmonologists at all academic ranks including a Division Chief to catalyze scientific emergence of the Division of Pulmonary and Critical Care Medicine. Competitive start-up support as well as newly renovated laboratory space within the Center for Lung Biology are available. Suitable candidates will have at least 80 percent of their time protected for research program development. One of the unique attributes of this opportunity is the presence of a number of NIH-funded M.D. and Ph.D. members of the Center who are dedicated to mentoring newly recruited junior faculty to the point where they can secure independent NIH research support. In addition, there are available outstanding, user-friendly core research facilities including microarray, gene delivery, biomedical imaging, transgenic animal, oligonucleotide and macromolecular synthesis, and proteomics laboratories. The College also houses one of the world's largest neotropical primate colonies. Substantial opportunities exist for the development of strategically focused clinical or translational research programs as well. The University has inaugurated an ambitious technology transfer program including the construction of an on-campus research and development park, which may be appealing to entrepreneurially oriented Pulmonary Scientists and clinicians.

The University of South Alabama is located in Mobile, Alabama, along the beautiful Gulf coast. The greater Mobile area boasts close proximity to some of America's most desirable beaches and resort destinations and numerous opportunities for outdoor recreation and cultural enrichment. Additional information can be found at our website: <http://www.southalabama.edu/usahealthsystem/clb>. Direct inquiries and applications to:

John Bass, M.D.
Chairman, Department of Medicine
or
Troy Stevens, Ph.D.
Director, Center for Lung Biology
University of South Alabama
College of Medicine, MSB 3370
Mobile, AL 36688

Affirmative Action/Equal Opportunity Employer.

ENVIRONMENTAL MICROBIOLOGIST: ASSISTANT PROFESSOR. The Department of Biological Sciences at Northern Arizona University (website: <http://www3.nau.edu/biology/>) invites applications for a tenure-track Assistant Professor position. We seek an individual who will establish an independent research program in the broadly defined area of environmental microbiology. The successful applicant will teach environmental microbiology and other courses at the undergraduate and graduate levels and mentor graduate (M.S., Ph.D.) and undergraduate student researchers. Qualifications include a Doctoral degree in a relevant field and at least one year of postdoctoral experience. Please submit curriculum vitae; a description of research interests; a statement of teaching philosophy; a statement that describes your commitment to (and/or evidence of) working effectively with a diverse student, faculty, and staff population; and three letters of recommendation to: **Environmental Microbiology Search Committee, Department of Biological Sciences, South Beaver at Franklin Streets, Northern Arizona University, Flagstaff, AZ 86011-5640.** Position open until filled. Review of applications will begin November 25, 2002. This position is subject to availability of funds. Northern Arizona University is an Equal Opportunity/Affirmative Action Employer. Minorities, women, persons with disabilities, and veterans are especially encouraged to apply.

POSITIONS OPEN

CHAIR, DEPARTMENT OF BIOLOGICAL SCIENCES Wright State University

Wright State University (WSU) College of Science and Mathematics invites applications and nominations for Chair, Department of Biological Sciences. The University is a comprehensive public university with an enrollment of over 16,000. The Biological Sciences Department includes 20 full-time faculty, 500 undergraduate majors, and 40 graduate students. It offers Bachelor's degrees in biological sciences, clinical laboratory science, exercise science, and environmental health and the Master of Science degree in biological science. Faculty and graduate students participate in the interdisciplinary biomedical sciences Ph.D. program and the environmental sciences Ph.D. program. More information about our Department can be found at website: <http://biology.wright.edu>.

The successful candidate will be expected to provide strong leadership in research and undergraduate/graduate education (including science education). Applicants must have a Ph.D., a record of scholarship commensurate with the rank of **FULL PROFESSOR**, and a strong record of funded research. Research in any area of biology will be considered. Opportunities are available for collaboration with basic science and clinical departments within the WSU School of Medicine.

A letter of application; a résumé including brief statements of research interests and administrative philosophy; and names, telephone numbers, and e-mail addresses of at least three references should be submitted to:

**Biology Chair Search Committee
College of Science and Mathematics
134 Oelman Hall
Wright State University
Dayton, OH 45435**

Review of applications will begin November 25, 2002, and continue until the position is filled. Wright State University is an Equal Opportunity/Affirmative Action Employer. The Biological Sciences Department is particularly interested in increasing the number of qualified applicants from groups underrepresented in biology.

