The American Federation for Aging Research (AFAR) is a nonprofit organization whose mission is to support biomedical research on aging. We fulfill this mission by:

- Supporting biomedical research that furthers our understanding of the aging process and its associated diseases and disorders;
- Offering opportunities for scientists and physicians to exchange new ideas and knowledge about aging;
- Building a cadre of early career scientists in aging research and in the practice of geriatric medicine; and
- Promoting awareness among the general public about the importance of aging research.

Since 1981, AFAR has awarded nearly $87 million to more than 2,100 early to mid-career investigators and students, with the goal of encouraging more of the nation’s scientists and physicians to enter and stay in the fields of gerontology and geriatric medicine. These scientists are conducting cutting-edge research on aging and age-related diseases, such as Alzheimer’s, cancer, osteoporosis, diabetes and heart disease. Support for AFAR grants comes from the generous contributions of corporations, foundations and individuals.

The American Federation for Aging Research (AFAR) is pleased to present its 25th anniversary grantee directory, highlighting all of the recipients of AFAR research grants and AFAR-administered grants programs to date.

We are proud to have supported more than 2,100 early-career investigators and medical students — the best and the brightest scientific minds in the nation — with funding of nearly $87 million. These grant recipients have made major inroads in our understanding of how and why we age, leading to important discoveries about how age-related diseases and disorders can be prevented or stalled.

From telomeres to stem cell research to the search for longevity genes, during the last 25 years, research on aging has yielded substantial breakthroughs, helping to identify the rates of aging in species and the susceptibility of disease, improving healthspan as well as lifespan.

We thank our esteemed review committee members and the many supporters who have made what we do possible. A full listing of review committee members and supporters is contained in this directory.

A special acknowledgment and dedication of this publication goes to our dedicated board member Dorothy Dillon Eweson, who died in June 2005. Dorothy was an early advocate for research in aging, supporting AFAR programs that have enabled scientists to pursue and sustain careers in the field, including an endowed lecture series that allows AFAR researchers to present their findings at annual scientific or medical specialty association meetings. We are grateful for her longstanding commitment and generosity.

At a time of limited funding for research on aging coupled with a burgeoning aging population, AFAR’s support is as critical as ever. As we celebrate 25 years of supporting great minds in science, we renew our commitment to helping even more scientists gain a foothold in the area of aging research.

Stephanie Lederman
AFAR’s committees are comprised of experts in aging research and related areas of research who volunteer their time and expertise to the AFAR review processes. Their dedication, enthusiasm and commitment is crucial to the success of AFAR’s grant programs.

AFAR Research Committee

Reviews grant proposals for the AFAR Research Grant, the Pfizer/AFAR Innovations in Aging Grant, and the Ellison Medical Foundation/AFAR Senior Postdoctoral Research Program

RICHARD A. MILLER, M.D., Ph.D., Chair
University of Michigan
Ann Arbor, Michigan

JUDD AIKEN, Ph.D.
University of Wisconsin College of Agriculture and Life Sciences
Madison, Wisconsin

ADAM ANTEBI, Ph.D.
Baylor College of Medicine
Houston, Texas

ANDRZEJ BARTKE, Ph.D.
Southern Illinois University
Springfield, Illinois

LAURA DUGAN, M.D.
University of California, San Diego
San Diego, California

JAY M. EDELBerg, M.D., Ph.D.
Weill Medical College of Cornell University
New York, New York

DAVID FINK, M.D.
University of Michigan School of Medicine
Ann Arbor, Michigan

SUZANNE GUENETTE, Ph.D.
Massachusetts General Institute for Neurodegenerative Disease
Harvard Medical School
Boston, Massachusetts

PATRICK K. HOF, M.D.
Mount Sinai School of Medicine
New York, New York

PETER HORNsBY, Ph.D.
University of Texas Health Science Center at San Antonio
San Antonio, Texas

ROGER McCARTER, Ph.D.
Pennsylvania State University
State College, Pennsylvania

DAVID G. MORGAN, Ph.D.
University of South Florida
Tampa, Florida

JAMES NELSON, Ph.D.
University of Texas Health Science Center
San Antonio, Texas

LAWRENCE RAISZ, M.D.
University of Connecticut Health Center
Farmington, Connecticut

JOHN SEDivy, Ph.D.
Brown University
Providence, Rhode Island

LINDA P. FRIED, M.D., M.P.H.
Johns Hopkins University Medical Institutions
Baltimore, Maryland

WILLIAM R. HAZZARD, M.D.
University of Washington School of Medicine
Seattle, Washington

EDWARD KOO, M.D.
University of California, San Diego
La Jolla, California

LEWIS LIPSITZ, M.D.
Harvard Medical School
Boston, Massachusetts

LINA OBEID, M.D.
Medical University of South Carolina
Charleston, South Carolina

ALAN R. SHULDINER, M.D.
University of Maryland School of Medicine
Baltimore, Maryland

Glenn/AFAR Breakthroughs in Gerontology (BIG) Selection Committee

RICHARD A. MILLER, M.D., Ph.D., Chair
University of Michigan
Ann Arbor, Michigan

EDWARD KOO, M.D.
University of California, San Diego
La Jolla, California

GEORGE M. MARTIN, M.D.
University of Washington
Seattle, Washington

DAVID G. NICHOLLS, Ph.D.
Buck Institute for Age Research
Novato, California

JOHN SEDivy, Ph.D.
Brown University
Providence, Rhode Island

MARc TATar, Ph.D.
Brown University
Providence, Rhode Island

MARK BEERS, M.D., Chair
Merck & Company, Inc.
West Point, Pennsylvania

MEGHAN GERETY, M.D.
University of Texas Health Science Center
San Antonio, Texas

BRUCE POLOCK, M.D., Ph.D.
University of Pittsburgh
Pittsburgh, Pennsylvania

Merck/AFAR Junior Investigators in Geriatric Clinical Pharmacology

MARK BEERS, M.D., Chair
Merck & Company, Inc.
West Point, Pennsylvania

MEGHAN GERETY, M.D.
University of Texas Health Science Center
San Antonio, Texas

The Medical Student Summer Training in Aging Program

PATRICIA BARRY, M.D., M.P.H., Chair
Merck Institute of Aging and Health
Washington, D.C.