CAREER CHEMISTRY LECTURER

The Department of Chemistry and Biochemistry at University of California Santa Barbara seeks applications for a Career Lecturer position with potential security of employment (similar to tenure) within the field of organic chemistry. Duties include (1) instruction in undergraduate organic chemistry lecture and laboratory courses; (2) curricular development and innovation in laboratory courses; (3) training, supervision, and evaluation of organic Teaching Assistants. A Ph.D. degree is required and at least two years of relevant experience is desired. Demonstrated excellence in teaching, interpersonal skills, instrumental methods, and instructional computing is required. Salary is commensurate with experience. Send résumé, a statement of professional interests and teaching perspectives, and three letters of reference to: **Chair, Lecturer Search Committee, Department of Chemistry, University of California, Santa Barbara, CA 93106-9510.** Position is open until filled; however, review of applications will begin December 2, 2002. University of California Santa Barbara is an Equal Employment Opportunity/Affirmative Action Employer.

A position is available immediately to work on research projects involving the regulation of prostate cell adhesion and its therapeutic modulation. A Ph.D. degree in cell biology, molecular biology, or related field is required. Candidates should have a strong background in cell culture techniques and molecular biology. The candidate will pursue research within an NCI-designated Comprehensive Cancer Center in downtown Chicago, Illinois, and in association with a Prostate SPORE program. Qualified and interested candidates should send their curriculum vitae to: **Raymond Bergan, Division of Hematology/Oncology, Northwestern University, Olson 8524, 710 North Fairbanks, Chicago, IL 60611. E-mail: r-bergan@northwestern.edu.**

GRANTS



U.S. Civilian Research & Development Foundation (CRDF)
for the Independent States of the Former Soviet Union

announces the

COOPERATIVE GRANTS PROGRAM

This program allows joint teams of U.S. and former Soviet Union (FSU) scientists and engineers to apply for one- to two-year support for cooperation in any area of civilian research and development in the natural sciences, mathematics, engineering, and biomedical and behavioral sciences.

ROLLING SUBMISSION

Proposals accepted any time beginning October 1, 2002

For a full program announcement and application forms please consult the CRDF website: www.crdp.org or contact CRDF at:

U.S. Civilian Research & Development Foundation
1530 Wilson Boulevard, 3rd Floor
Arlington, VA 22209 USA
Tel: 703-526-9720 • Fax: 703-526-9721
E-mail: cgp@crdf.org
<http://www.crdp.org>

GRANTS

Creating the future of biotech—Together

Invitrogen's Research Tools Development Grants Program provides funding for investigators developing innovative tools for use in life science research, including investigators working in academics, not-for-profit institutions, and for-profit companies. Total funding is US\$5 million per year, with annual individual awards of up to US\$100,000. Grants are provided quarterly; each quarter focuses on a specific field of interest.

Fourth quarter 2002 funding is for the area of **amplification, labeling and quantitation** of nucleic acids—including proposals for the *in vitro* or *in vivo* applications of detection, expression, hybridization, microarrays, and screening. Deadline for full Grant Proposals is December 1. A preproposal is required prior to submitting a Grant Proposal. For more information, visit www.invitrogen.com, e-mail grants@invitrogen.com, or call 800 955 6288, ext. 66140.

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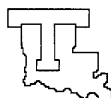
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IfM



Institute for Micromanufacturing
Louisiana Tech University
Bionanotechnology Post-doc

The Institute for Micromanufacturing (<http://www.latech.edu/tech/engr/ifm>) invites applications for a full-time post-doctoral research position in bionanotechnology. The Institute comprises a 41,000 sq ft R & D facility dedicated to realizing micro- and nanosystems for applications in bioscience and biomedicine, environmental technology, information technology, and other areas. The Institute's Biotechnology Laboratory is exceptionally well equipped for basic and applied research (<http://www2.latech.edu/~haynie/page4.html>). Individuals with a PhD in biochemistry, biophysics, molecular biology, biomedical engineering or a closely related field are encouraged to apply. Salary will be based on research achievements and suitability for enhancing ongoing research.

To apply, send curriculum vitae, statement of long-term professional goals, and contact details of three referees to: **Institute for Micromanufacturing, Biotechnology Post-doctoral Search**, Louisiana Tech University, PO Box 10137, Ruston, LA 71272, or to jfutrell@coe.latech.edu. Further technical details are available from **Dr Don Haynie**, tel. +1.318.257.5100. Review of applications will begin immediately.

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POSITIONS OPEN

POSTDOCTORAL AND RESEARCH POSITIONS CUNY Graduate Center

Postdoctoral positions and a Research Technician position are available (1) to study nematode RNA transsplicing, mRNA cap, and RNA-binding proteins and their role in mRNA metabolism; and (2) to develop and use molecular genetic tools in parasitic nematodes and flatworms. Postdoctoral positions require a Ph.D. in biochemistry, molecular biology, or a related field with publications in international journals. Minimum of two years of research experience required for Technician. Good communication skills and ability to work independently required. Send curriculum vitae/résumé and names, e-mail addresses, and telephone numbers of three references to: Richard E. Davis; e-mail: redavis@postbox.csi.cuny.edu. See website: http://www.library.csi.cuny.edu/davis/faculty_page/ for additional information.

Equal Employment Opportunity/Affirmative Action/Americans With Disabilities Act Employer.

A position is available for a **POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE** to establish and manage an oxidative/nitrative stress core laboratory. The individual will be responsible for measuring antioxidants, total antioxidant capacity and oxidative/nitrative biomarkers by various analytical techniques including HPLC with electrochemical or mass spectrometric detection and ELISA. In addition, the individual is expected to run a research project investigating molecular mechanisms of oxidative stress and antioxidant protection in human disease. Applicants must have a Ph.D. in chemistry, biochemistry, or a related field; experience in computer-based data management and statistical analysis; and relevant research experience. Send curriculum vitae; summary of research experience and interests; and names, telephone numbers, and e-mail addresses of three references to: Balz Frei, Ph.D., Linus Pauling Institute, Oregon State University, 571 Weniger Hall, Corvallis, OR 97331-6512. E-mail: balz.frei@orst.edu. For full consideration, apply by October 25, 2002. Oregon State University is an Affirmative Action/Equal Employment Opportunity Employer.

A **POSTDOCTORAL POSITION** available immediately to study the functions of BRCA1 and its cofactors in transcriptional regulation and suppression of breast and ovarian cancers. Highly motivated individuals with experience in molecular biology and biochemistry are encouraged to apply. Prior experience with mammalian tissue culture is preferred but not required. Send curriculum vitae and the names of three references to: Rong Li, Ph.D., Department of Biochemistry and Molecular Genetics, Health Science Center, University of Virginia, Charlottesville, VA 22908. E-mail: rl2t@virginia.edu.

POSTDOCTORAL POSITION Germ Line Stem Cells

Studies include culture, purification, gene activity, and gene modification of male germline stem cells (spermatogonia). See review in *Science* 21 June 2002. Send curriculum vitae, names of three references, and a letter describing research experience to: R. L. Brinster, School of Veterinary Medicine, University of Pennsylvania, 3850 Baltimore Avenue, Philadelphia, PA 19104.

POSTDOCTORAL FELLOW

Study neuromuscular disease, apoptosis, and stem cells using molecular genetic, transgenic, and knockout methods (website: <http://www.bbri.org/faculty/miller/miller.html>). Send résumé to: Dr. Jeffrey B. Miller, Boston Biomedical Research Institute, 64 Grove Street, Watertown, MA 02472. E-mail: miller@bbri.org.

POSITIONS OPEN

POSTDOCTORAL POSITION Experience-Dependent Gene Expression in Memory Consolidation

An NIH-funded Postdoctoral position studying the regulation and role of experience-dependent neuronal gene expression in hippocampal and cortical function during learning and memory processes is available immediately. This research uses novel molecular imaging approaches and involves multiple levels of analysis including molecular/cellular and systems/behavioral neuroscience. Consequently, the applicant must have a Ph.D. and research expertise in at least one of these two neuroscience disciplines. For additional information, please visit website: <http://www.unm.edu/~neurohsc/guzowski.htm>.

Applicants should send a statement of research interests, curriculum vitae, and contact information for three individuals who can serve as a reference to: Dr. John F. Guzowski, Department of Neurosciences, BMSB Room 145, University of New Mexico, Health Sciences Center, Albuquerque, NM 87131-5223.

POSTDOCTORAL POSITIONS

Immediate openings for two Postdoctoral positions to participate in NIH-funded projects on the role of oxidative stress in atherogenesis. The successful applicant has extensive experience in vascular biology/molecular biology and mass spectrometry. Please send curriculum vitae and references to: Dr. Sanjay Srivastava, Assistant Professor, Department of Medicine, Division of Cardiology, University of Louisville, 500 South Floyd Street, Louisville, KY 40202. FAX: 502-852-2570; e-mail: sanjay@louisville.edu.

POSTDOCTORAL RESEARCH ASSOCIATE needed to study the effect of bacterial redox proteins on the induction of apoptosis in human cancer cells leading to cancer regression. The candidate will be working in an entirely new and novel field. Experience in apoptotic and protein interaction studies will be required. Résumés should be forwarded to: Dr. Tapas K. Das Gupta, Department of Surgical Oncology, 840 South Wood Street M/C 820, Chicago, IL 60612. Telephone: 312-996-6134; FAX: 312-996-9365; e-mail: tkd@uic.edu.