RONALD D. ADELMAN, M.D.
Weill Medical College of Cornell University
New York, New York

THOMAS A. CAVALIERI, D.O.
UMDNJ School of Osteopathic Medicine
Stratford, New Jersey

KATRIN ANDREASSON, M.D.
Johns Hopkins University School of Medicine
Baltimore, Maryland

ROBERT ARking, Ph.D.
Wayne State University
Detroit, Michigan

NANCY L. BAENZIGER, Ph.D.
Washington University
St. Louis, Missouri

BEN A. BAIHR, Ph.D.
University of Connecticut
Storrs, Connecticut

NIR BARZILAI, M.D.
Albert Einstein College of Medicine
Bronx, New York

CARMELA R. ABRAHAM, Ph.D.
Boston University School of Medicine
Boston, Massachusetts

ITAMAR ABRASS, M.D.
University of Washington
Seattle, Washington

AYOTUNDE ADEAGBO, Ph.D.
University of Louisville
Louisville, Kentucky

NEIL ALEXANDER, M.D.
University of Michigan
Ann Arbor, Michigan

LAWRENCE RAISZ, M.D.
University of Connecticut Health Center
Farmington, Connecticut

ROBERT BLANK, M.D., Ph.D.
National Institutes of Health
Bethesda, Maryland

WILLIAM R. HAZZARD, M.D.
University of Washington School of Medicine
Seattle, Washington

ROBERT A. BOHr, M.D., Ph.D.
National Institute on Aging
Baltimore, Maryland

ROBERT A. BONOmo, M.D.
University of Louisville School of Medicine
Louisville, Kentucky

ADELE BOSKEY, Ph.D.
Hospital for Special Surgery
New York, New York

NATIONAL SCIENTIFIC ADVISORY COUNCIL (NSAC)

Reviews grant proposals for the AFAR Research Grant, the Pfizer/AFAR Innovations in Aging Grant, and the Ellison Medical Foundation/AFAR Senior Postdoctoral Research Program

Postdoctoral Research Program

CARmELA r. ABRAHAm, Ph.D.
Boston University School of Medicine
Boston, Massachusetts

ITAMAR ABRASS, M.D.
University of Washington
Seattle, Washington

AYOTUNDE ADEAGBO, Ph.D.
University of Louisville
Louisville, Kentucky

NEIL ALEXANDER, M.D.
University of Michigan
Ann Arbor, Michigan

LAWRENCE RAISZ, M.D.
University of Connecticut Health Center
Farmington, Connecticut

ROBERT BLANK, M.D., Ph.D.
National Institutes of Health
Bethesda, Maryland

WILLIAM R. HAZZARD, M.D.
University of Washington School of Medicine
Seattle, Washington

ROBERT A. BOHr, M.D., Ph.D.
National Institute on Aging
Baltimore, Maryland

ROBERT A. BONOmo, M.D.
University of Louisville School of Medicine
Louisville, Kentucky

ADELE BOSKEY, Ph.D.
Hospital for Special Surgery
New York, New York

AFAR’s committees are comprised of experts in aging research and related areas of research who volunteer their time and expertise to the AFAR review processes. Their dedication, enthusiasm and commitment is crucial to the success of AFAR’s grant programs.
2005 Grantees

Wolfgang B. Liedtke, M.D., Ph.D.
Duke University Medical Center
Molecular Pathogenesis of Osmotic Dysregulation by the Nervous System in Aging Mammals

Jianyuan Luo, Ph.D.
University of Massachusetts Medical School
Negative Regulation of p53 Pathway by Mammalian Sirt2 Antagonize p53 Dependent Cell Senescence Induced by Oxidative Stress

Barbara McCreadie, Ph.D.
University of Michigan
Age-related Response to Trabecular Bone Microdamage

M. Paul Murphy, Ph.D.
Mayo Clinic College of Medicine, Jacksonville
Regulation of β-Secretase by CBP

Radhika H. Muzumdar, M.D.
Albert Einstein College of Medicine
Role of Declining IGF-1 in the Metabolic Syndrome of Aging

Peter Penev, Ph.D.
Northwestern University
Regulation of Structural Plasticity of Excitatory Synapses

Pere Puigserver, Ph.D.
Johns Hopkins University School of Medicine
Molecular Mechanisms for Transcriptional Regulation of Glucose Homeostasis Linked to Aging

Patrick M. Sullivan, Ph.D.
Duke University Medical Center
Effective Aging on Brain ApoE-dependent, Lipid Metabolism

Kaoru Tominaga, Ph.D.
University of Texas Health Science Center at San Antonio
Analysis of MORF4 Functions In Vitro and In Vivo Model Systems

Zoltan Ungvari, M.D., Ph.D.
New York Medical College
Cardiovascular Protective Effects of Anti-TNFα/TACE Treatment in Aging

David N. Zacks, M.D., Ph.D.
University of California, San Diego
Regulation of Structural Plasticity of Excitatory Synapses

Tian Wang, Ph.D.
Yale University School of Medicine
The Effect of Aging on Gamma Delta T-cell Response to Nile Virus Infection in Mouse Model

2004 Grantees

Gal Bitan, Ph.D.
Brigham and Women’s Hospital/Harvard Medical School
Development of Amyloid β-Protein Oligomerization Inhibitors

Bo-Chin Chiu, Ph.D.
University of Michigan
Effect of Aging on Early Events of Pulmonary Innate Immune Response to Mycobacterial Antigen Challenge in Mouse Models

Douglas E. Faunce, Ph.D.
Loyola University Medical Center
A Role for Natural Killer T-cells in Age-related Immune Dysfunction

Gonzalo G. Garcia, Ph.D.
University of Michigan
Effects of Surface Glycosylation in the Age-related Decline of T-cell function

Ming Guo, M.D., Ph.D.
David Geffen School of Medicine at the University of California, Los Angeles
Identifying Regulators of Gamma Secretase Implicated in Alzheimer’s Disease

Daniel G. Herrera, M.D., Ph.D.
Weill Medical College of Cornell University
Effects of Alcoholism on Neurogenesis in the Aged Brain

Elizabeth Jonas, M.D.
Yale University School of Medicine
Enhancement of Synaptic Function by a BCL-2 Family Protein

David E. Kang, Ph.D.
University of California, San Diego
Role of Presenilin in Phosphorylation of Tau

Brian K. Kennedy, Ph.D.
University of Washington
Genome-wide Identification of Yeast Aging Genes

Christine Marie, Ph.D.
Georgetown University Medical Center
Estrogen Modulation of the Renin-Angiotensin System in the Pathogenesis of Age-related Progressive Renal Disease

Kelly L. Tremblay, Ph.D.
University of Washington
Aging and the Neural Representation of Speech-Sounds: Effects of Hearing Aid Amplification and Auditory Training

Edwin J. Weeber, Ph.D.
Vanderbilt University Medical Center
The Role of ApoE Receptors in Hippocampal-dependent Synaptic Function

Gang Yu, Ph.D.
University of Texas Southwestern Medical Center
Dissecting Molecular Interactions of PEN-2 in the β-Secretase Complex