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

POSTDOCTORAL POSITIONS in molecular virology/cell biology at the University of Pennsylvania, Children's Hospital of Philadelphia. Projects concern (1) structure-based design of vectors for AIDS vaccine delivery, (2) cell biology of picornavirus entry, and (3) cellular function of the coxsackievirus/adenovirus receptor (see *Science* 275:1320; *J. Virology* 76:9474; *PNAS* 98:15192; *J. Virology* 76:2667). Please send curriculum vitae and names of three references to: Dr. Jeffrey Bergelson, Abramson 1202E, Children's Hospital of Philadelphia, 3615 Civic Center Boulevard, Philadelphia, PA 19104. E-mail: bergelson@email.chop.edu.

POSTDOCTORAL POSITION available immediately to study developmental plasticity of pain systems. The project employs real time RT-PCR and *in situ* hybridization for examining molecular changes in pain circuitry in response to early postnatal inflammation. Ph.D. in molecular biology or related field is required. Contact: Dr. Michael Lidow, Department of OCBS, University of Maryland, HHH, 5-A-12, 666 West Baltimore Street, Baltimore, MD 21201. E-mail: mlidow@umaryland.edu.

POSTDOCTORAL FELLOWSHIPS in gene therapy. Can study a broad array of topics from development of novel vectors to applications in animal models. Vector systems under study include those based on adeno-associated virus and lentivirus for achieving stable gene expression and adenovirus for use as a genetic vaccine. A Ph.D. or M.D. is required. Send curriculum vitae and the names of three references to: Dr. James M. Wilson, University of Pennsylvania; e-mail: wilsonjm@mail.med.upenn.edu.

POSITIONS OPEN

JAMES BOSWELL POSTDOCTORAL FELLOWSHIP California Institutes of Technology Pasadena, California

The California Institute of Technology and The Huntington Medical Research Institutes announce the availability of an endowed Postdoctoral Fellowship for collaborative research. This one-year Fellowship, renewable for a second year, is open to men and women who have recently received their Doctorate and are interested in doing research in the areas of biomedical magnetic resonance, neural prosthetics, cell biology, cancer genetics, tissue engineering, or other areas closely related to the interests of faculty members at Caltech and HMRI. The Boswell Fellowship provides an annual stipend between \$36,000 and \$42,000 commensurate with Fellow's qualifications and experience.

Application should include a letter outlining specific research interests and curriculum vitae. Three letters of reference should be submitted directly. All correspondence should be addressed to:

James Boswell Postdoctoral
Fellowship Committee
California Institute of Technology
Mail Code 206-31
Pasadena, CA 91125

Completed applications with reference should arrive at Caltech before January 6, 2003.

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

POSTDOCTORAL POSITIONS Institute for Genetic Medicine University of Southern California

Several fully funded Postdoctoral positions are available in the laboratory of Henry Sucov. We use conventional and conditional knockout mice to explore diverse aspects of development and postnatal physiology that are regulated by nuclear receptors. Current projects address cardiovascular development, erythropoiesis, fate and function of neural crest cells, cholesterol homeostasis, and prostate growth and tumorigenesis. The laboratory is in newly constructed research space on the USC Health Sciences Campus in Los Angeles. Contact e-mail: sucov@usc.edu.

A **POSTDOCTORAL POSITION** is available to study the role of Ffh and the signal recognition particle (SRP) during environmental stress responses in *Streptococcus mutans*. Experience with general molecular biology techniques and a solid background in microbial physiology and genetics are required. Experience with protein purification, RNA analyses, and quantitative PCR is desirable. Send curriculum vitae and names of three references to: Dr. L. Jeannine Brady, Department of Oral Biology, University of Florida, P.O. Box 100424, Gainesville, FL 32610. E-mail: jbrady@dental.ufl.edu.

The Division of Plastic and Reconstructive Surgery of the University of Wisconsin, Madison, is recruiting outstanding **POSTDOCTORAL CANDIDATES** to study the molecular events that control cerebral angiogenesis and peripheral neurogenesis. Candidates should have demonstrated productivity in molecular techniques including immunohistochemistry and/or *in situ* hybridization and have interest in exploring new approaches to the visualization of morphogenesis. Background in neurosciences is preferred but is not essential. Apply by e-mail: lahvis@surgery.wisc.edu; FAX: 608-265-9695.

POSTDOCTORAL POSITION: structure and dynamics of heme oxygenase-sensing proteins. Requires experience in protein engineering, cloning, protein purification. Interest/experience in biophysical methods helpful. Must be fluent in writing/speaking English. Send curriculum vitae and names of three references to: Professor James Satterlee, Department of Chemistry, Washington State University, Pullman, WA 99164-4630. E-mail: hemeteam@wsu.edu. *Women and minorities encouraged to apply.*



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POSITIONS OPEN



POSTDOCTORAL POSITION

Available immediately to study inflammation and autoimmunity. Major emphasis is on (1) innate and adaptive inflammatory immune responses in Lyme disease and (2) models of autoimmune arthritis. Ph.D. or equivalent degree required and background in cellular or molecular immunology or microbiology desirable. Send curriculum vitae and names of three references to: **Dr. Allen Steere, Massachusetts General Hospital/Harvard Medical School, Center for Immunology and Inflammatory Diseases, 149 13th Street, Room 8301, Charlestown, MA 02129. E-mail: asteere@partners.org.**

POSTDOCTORAL FELLOW POSITION Harvard Medical School/ Massachusetts General Hospital

Our major focus is on the analysis of the gene products that interact (protein-protein interactions) with homeobox transcription factors to control mammalian organogenesis. Previous experience and demonstrated expertise in biochemistry and cell biology is preferred. Please send curriculum vitae and the names of three references to: **Dr. M. Bei, CBRC, MGH East, Building 149 13th Street, Charlestown, MA 02129. E-mail: bei@rascal.med.harvard.edu.** The MGH/Harvard CBRC is a committed Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped, and veterans are encouraged to apply.

POSTDOCTORAL FELLOW POSITION Harvard Medical School/ Massachusetts General Hospital

The major focus of our research is on the molecular mechanisms by which transcription factors control epithelial appendage formation using genome-based transcriptional profiling approaches. Previous experience and demonstrated expertise in cell and molecular biology is required. Please send curriculum vitae and the names of three references to: **Dr. M. Bei, CBRC, MGH East, Building 149 13th Street, Charlestown, MA 02129. E-mail: bei@rascal.med.harvard.edu.** The MGH/Harvard CBRC is a committed Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped, and veterans are encouraged to apply.

POSTDOCTORAL POSITIONS supported by the NIH are available in the Section of Nephrology at the University of Chicago. Research topics include immunopathogenesis of experimental renal diseases, apoptotic antigens and autoimmunity, novel macrophage signaling pathways, and study of renal transport mechanisms. Investigative work can take advantage of a fully operational microarray facility controlled by the Section. Applicant must have a Ph.D. and/or M.D. degree and be a U.S. citizen or permanent resident. Expertise in cellular and molecular biology, signal transduction, and/or immunology is essential. The start date can be as early as October 1, 2002. Submit curriculum vitae including three references to: **Dr. Jerrold Levine; e-mail: jlevine@medicine.uchicago.edu.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW Megakaryocytopoiesis and Platelet Function University of California, San Francisco

NIH-funded position available for highly motivated individual. My laboratory uses mouse models and murine embryonic stem cells to better understand megakaryocytopoiesis and to identify regulators of platelet integrin $\alpha IIb\beta 3$ signaling. Experience in mouse work, retrovirology, FACS analysis, and marrow culture a plus. Send curriculum vitae and three references to: **Dr. Andrew Leavitt, 513 Parnassus Avenue, Room S-555, UCSF, San Francisco, CA 94143-0100. E-mail: leavitta@labmed2.ucsf.edu.** Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL APPOINTMENT OPPORTUNITY

Water Resources Institute California State University, San Bernardino

The Water Resources Institute (WRI) of California State University, San Bernardino, is inviting applicants for a one-year Postdoctoral appointment at the Institute. The application process is open now and will be continued until the appointment is made. The preferred starting date is January or February 2003 but is negotiable.

Appointment needs: The Institute is seeking a Postdoctoral Fellow with a Ph.D. from an appropriate discipline to further the conceptualization; design; and recommended implementation of large-scale databases for water-related resources, their dissemination, and their successful utilization by a variety of information users. The Postdoctoral Fellow provides the intellectual and organizational leadership to define the WRI's strategic and operational capabilities for future databases. The Postdoctoral Fellow should have knowledge and experience with information resources and formats used in historical and contemporary water-related research. Requisite is knowledge of metadata standards in ecology, geography, and other disciplines. A strong familiarity with geographic information systems (GIS) database construction, mapping, and uses is required. Specific knowledge of ESRI software products is highly desirable. The Fellow should be familiar with the Global Spatial Data Infrastructure (GSDI) and the GSDI server software. Familiarity with data warehousing, data quality control processes, automated content management systems, and Web-based data publishing are highly desirable knowledge sets.

Appointment terms: The appointment is for a 12-month period and is housed in the Water Resources Institute on the campus of the university. The Fellowship stipend is \$45,000 for the period plus benefits. Additional funding is provided for support staff, software/hardware needs, publications, and travel. The appointment will provide the opportunity for guest lecturing and publication of work.

Application: Send a letter of interest and qualifications, current curriculum vitae or a professional résumé, and the contact information for three references to:

**Jeff Davis, Director
Water Resources Institute
California State University, San Bernardino
5500 University Parkway
San Bernardino, CA 92407**

Jeff Davis may be reached by e-mail: jdavis@csusb.edu; Telephone: 909-880-7681.