2002 Grantees

Mary L. Boussen, Ph.D.
Beth Israel Deaconess Medical Center
The Role of β-Arrestin2 in Regulating the Effects of PTH in Bone

Francesco S. Celi, M.D.
University of Maryland, Baltimore
Type-2 Deiodinase Mutations and Insulin Resistance in the Old Order of Amish

Linda L. Chao, Ph.D.
University of California, San Francisco/Veterans Affairs Medical Center
fMRI of Attention and Inhibitory Control in Normal Aging

Paola Fabrizio, Ph.D.
University of Southern California
The Role of Evolutionary Conserved Proteins in Yeast Longevity

Thomas J. Gould, Ph.D.
Temple University
Investigation of Age-related Changes in Molecular Substrates of Learning in Transgenic Mice

Mark Hoffman, Ph.D.
Oregon State University
Reflex Modulation during Manipulation of the Sensory Systems

Xudong Huang, Ph.D.
Massachusetts General Hospital
Homocysteine, Oxidative Stress and Mitochondria-dependent Neuronal Apoptosis in Alzheimer’s Disease

Mark Laubach, Ph.D.
The John B. Pierce Laboratory
Neurophysiological Correlates of Aging on Reaction Time Performance

Philippe Marambaud, Ph.D.
Mount Sinai School of Medicine
Identification of Novel Age-at-Onset Genes on Chromosome 10 in Alzheimer’s Disease

Giovanni Paternostro, M.D., Ph.D.
Burnham Institute
Genetic Analysis of Cardiac Aging in Drosophila

Qitao Ran, Ph.D.
University of Texas Health Science Center at San Antonio
Will Reduced Level of PHGPx (GPx4) in Brain Facilitate the Formation of Amyloid Plaques?

P. Hemachandra Reddy, Ph.D.
Oregon Health and Science University
Molecular Analysis of Synaptophysin Gene: A Possible Genetic Link with Late-onset Alzheimer’s Disease

Molly Shores, M.D.
Veterans Affairs Puget Sound Health Care System
The Effect of Testosterone Treatment on Depressive Symptoms and Quality of Life in Older Men with Age-associated Hypogonadism and Subsyndromal Depression

Adrian M. Timmers, Ph.D.
University of Florida
Accumulation of Age-pigment in Retinal Pigment Epithelium and Age-related Macular Degeneration

* Institution affiliation at time of award listed
2001 Grantees

Christy S. Carter, Ph.D.
Wake Forest School of Medicine
Physical Ability in Aged and Dwarf (d/dv) Rats: Isolating Growth Hormone Effects

John P. Case, M.D.
Rush-Presbyterian-St. Luke’s Medical Center
Relationship between Dynamic Joint Loading, Bone Mineral Density, and Radiographic Predictors of Early Osteoarthritis in the Elderly

Atanu Duttaroy, Ph.D.
Howard University
Genomic Regions Involved in Manganese Superoxide Dismutase Regulation in Drosophila

Peter Erhardt, M.D., Ph.D.
Boston Biomedical Research Institute
Regulation of Cardiomyocyte Survival by MDM2

Karen Furie, M.D., M.P.H.
Spaulding Rehabilitation Hospital
Autoimmunity in Transgenic Mice: Does Calorie Restriction Retard Atherosclerosis?

David F. Jarrard, M.D.
Meharry Medical College
Genomic Imprinting Alterations in Senescence

Dawn A. Lowe, Ph.D.
University of Minnesota
Molecular Mechanism of Age-related Declines in Muscle Contractility

Gianni F. Maddalozzo, Ph.D.
Oregon State University
The Separate and Combined Effect of Estrogen Replacement Therapy (ERT) and Resistance Training on the Musculoskeletal and Nervous System in Early Postmenopausal Women

Robert Moir, Ph.D.
Massachusetts General Hospital
LRP-mediated Uptake of Redox Modified AD Associated Proteins

Laura E. Niklason, M.D., Ph.D.
Duke University Medical Center
Telomerase in Engineered Vascular Tissues

Claudia A. Orento, M.D., Ph.D.
Baylor College of Medicine
Testosterone Augmentation in Depressed Men with Partial Response to Anti-depressant Therapy

2000 Grantees

Marciamen Planas-Silva, Ph.D.
Penn State University College of Medicine
Estrogen Receptor Expression and Function in the Aging Mammary Gland

Troy T. Koh, Ph.D.
Boise State University
The Role of Caspase-8 in Mediating Neuronal Cell Death Associated with Alzheimer’s Disease: A Potential Therapeutic Target

Patricia W. Slatlum, Pharm.D., Ph.D.
Virginia Commonwealth University
Age-related Differences in the Sensitivity and Development of Acute Tolerance to Ethanol in Humans

Sundar Srinivasan, Ph.D.
University of Washington
Rest-Inserted Loading: Examination of a Novel Osteogenic Stimulus for the Aged Skeleton

Mei Sun, Ph.D.
West Roxbury Veterans Affairs Hospital/Harvard Medical School
Developing Gene Therapy for Parkinson’s Disease Using Helper Virus-free HSV-1 Vectors

Ruben G. Vidal, Ph.D.
Indiana University School of Medicine
The BRI Gene Family and Familial British and Danish Dementia

Suresh Viswanathan, M.S., Ph.D.
Indiana University School of Optometry
Identifying the Retinal Loci of Age-related Changes in Rod-mediated Visual Function

Beverly M. Yashar, M.S., Ph.D.
University of Michigan
Molecular Genetics Studies of Age-related Macular Degeneration

Clare E. Yellowley, Ph.D.
Penn State University College of Medicine
Interactions of Age and Ovariectomy on Bone Cell Mechanosensitivity: Recovery by PTH Administration

James A. Carson, Ph.D.
University of South Carolina
Serum Response Factor’s Role in Aged Skeletal Muscle’s Blunted Remodeling Response to Chronic Stretch

Qin Mary Chen, Ph.D.
University of Arizona
Molecular Mechanisms of Oxidative Stress Response in Cardiomyocytes

Charleen T. Chu, M.D., Ph.D.
University of Pittsburgh
Superoxide and Nitric Oxide in a Parkinsonian Mouse Model

Ana Maria Cuervo, M.D., Ph.D.
Albert Einstein College of Medicine
Changes in the Lysosomal Receptor for Chaperone-mediated Autophagy with Age

2001 Grantees

Esther Dupont-Versteegden, Ph.D.
Donald W. Reynolds Center on Aging at the University of Arkansas Medical School
The Role of Calcineurin in Age-associated Muscle Atrophy

David A. Goukassian, M.D., Ph.D.
Boston University School of Medicine
The Effect of Aging on DNA Repair and Mutation Rate: Modulation by DNA Oligonucleotide Therapy

Claudia Gravekamp, Ph.D.
Cedars-Sinai Medical Center
Modeling the Role of Microglia in Parkinson’s Disease

Paul S. Hees, Ph.D.
Johns Hopkins Bayview Medical Center
Reversal of Age-related Myocardial Stiffness in Rats

Shurong Huang, Ph.D.
Palo Alto Institute of Molecular Medicine
Reversal of Age-related Myocardial Stiffness in Rats

Michael J. McEachern, Ph.D.
University of Georgia
Aging & Parkinson’s Disease: MPTP Models of Neurotoxicity

Timothy P. O’Connor, Ph.D.
City College of the City University of New York
Aging of Gut Function and Metabolism in a Long-lived Rodent, the Naked Mole-Rat

2000 Grantees

James A. Carson, Ph.D.
University of South Carolina
Serum Response Factor’s Role in Aged Skeletal Muscle’s Blunted Remodeling Response to Chronic Stretch

Qin Mary Chen, Ph.D.
University of Arizona
Molecular Mechanisms of Oxidative Stress Response in Cardiomyocytes

Charleen T. Chu, M.D., Ph.D.
University of Pittsburgh
Superoxide and Nitric Oxide in a Parkinsonian Mouse Model

Ana Maria Cuervo, M.D., Ph.D.
Albert Einstein College of Medicine
Changes in the Lysosomal Receptor for Chaperone-mediated Autophagy with Age

James A. Carson, Ph.D.
University of South Carolina
Serum Response Factor’s Role in Aged Skeletal Muscle’s Blunted Remodeling Response to Chronic Stretch

Qin Mary Chen, Ph.D.
University of Arizona
Molecular Mechanisms of Oxidative Stress Response in Cardiomyocytes

Charleen T. Chu, M.D., Ph.D.
University of Pittsburgh
Superoxide and Nitric Oxide in a Parkinsonian Mouse Model

Ana Maria Cuervo, M.D., Ph.D.
Albert Einstein College of Medicine
Changes in the Lysosomal Receptor for Chaperone-mediated Autophagy with Age
Karen Diane Parfitt, Ph.D.
Pomona College
Changes with Aging in Cyclic AMP-dependent Synaptic Transmission and Synaptic Plasticity in Rat Hippocampus

Jhanna Ray, Ph.D.
Cornell University
Age-related Alteration in Retinal Pigment Epithelial Metabolism - Significance to Age-related Macular Degeneration

G. William Rebeck, Ph.D.
Harvard Medical School
Analysis for ApoE Mutations Affecting the Risk of Alzheimer's Disease

Michael Sierks, Ph.D.
University of Maryland, Baltimore Artificial Antibodies for Diagnosis and Treatment of Alzheimer's Disease

John R. Silber, Ph.D.
University of Washington
Consequences of Age-dependent Loss of the DNA Repair Protein O6-Methylguanine-DNA Methyltransferase in Human Brain

Mark A. Smith, Ph.D.
Case Western Reserve University
Markers of Oxidative Stress in Aging and Neurodegenerative Disease

J. Andrew Taylor, Ph.D.
Harvard Medical School
Effect of Age and Hypertension on Baroreflex-mediated Autonomic Outflow

Guochuan Tsai, M.D., Ph.D.
Harvard Medical School
A Pilot Study of D-cycloserine in Alzheimer's Disease

Christopher H. van Dyck, M.D.
Yale University School of Medicine
Motor Correlates of Striatal Dopamine Transporter Binding with [123I]β-CIT: SPECT in Older Adults

Holly Van Remmen, Ph.D.
University of Texas Health Science Center at San Antonio
Production of Transgenic Mice Overexpressing Catalase and Superoxide Dismutase: A Model to Test the Free Radical Theory of Aging

Richard E. White, Ph.D.
Wright State University School of Medicine
Female Sex Hormones Prevent Age-induced Cardiovascular Dysfunction

1994 Grantees

Nir Barzilai, M.D.
Albert Einstein College of Medicine
Aging Effects on Peripheral and Hepatic Glycose Metabolism

Bysani Chandrasekar, D.V.M., Ph.D.
University of Texas Health Science Center at San Antonio
Modulation of Age-associated Loss in Kidney Function by Calorie Restriction

Jonathan Day, Ph.D.
Pennsylvania State University
Plasticity in the Aging Rat Hippocampus

Kottarapat Dileepan, Ph.D.
University of Kansas Medical Center
Protective Effects of Heparin on Vascular Endothelium

Pamela Fink, Ph.D.
University of Washington
T-cell Receptor Repertoire in CD4-CD8- Peripheral T-cells from Aged Mice

Lorise Gahring, Ph.D.
University of Utah
Age-related Changes in Inflammatory Cytokine Expression in the Brain

Pamela Ann Gayheart, Ph.D.
Medical College of Pennsylvania
The Effects of Myocardial Ischemia on the Cardiac Sympathetic Nervous System of the Aging Heart

Garth Hall, Ph.D.
University of Pennsylvania
Phosphorylation of Tau Protein in Identified Lamprey Neurons: A Cellular Model for the Cytopathology of Alzheimer's Disease

Ahmad Heydari, Ph.D.
University of Texas Health Science Center at San Antonio
Does Caloric Restriction Alter Transcription of Specific Genes at the Level of Transcription Factors?

Eric Howard, Ph.D.
University of Oklahoma Health Sciences Center
Matrix Metalloproteinases in Bone Stromal Cells

David Hurley, Ph.D.
Tulane University
Growth Hormone Releasing Hormone Transcriptional Regulation in Aging

Mary King, M.D.
University of Connecticut Health Center
Do Postural Stability Limits Predict Dynamic Balance Responses?

Qian Li, Ph.D.
University of California, San Francisco
Effects of Aging on Voltage-dependent Ion Channels in Myocardial Cells

Brian Richard MacDonald, M.B., Ch.B., Ph.D.
Hospital of the University of Pennsylvania
A Cellular and Molecular Analysis of Osteoblast Differentiation

Susan Marengo, Ph.D.
Case Western Reserve University School of Medicine
Stimulation of Growth of the Prostatic Stroma by the Prostatic Epithelium: A Possible Role for a Paracrine Pathway in the Development of BPH

Daniel McCarty, M.D.
Medical College of Wisconsin
A Quantitative Approach to Inorganic Pyrophosphate Metabolism

Skye McDougall, Ph.D.
University of California, Los Angeles
The Role of TWIST in Controlling Type II Collagen Gene Expression in Chondrocytes and the Development of Osteoarthritis

Todd Morgan, Ph.D.
Research University of Southern California
TGF-B1 and the Micrornidal Response to Aging

Ramagopal Mudumbi, Ph.D.
Veterans Affairs Medical Center, Boise
Aging & Vascular Pharmacology of Adenosine