A **POSTDOCTORAL POSITION** in neuroscience is available at Cornell University Weill Medical College in New York City. Research will involve delineating the molecular mechanisms of mRNA trafficking to synapses in neurons and will utilize molecular biological, fluorescence microscopy, and neuronal culture techniques. For more details, see website: <http://www.med.cornell.edu/gradschool/fac/jaffrey.html>. Queries as well as applications comprising curriculum vitae, statement of research interests, and contact information for references should be e-mailed to: **Dr. Samie Jaffrey, Cornell University Weill Medical College, Department of Pharmacology, 1300 York Avenue, Box 70, New York, NY 10021. E-mail: srj2003@med.cornell.edu.**

POSTDOCTORAL POSITIONS Oxidant Stress, Proteomics, and Vascular Disease

Vascular biology unit has several positions to study the role of oxidant stress in atherosclerotic and diabetic vascular disease. Oxidative protein modifications in vascular and blood cells will be studied in the setting of the Boston University Cardiovascular Proteomics Center. Knowledge of protein chemistry, HPLC, MS preferred. Résumé and three references to e-mail: racohen@bu.edu.

POSITIONS OPEN

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The University of Pennsylvania School of Medicine and The Children's Hospital of Philadelphia (consistently ranked as one of the best pediatric hospitals in the nation by *U.S. News and World Report*) are offering a **POSTDOCTORAL FELLOWSHIP** in the division of pediatric cardiology.

DEVELOPMENTAL BIOLOGY

A Postdoctoral position is available to study molecular mechanisms in embryonic mesoderm differentiation and/or cardiac development. The laboratory's main projects focus on mesoderm induction and cardiac cell proliferation using *Xenopus* as a model system. Possible projects include investigating signaling mechanisms and genes in heart development and TGF-beta signaling in a novel pathway important late in cardiac development. Our ideal candidate will possess training in molecular embryology/developmental biology using *Xenopus*. Experience in molecular biology, protein and nucleic acid biochemistry, signal transduction, and vertebrate embryonic development is helpful. The training environment includes interactions with affiliated University of Pennsylvania laboratories. The Children's Hospital of Philadelphia offers total compensation packages that include competitive salary and excellent benefits. Please send curriculum vitae, summary of research interests, and the names of three references to: **Kenneth Ryan, Ph.D., The Children's Hospital of Philadelphia, Abramson Pediatric Research Center, Room 710, 3615 Civic Center Boulevard, Philadelphia, PA 19104. FAX: 215-590-5454; e-mail: ryank@email.chop.edu.** You may also apply online at website: <http://careers.chop.edu>. Use Reference I.D. 41 in your correspondence. The Children's Hospital of Philadelphia is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION in molecular viral oncogenesis and new pathogen discovery. Position available starting July 2002. Ongoing studies involve viral regulation of cMYC, pRB, apoptotic, and interferon-signaling pathways by Kaposi's sarcoma-associated herpesvirus (*Science* 266:1865, 1994; *PNAS* 93:1487, 1996) and use of molecular techniques to find unidentified pathogens. Experience in virology, transcriptional regulation, or genomics preferred. The laboratory is located in the University of Pittsburgh Hillman Cancer Center, a newly built, free-standing 350,000-square-foot cancer research and treatment facility. Send curriculum vitae and three references by FAX or mail to: **Patrick S. Moore, M.D., M.P.H. and Yuan Chang, M.D., Molecular Virology Program, University of Pittsburgh Cancer Institute, Research Pavilion, 5117 Centre Avenue, Suite 1.4, Pittsburgh, PA 15213-1863. Website: <http://www.upmc.edu/internet/molvirol/kshvlab.html>; FAX: 412-623-7715.**

POSTDOCTORAL POSITION available to study mechanisms of visual transduction, adaptation, and retinal disease using electrophysiological methods. Please send a brief statement of research interests, curriculum vitae, and contact information for three references to: **Dr. Clint L. Makino, Department of Ophthalmology, Harvard Medical School, 243 Charles Street, Boston, MA 02114. E-mail: cmakino@meei.harvard.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS University of California, Irvine

Postdoctoral positions are immediately available for research focused on checkpoint/repair genes ATM/ATR/NBS1 and mouse models of human breast cancer by conditional inactivation of p53 and BRCA1. Our recent publications: *Nature* 405:473; 406:210; *J. Biol. Chem.* 274:12748; *Proc. Natl. Acad. Sci.* 98:13102; tumor models, *Cancer Res.* 57:4123; *Oncogene* 20:6742 and 7073. Annual salary range is \$31,044 to \$43,908 depending on research experience. A Ph.D. degree is required. Training and experience in molecular and cell biology, biochemistry, or animal models preferred. Prospective candidates should forward their curriculum vitae and three references to:

Dr. Eva Lee, Professor
Department of Developmental and Cell Biology
and Department of Biological Chemistry
University of California, Irvine
Irvine, CA 92697-1700
E-mail: elec@uci.edu

Closing date: November 15, 2002.