Lauren Nathan, M.D.
David Geffen School of Medicine at the University of California, Los Angeles
The Effects of Conjugated Equine Estrogens on Coronary Blood Flow

Usa Ponnapann, Ph.D.
University of Arkansas for Medical Sciences
Aging and Immune Function Role of Transcription Factor NFkB

Marko Radic, Ph.D.
Medical College of Pennsylvania
Molecular Basis for the Declining Antibody Response in Aging

May J. Reed, M.D.
University of Washington
Aging, Caloric Restriction and Wound Repair

Chandar Singaram, M.B.
University of Wisconsin-Madison
Pathogenesis of Exophagial Dysmotility in the Elderly

Charles Soparkar, M.D., Ph.D.
Baylor College of Medicine
Enhancing the Vascularization of Orbital Bone Substitutes: A Model for the Study of Changes in Angiogenesis and Aging

Eugenia Spanospolou, Ph.D.
Rockefeller University
Age-related Loss of Immunoglobin Diversity & the Role of RAG-1 in the Bone Marrow Lymphocytes of Elder Mice

Pericles Stavropoulos, Ph.D.
Boston University
Synthesis of CuZnSOD Mimosas as Potential Probes of Age-related Oxidative Damage

Giulio Tagliatela, Ph.D.
University of Texas Medical Branch
Neurotrophins Rescue of Apoptotic Neural Cells

W. Robert Taylor, M.D., Ph.D.
Veterans Affairs Medical Center, Decatur
Mechanisms of Age-related Impairment of Endothelial Function

Jonathan Tilby, Ph.D.
Johns Hopkins University
The Molecular Basis of Female Reproductive Aging & Menopause

Elas Traboulsi, M.D.
Johns Hopkins University
Mapping the Gene(s) for Chronic Open Angle Glaucoma (COAG)

Yaotang Wu, Ph.D.
Children's Hospital, Harvard Medical School
Solid State NMR Study of Osteoporotic Bone

Donna Zimmaro Bliss, R.N., Ph.D.
University of Minnesota
Dietary Fiber Therapy for Fecal Incontinence

1993 Grantees

Diana Bigelow, Ph.D.
University of Kansas
Effects of Protein & Lipid Oxidation on Intracellular Calcium Regulation

Gregory Boyarsky, Ph.D.
University of Texas Medical Branch
Regulation of Intracellular pH in Single Senescent Vascular Smooth Muscle

Judy Bruno-Bechtold, Ph.D.
Bowman Gray School of Medicine at Wake Forest University
Effects of Dietary Restriction on Cerebrovascular and Neural Aging

Mary Lou Caspers, Ph.D.
University of Michigan
Regulation of Cytokine c with Oxidase Gene Expression in Aging Skeletal Muscle

Lucian Del Priore, M.D., Ph.D.
Washington University School of Medicine
Transplantation of Retinal Pigment Epithelium

Michele Didier, Ph.D.
McLean Hospital
Molecular Characterization of Glutamate Receptor Subunits in Neurodegeneration

Meika A. Fang, M.D.
Veterans Affairs Medical Center, West Los Angeles
The Role of EGR-1 in Prostaglandin E2 Mediated Signal Transduction and Proliferation of Osteoblastic Cells

Thomas C. Foster, Jr., Ph.D.
University of Virginia
Neurobehavioral Relations of the Senescent Hippocampus

Barry Gumbiner, M.D.
University of Rochester
Insulin Signal Transduction in Aging

Eun-soo Han, Ph.D.
University of Texas Health Science Center at San Antonio
Estrogen-dependent Gene Expression in the Aging Brain

Robert H. Helfert, M.D.
Southern Illinois University School of Medicine
Alterations in the Synaptic Organization of the Inferior Colliculus of Aging Fischer 344 Rats

Skye McDougall, Ph.D.
University of California, Los Angeles
The Role of TWIST in Controlling Type II Collagen Gene Expression in Chondrocytes and the Development of Osteoarthritis

Todd Morgan, Ph.D.
Research University of Southern California
TGF-B1 and the Micrornidal Response to Aging

Ramagopal Mudumbi, Ph.D.
Veterans Affairs Medical Center, Boise
Aging & Vascular Pharmacology of Adenosine

Lauren Nathan, M.D.
David Geffen School of Medicine at the University of California, Los Angeles
The Effects of Conjugated Equine Estrogens on Coronary Blood Flow

Usa Ponnapann, Ph.D.
University of Arkansas for Medical Sciences
Aging and Immune Function Role of Transcription Factor NFkB

Marko Radic, Ph.D.
Medical College of Pennsylvania
Molecular Basis for the Declining Antibody Response in Aging

May J. Reed, M.D.
University of Washington
Aging, Caloric Restriction and Wound Repair

Chandar Singaram, M.B.
University of Wisconsin-Madison
Pathogenesis of Exophagial Dysmotility in the Elderly

Charles Soparkar, M.D., Ph.D.
Baylor College of Medicine
Enhancing the Vascularization of Orbital Bone Substitutes: A Model for the Study of Changes in Angiogenesis and Aging

Eugenia Spanospolou, Ph.D.
Rockefeller University
Age-related Loss of Immunoglobin Diversity & the Role of RAG-1 in the Bone Marrow Lymphocytes of Elder Mice

Pericles Stavropoulos, Ph.D.
Boston University
Synthesis of CuZnSOD Mimosas as Potential Probes of Age-related Oxidative Damage

Giulio Tagliatela, Ph.D.
University of Texas Medical Branch
Neurotrophins Rescue of Apoptotic Neural Cells

W. Robert Taylor, M.D., Ph.D.
Veterans Affairs Medical Center, Decatur
Mechanisms of Age-related Impairment of Endothelial Function

Jonathan Tilby, Ph.D.
Johns Hopkins University
The Molecular Basis of Female Reproductive Aging & Menopause

Elas Traboulsi, M.D.
Johns Hopkins University
Mapping the Gene(s) for Chronic Open Angle Glaucoma (COAG)

Yaotang Wu, Ph.D.
Children’s Hospital, Harvard Medical School
Solid State NMR Study of Osteoporotic Bone

Donna Zimmaro Bliss, R.N., Ph.D.
University of Minnesota
Dietary Fiber Therapy for Fecal Incontinence
Carol J. Phelps, Ph.D.
Tulane University Medical Center
Catecholaminergic Neuron Plasticity in the Aged Rat Brain

Raymond M. Quock, Ph.D.
University of Illinois College of Medicine
Opioid Analgesia and Brain Opioid Radioligand Binding in Senescent Rats

Jame F. Reckelhoff, Ph.D.
University of Mississippi Medical Center
Mechanisms of Age-dependent Change in Renal Protein Turnover in the Rat

Scott W. Rogers, Ph.D.
Salk Institute for Biological Studies, San Diego
Stimulated Atrial Natriuretic Hormone Elevations in Healthy Men

John Aronson, Ph.D.
University of Florida

Kevin J. Anderson, Ph.D.
University of Pennsylvania

Rheumatoid Sinovitis Involvement in the Development of Autoimmunity and Aging: Cyrokine

William V. Williams, M.D.
Acetylcholine Release during Senescence

Martin Sarter, Ph.D.
Ohio State University
Disinhibition of Cortical Cholinergic Activity and Attenuation of Age-related Attentional Impairments

Jacob J. Steinberg, M.D.
Albert Einstein College of Medicine
Alteration of DNA Binding Sites and Proteins in Aging

Bruce R. Troen, M.D.
University of Michigan
Regulation of Expression of Cathepsin L

Alan Tucker, Ph.D.
Colorado State University
The Effects of Aging and Exercise on Vascular Reactivity in the Isolated Perfused Rat Hindlimb

David S. Ucker, Ph.D.
Medical Biology Institute, La Jolla
Susceptibility of T-cells to Activation-driven Cell Death: Aging-associated Changes and Autoimmunity

Molly S. Weiler, Ph.D.
University of Wisconsin School of Pharmacy
Muscarnic Modulation of Neostriatal Acetylcholine Release during Senescence

William V. Williams, M.D.
University of Pennsylvania
Autoimmunity and Aging: Cytokine Involvement in the Development of Rheumatoid Sarcitis

John Ding-e Young, M.D. Ph.D.
Rockerfeller University
Molecular Mechanisms of Programmed Cell Death (Apoptosis)

Stephen Baumann, Ph.D.
University of Texas Medical Branch
The Use of Magneto-encephalography to Detect Mild Alzheimer's Disease

Xandra O. Breakefield, Ph.D.
Eunice Kennedy Shriver Center, Boston
Age-related Regulation of Monamine Oxidase

Karen P. Briski, Ph.D.
Washington State University
Immunologic and Biologic Potencies of Prolactin Hormonal Forms Synthesized by Young and Old Rat Pituitary Glands

Donald M. Caspary, Ph.D.
Southern Illinois University School of Medicine
Age-related Changes in a Central Auditory Structure: A Key to Presbycusis

William T. Cefalu, M.D.
Bowman Gray School of Medicine at Wake Forest University
The Role of the Aging Process on Insulin Receptor Recyling In Vivo

Terrani Crisp, Ph.D.
Northeastern Ohio Universities
Age-related Changes in Spinal Opiate-induced Analgesia

Susan Ettinger, Ph.D.
Cornell University Medical College
Age-associated Chromosomal Fragility in Human Lymphocytes

Donna D. Flynn, Ph.D.
University of Miami School of Medicine
Age-altered M-1 Muscarinic Receptor Function

Joseph A. Gascho, M.D.
Penn State Milton S. Hershey Medical Center
The Effects of Aging on the Venodilatory Response to Nitroglycerine

Gabriel Gold, M.D.
Mount Sinai Medical Center
Influence of Age on Basal and Exercise Stimulated Abal Natriuretic Hormone

Reuben Gonzales, Ph.D.
University of Texas
Effects of Aging on Glutamate Receptor Function

Susan Greenspan, M.D.
Harvard Medical School
The Role of Newly Discovered Coenzyme PQO in Age-related Dopamine Regulation

Sharon K. Inouye, M.D.
Yale University School of Medicine
Acute Confusional State in the Hospitalized Elderly: Incidence, Risk Factors and Complications

S. Michal Jazwinski, Ph.D.
Louisiana State University Medical Center
The 8-Amyloid Gene of Yeast

Donald A. Jurivich, D.O.
Northwestern University Medical Center
Signal Transduction during Heat Shock and Senescence

Frances M. Leslie, Ph.D.
University of California, Irvine
Neurotransmitter Correlates of Senescent Memory Decline

Scott L. Mader, M.D.
Case Western Reserve University
Case of Aging on Adrenergic Physiology in Cultured Vascular Smooth Muscle Cells

Jeffrey N. Masters, Ph.D.
University of Southern California
Glucocorticoids and the Aging Hippocampus

Roger B. McDonald, Ph.D.
University of California, Davis
Effect of Age and Gender on the Neural Control of Pancreatic Function

Michael J. Meldrum, Ph.D.
University of Florida College of Pharmacy
Alterations in Glutamate Release in Aging

Russell L. Moore, Ph.D.
Penn State Milton S. Hershey Medical Center
Adaptation of Senescent Myocardium to Training

William C. Orr, Ph.D.
Southern Methodist University
The Effects of Glutathione Peroxidase on Aging in Transgenic Drosophila

Horace M. Perry, M.D.
Saint Louis University School of Medicine
Involusional Osteoporosis, Osteoblast and Osteoclast Activity

John W. Rachow, M.D., Ph.D.
University of Iowa College of Medicine
The Role of Matrix Vesicle Function in Herpetocystic Ossification Following Hip Arthropathy

Richard L. Riley, Ph.D.
University of Miami School of Medicine
Regulation of B Lymphocytes in Aging

Eugene L. Roberts, Jr., Ph.D.
University of Miami School of Medicine
Increased Vulnerability of Aged Brain to Anoxia

Dorrie E. Rosenblatt, M.D., Ph.D.
University of Michigan
Pro tease Nexin I Binding: A Biochemical Marker for Alzheimer's Disease?

Robert D. Shaw, M.D.
Veterans Affairs Medical Center, Northport, NY
Prolactin Rejuvenation of Aged Murine Macosal Immunity

J. David Sweatt, Ph.D.
Baylor College of Medicine
Cholinergic and Noradrenergic Mechanisms in the Hippocampus: Possible Molecular Locus for Aging-related Memory Dysfunction

Mitchell S. Turker, Ph.D.
University of Kentucky School of Medicine
An In Vitro Analysis of a Mammalian Hibernation Factor

Randall J. Urban, M.D.
University of Virginia School of Medicine
Sex Steroidal Mechanisms Modulating FSH Elevations in Healthy Men

Roy B. Verdeny, M.D., Ph.D.
Bowman Gray School of Medicine at Wake Forest University
Role of Lipoproteins in Production of Tumor Necrosis by Monocyte-Macrophage

Bryant Villepontee, Ph.D.
University of Michigan
Genetic Markers of Aging and Immortalization

Houa-yan Wang, Ph.D.
Medical College of Pennsylvania
The Effect of Age on Human Protein Kinase C

Zahra F. Zakeri, Ph.D.
University of Medicine & Dentistry of New Jersey
Stress Proteins and Stress Response in Aging Tissues