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

A **POSTDOCTORAL POSITION** in molecular biology is available immediately in the laboratory of **Dr. Jonathan Arias** of the Center for Biosystems Research, University of Maryland Biotechnology Institute. The successful candidate will investigate transcription factor regulatory networks involved in plant protection using high-throughput applications of chromatin immunoprecipitation (see *Plant J.* 28:237-243, 2001) and *Arabidopsis thaliana* intergenic DNA arrays. Qualifications include a Ph.D. in molecular or plant biology or in a related area. Experience with general molecular biology techniques, especially PCR, is essential. Applicants should send curriculum vitae, names of three references, and a summary of research accomplishments to: **Postdoctoral Position Number R3-00XX, Center for Biosystems Research, University of Maryland Biotechnology Institute, Plant Sciences Building, Room 5115C, College Park, MD 20742-4450**. Consideration of applications will begin on October 18, 2002, and continue until the position is filled. *The University System of Maryland is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIPS Ecology and Evolution of Plant-Enemy Interactions

Two two-year V. Dropkin Postdoctoral Fellowships are available for work in the Department of Ecology and Evolution at The University of Chicago. Fellows will be selected based on their potential to perform innovative research in plant pathology and/or sustainable agriculture and will be expected to commence studies no later than fall 2003. Salaries are competitive and both research funds and excellent resources will be provided. Applicants are encouraged to contact potential faculty sponsors within the Department to discuss their applications and should send a three-page research proposal, curriculum vitae, and three letters of recommendation by 2 December 2002 to: **Dr. Joy Bergelson, Department of Ecology and Evolution, University of Chicago, 1101 East 57th Street, Chicago, IL 60637**. *The University of Chicago is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Five-year NIH-funded position available to study signal transduction/cell cycle checkpoints elicited by DNA damage. Current projects include (1) molecular basis of the intra-S-phase checkpoint, (2) characterization of a novel DNA damage-regulated growth factor-binding protein, and (3) identification of signaling pathways that mediate DNA damage-induced regulation of mRNA stability. Applicants should submit curriculum vitae, cover letter, and three letters of reference to: **Dr. Cyrus Vaziri, Cancer Center, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118**. E-mail: cvaziri@bu.edu.

POSITIONS OPEN



Pennington Biomedical Research Center, a Louisiana State University facility, is accepting applications for **RESEARCH ASSOCIATE** and **POSTDOCTORAL RESEARCHER** positions. For information on employment options, see our website: <http://www.pbrc.edu>.

Pennington Biomedical Research Center is an Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** is available immediately to study redox regulation of signal transduction, cell cycle, and apoptosis by dietary nutrients in prostate cancer chemoprevention. The laboratory currently focuses on modulation of intracellular redox state by altering antioxidant enzymes using sense and antisense transfection to delineate the molecular mechanisms and targets of cancer chemopreventive agents (such as selenium and other antioxidants) in prostate cancer cells and transgenic mouse models. Candidates should have a Ph.D. or M.D. with experience in molecular and cellular biology. Experience with DNA microarray and/or proteomics would be desirable. Salary will be determined by the successful candidate's experience. Send application with curriculum vitae and names of three references to: **Weixiong Zhong, M.D., Ph.D., K4/868, Box 8550, Department of Pathology and Laboratory Medicine, University of Wisconsin Medical School, 600 Highland Avenue, Madison, WI 53792**. E-mail: wzhong3@facstaff.wisc.edu.

POSTDOCTORAL POSITION Computational Biology Michigan State University

One or more Postdoctoral positions are available immediately for a period of two years with the possibility of extension for a third year. The project will involve studying the flexibility of proteins and pathways between different conformational states. Applicants should send an e-mail: thorpe@pa.msu.edu with an attached curriculum vitae and the names of two people who can be contacted for letters of recommendation. A Ph.D. degree is required. Applications received by December 15, 2002, will be considered first. **Professor M.F. Thorpe, Physics and Astronomy Department, Michigan State University, East Lansing, MI 48824-2320**. Website: <http://www.pa.msu.edu/~thorpe/>. *MSU is an Affirmative Action/Equal Opportunity Employer.*

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POSTDOCTORAL POSITIONS available to study yeast prions, their interactions, and their role in chromatin remodeling. Prion biology is a newly emerging area addressing the regulatory mechanism and biological relevance of protein-based infectivity and inheritance (*Science* 287:661-664). Recent Ph.D.s with demonstrated track records in biochemistry, molecular biology, and/or molecular genetics are preferred. Send complete curriculum vitae and three references to: **Dr. Liming Li, Department of MPBC, Northwestern University Medical School, 320 East Superior Street, Chicago, IL 60611**. FAX: 312-503-7345; e-mail: limingli@northwestern.edu.