1988 Grantees

Ina J. Amber, M.D.
University of Utah
Effects of Age on the Activation and Cytotoxic Effector Mechanisms of Macrophages

Rosemarie M. Booze-Aron, Ph.D.
University of Kentucky Medical Center
Initiation and Maintenance of Neural Growth in Aging: Role of NGF

Connie W. Bales, Ph.D.
Duke University Medical Center
Vitamin D Metabolism: A Function of Kidney Donor Age

Margaret M. Baumann, M.D.
Harvard Medical School
Cellular Mechanisms of Incontinence in the Elderly

Elizabeth S. Boylan, Ph.D.
Queens College, City University of New York
The Control of Metastasis by Dietary Fat in Aged Rats

Anne M. Cataldo, Ph.D.
McLean Hospital
Molecular Mechanisms of Neuronal Proteolysis during Normal Aging and Late-onset Neurodegenerative Disease

James R. Connor, Ph.D.
Pennsylvania State University
Aluminum Access to the Brain: The Role of the Transferrin Receptor

Nazneen Dewji, Ph.D.
University of California, San Diego School of Medicine
Molecular Studies of Disorders of Accelerated Aging

Peter D. Gorevic, M.D.
State University of New York, Stony Brook
Amyloid and Aging: Abnormalities in the Processing of Autologous Proteins

Marilyn Gossman, Ph.D.
University of Alabama, Birmingham
Relationship of Strength, Muscle Length, Balance, and Gait Characteristics to Falling in Elderly Women

1989 Grantees

Kevin J. Anderson, Ph.D.
University of Florida
Excitotoxicity and NMDA Receptors in the Aged Brain

John Aronson, Ph.D.
Wistar Institute
Enhancer Sensitive Cell Lines for Aging Studies
Ernest R. Greene, Ph.D.
Lovelace Medical Foundation
Age-related Differences in Human Regional Blood Flow

Margaret T. Hessen, M.D.
Medical College of Pennsylvania
Role of Lymphokines in Decreased Lymphoproliferative Response of the Elderly and Relation to Morbidity and Mortality

Martin I. Horowitz, Ph.D.
New York Medical College
Glycation of Histones in the Aging Brain

Mark D. Johnson, Ph.D.
Medical College of Pennsylvania
Stimulus Response Coupling In the Aging Vasculature

Judith A. Kritsly-Roy, Ph.D.
University of Michigan
Role of Opioid Peptides & Corticotrophin Releasing Hormone to Modulate Sympathetic Outflow & Cardiovascular Function during Aging Process of Rats

Daniel A. Kirschner, Ph.D.
Boston Children’s Hospital
β-Amyloid of Alzheimer’s Disease: Assembly and Stability

Dalane W. Kitzman, M.D.
Duke University Medical Center
Age Relationships in Central & Peripheral Cardiovascular Function during Rest and Exercise in Normal Subjects

Gary Kochersberger, M.D.
Buffalo Veterans Affairs Medical Center
The Metabolic Effects of Calcium Supplementation in the Elderly

Deborah C. Mash, Ph.D.
University of Miami School of Medicine
Age-altered Neurontneris Receptor Architectonics

Vincent M. Monnier, M.D.
Case Western Reserve University
Structure, Elucidation and Role of a Biological Marker for Aging

Robert W. Rees-Jones, M.D.
Columbia University
Correction of In Vitro Growth Defects of Werner’s Syndrome Fibroblasts by Gene Transfer

Anthony C. Santucci, Ph.D.
Brons Veterans Affairs Medical Center
An Examination of NGF’s Efficacy in Aged Rats

Jay S. Schneider, Ph.D.
Hahnemann University
The Effects of Age on Dopamine System Regeneration in a Rodent Model of Parkinsonism

Thomas Sorger, Ph.D.
Wistar Institute
Modulation of Human Vascular Smooth Muscle Cell Responses to Monocyte Factors by n-3 Fatty Acids and DHEA

Andrea L. Spiering, Ph.D.
Baylor College of Medicine
Escape from Senescence: The SUSM-1 Cell Line as a Model System

Gretchen H. Stein, Ph.D.
University of Colorado
Expression of a Senescence-related Gene during Cellular Aging

Michael K. Stock, Ph.D.
Oregon Health & Science University
Effect of Prenatal Oxygen Exposure on Growth, Metabolism, Aging and Longevity of Drosophila

Joyce S. Tenover, M.D., Ph.D.
Harbournview Medical Center, Seattle
Effects of Testosterone Replacement in Elderly Men

Nancy G. Weiland, Ph.D.
University of Maryland
NMDAS and GABA Receptors in Aging Females

1987 Grantees

Vincent J. Aloyo, Ph.D.
Medical College of Pennsylvania
Age-related Alteration of Hypothalamic Serotonin Stimulus-secretion Coupling

Jeffrey Aron, M.D.
Mount Zion Hospital, San Francisco
Physiological Determinants of Resting Energy Expenditure in the Elderly

Carol A. Barnes, Ph.D.
University of Colorado
Effects of Aging on Sensory-motor Information Processing Capabilities of Mammalian Association Cortex

Jerry G. Blaivas, M.D.
Columbia University College of Physicians and Surgeons
Urodynamics of Aging

Terrence F. Blaschke, M.D.
Stanford University Medical Center
β Blocker vs. Calcium Channel Blocker: Relative Incidence of Cognitive Dysfunction and Depression in Elderly Patients

John F. Disterhoff, Ph.D.
Northwestern University Medical School
Mechanisms of Age-related Memory Deficits

Linda A. Dokas, Ph.D.
Medical College of Ohio
Neurochemical Correlates of Hippocampal Aging

David N. Ernst, Ph.D.
Scirps Clinic, San Diego
Synthesis and Activity of Interleukin-2 in Aged Mice

James W. Gubahtz, Ph.D.
University of South Alabama
DNA Repair of Proto-oncogenes during Aging

Alfred L. Geller, Ph.D.
Massachusetts General Hospital
Studies on Alzheimer’s Disease and Long Term Memory Loss in the Hippocampus, In Vivo, Using HSV-1 Vectors

Dick Greene, Ph.D.
New Mexico Highlands University
Aging and Human Regional Blood Flow

Margaret A. Griffin, M.D.
Pettis Memorial Veterans Affairs Hospital
A T-cell Biomarker of Cellular Aging

Jerome H. Herman, M.D.
University of Cincinnati College of Medicine
Healing of Osteoarthritic Cartilage by Nd:YAG Laser Radiation

Andrew K.S. Ho, Ph.D.
University of Illinois College of Medicine
Molecular Mechanisms of Muscarinic Acetylcholine Receptor in Aging