POSITIONS OPEN

RESEARCH ASSOCIATE/ POSTDOCTORAL FELLOW

The CONRAD Intramural Preclinical Research Program at the Eastern Virginia Medical School (EVMS) is seeking qualified, motivated Investigators to work on discovery and characterization of novel molecules with antifertility and antimicrobial properties under the direction of **G. Doncel, M.D., Ph.D.** The main research lines in the laboratory are (1) cellular and molecular mechanisms common to mammalian fertilization and microbial infection. This is a multidisciplinary collaborative project focused on ligand-receptor recognition, signal transduction, and membrane dynamics. Emphasis is placed on those processes involved in gamete fertilization. (2) Signal transduction mechanisms controlling sperm function. (3) Characterization of biological, molecular, and genomic markers of vaginal inflammation. (4) Cellular and molecular mechanisms mediating spermatogenic arrest in male contraception.

Applicants should have a Ph.D. or equivalent degree. Expertise in reproductive biology, pharmacology, molecular biology, or microbiology is preferred. Qualified candidates please send updated curriculum vitae, brief description of career goals and interests, references, and salary requirements to: **Gustavo Doncel, M.D., Ph.D., Director, CONRAD Intramural Preclinical Program, Eastern Virginia Medical School, 601 Colley Avenue, Norfolk, VA 23507**. E-mail: doncelgf@evms.edu. *Affirmative Action/Equal Opportunity Employer/drug free.*

POSTDOCTORAL POSITION Arabidopsis Functional Genomics and Bioinformatics Genome Center of Wisconsin University of Wisconsin-Madison

A Postdoctoral position is available immediately to work on an NSF-funded project that involves using high-density oligonucleotide microarrays to catalog mutations on a genomic scale. A more detailed description of the project can be found at website: <http://www.hort.wisc.edu/krysan/postdoc>. Experience with molecular biology techniques and computer programming is required. Interested candidates should submit curriculum vitae, list of publications, three letters of reference, a statement of research and computing experience, and a statement of research interests to: **Dr. Patrick Krysan, Horticulture Department, 1575 Linden Drive, Madison, WI 53706**. *UW-Madison is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION in the laboratory of **Steven Sandler** at the University of Massachusetts at Amherst to study the molecular mechanisms of repair of replication forks in bacteria is available immediately. Applicants should have a strong background in molecular biology and genetics. Send curriculum vitae and names of three references by e-mail: sandler@microbio.umass.edu by November 30, 2002.

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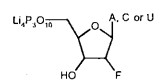
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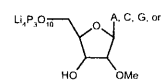
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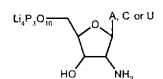
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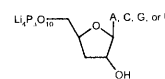
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Primary Antibody (10 ml)	\$3.15	\$31.50
Secondary Antibody (10 ml)	\$0.04	\$0.47
Substrate (10 ml)	\$4.12	\$6.05
Film (CL-XPosure™ Film vs. Hyperfilm™ Film)	\$1.20	\$2.28
Total Blotting Cost	\$22.63	\$54.32

Antibodies are used at the recommended starting concentration.

Costs are based on March 2002 U.S. list prices for an 8 x 10 cm mini gel following the manufacturers' instructions.

Pierce gives you
twice the signal

The Original SuperSignal® West Pico Chemiluminescent Substrate

**Twice as much signal for
about half the price
of the ECL™ System**

Lower Detection Limit

- Low-picogram (10^{-12})
- Mid-attomole (10^{-17})

Signal Duration

- 6-8 hours

Working Solution Stability

- 24 hours at RT

Fast Signal Generation

- Signal can be detected immediately

Suggested Antibody Dilutions (from 1 mg/ml stock)

- Primary: 1/1,000-1/5,000
- Secondary: 1/20,000-1/100,000

Stock Solution Stability

- 1 year at RT

- SuperSignal® West Pico Substrate costs less than ECL™ Substrate
- Save even more money because you use fewer antibodies*
- Antibodies last at least five times longer when using SuperSignal® West Pico Substrate than with ECL™ Substrate*

In side-by-side comparisons using identical conditions, blots incubated with SuperSignal® West Pico Chemiluminescent Substrate exhibit at least twice the intensity as blots treated with the ECL™ System. Your previously hard-to-see, low-picogram bands will shine for hours when you use Pierce SuperSignal® Substrate.

www.SuperSignalWest.com

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Human

- IFN- γ
- IL-1 β
- IL-2
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- IL-5
- IL-6
- IL-13
- TNF- α

Mouse

- IFN- γ
- IL-4
- IL-6
- IL-10
- TNF- α

Rat

- IFN- γ
- IL-2

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