Anne L. Hoff, Ph.D.
State University of New York, Stony Brook
The Effects of Tricyclic Antidepressant Medication on Cognitive Functioning in the Aged

Laura L. Mays Hoopes, Ph.D.
Occidental College
Decreased DNA Methylation Capacity in Aging Mouse Liver

Jeffrey N. Joyce, Ph.D.
University of Pennsylvania
Neurotransmitter Alterations in Aged Striatum

Donald A. Kleinek, Ph.D.
Baylor College of Medicine
Gene Expression Studies of Cellular Aging In Vitro

Melinda A. Lee, M.D.
Oregon Health and Science University
Regulation of Hematopoiesis by Marrow Stromal Cells: Age-related Changes

Timothy A. McCaffrey, Ph.D.
Cornell University Medical College
Age and Smooth Muscle Proliferation: Potential Influence of PDGF-like Factors

David G. Morgan, Ph.D.
University of Southern California
Gene Expression in Alzheimer’s Disease

Jay S. Pepose, M.D.
Washington University School of Medicine
Immunological Studies of Age-related Macular Degeneration

K. Murrali Krishna Rao, M.D.
Duke University Medical Center
Mechanisms of Cellular Senescence in Lymphocytes and Neutrophils

Jo Anne Robbins, Ph.D.
University Florida College of Pharmacy
Regulation of the Intestinal Immune Response in the Aged Rat

Margaret A. Griffin, M.D.
Pettis Memorial Veterans Affairs Hospital
A T-cell Biomarker of Cellular Aging

1986 Grantees

Gary Aston-Jones, Ph.D.
New York University
Physiological Properties of Cholinergic and Noradrenergic Cortical Afferent Neurons in Behaving Primates: Changes with Old Age

Cynthia M. Beall, Ph.D.
Case Western Reserve University
Age and Adaptation to High Altitude Hypoxia

Paul E. Bendheim, M.D.
New York State Institute for Basic Research Scapie as a Model for Alzheimer’s Disease: Purification & Characterization of a Putative Amyloid Precursor Protein

Jesse M. Cedarbaum, M.D.
Burke Rehabilitation Center, White Plains
Early Signs of Cognitive Impairment in Parkinson’s Disease and Normal Aging

Christopher K. Daniels, Ph.D.
University of California, San Francisco School of Medicine
Regulation of the Intestinal Immune Response in the Aged Rat

Ralph Dawson, Jr., Ph.D.
University Florida College of Pharmacy
Excitotoxic Amino Acids and Neuronal Loss in the Aging Brain

Lawrence K. Duffy, Ph.D.
University of Alaska
Monoclonal Antibodies to Age-related Abnormal Proteins

Joe E. Springer, Ph.D.
Hahnemann University
Transplantation of NGF-rich Tissue Provides Trophic Support for Damaged Cholinergic Neurons

Einar Stefansson, M.D., Ph.D.
Duke University Medical Center
Surgical Relocation of the Macula: A Treatment for Age-related Macular Degeneration

Trygve O. Tollefsbol, Ph.D.
Duke University Medical Center
RNA Processing and Enzyme Induction in Aging Using Cloned cDNA Probes

Nihal Turner, Ph.D.
Medical College of Pennsylvania
Age-related Changes in the Effect of Circulating Catecholamines on the Cardiac Adrenergic Neuroeffector Junction

Cheryl A. Walters, M.D.
Cornell University Medical College
Age-related Antibody Kinetics of Polyvalent Pneumococcal Vaccine

Margaret A. Griffin, M.D.
Pettis Memorial Veterans Affairs Hospital
A T-cell Biomarker of Cellular Aging

Wistar Institute
Scrapie as a Model for Alzheimer’s Disease: Modulation of Human Vascular Smooth Muscle Cell Responses to Monocyte Factors by n-3 Fatty Acids and DHEA

Baylor College of Medicine
Escape from Senescence: The SUSM-1 Cell Line as a Model System

University of Colorado
Expression of a Senescence-related Gene during Cellular Aging

University of Cincinnati College of Medicine
Healing of Osteoarthritic Cartilage by Nd:YAG Laser Radiation

University of Illinois College of Medicine
Molecular Mechanisms of Muscarinic Acetylcholine Receptor in Aging

State University of New York, Stony Brook
The Effects of Tricyclic Antidepressant Medication on Cognitive Functioning in the Aged

Columbia University
Gene Expression Studies of Cellular Aging In Vitro

University of Chicago
Gene Expression in Alzheimer’s Disease

University of Southern California
Gene Expression in Alzheimer’s Disease

New York University
Physiological Properties of Cholinergic and Noradrenergic Cortical Afferent Neurons in Behaving Primates: Changes with Old Age

Case Western Reserve University
Age and Adaptation to High Altitude Hypoxia

New York State Institute for Basic Research Scapie as a Model for Alzheimer’s Disease: Purification & Characterization of a Putative Amyloid Precursor Protein

Burke Rehabilitation Center, White Plains
Early Signs of Cognitive Impairment in Parkinson’s Disease and Normal Aging

University of California, San Francisco School of Medicine
Regulation of the Intestinal Immune Response in the Aged Rat

University Florida College of Pharmacy
Excitotoxic Amino Acids and Neuronal Loss in the Aging Brain

University of Alaska
Monoclonal Antibodies to Age-related Abnormal Proteins

University of Vermont
Selective Regulation of CNS Muscarinic Receptors: Implications for Aging Research

University of Texas
Effects of Exercise Upon Age-induced Deficits in Neuronal Calcium Transport
<table>
<thead>
<tr>
<th>1983 Grantees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cynthia M. Beall, Ph.D.</strong></td>
</tr>
<tr>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Lifelong High Physical Activity Level and the Aging Process</td>
</tr>
<tr>
<td><strong>W. Ted Brown, M.D., Ph.D.</strong></td>
</tr>
<tr>
<td>New York State Institute for Basic Research</td>
</tr>
<tr>
<td>Biochemical Studies of Werner Syndrome as a Model of Aging</td>
</tr>
<tr>
<td><strong>Arthur Cherkin, Ph.D.</strong></td>
</tr>
<tr>
<td>David Geffen School of Medicine at the University of California, Los Angeles</td>
</tr>
<tr>
<td>Senile Dementia: Combination Drug Therapy and Toxicity</td>
</tr>
<tr>
<td><strong>Fulton T. Crews, Ph.D.</strong></td>
</tr>
<tr>
<td>University of Florida School of Medicine</td>
</tr>
<tr>
<td>Interaction of Acetylcholine, Peptide Neurotransmitters and Membrane Properties during Aging</td>
</tr>
<tr>
<td><strong>John Ellis, Ph.D.</strong></td>
</tr>
<tr>
<td>University of Vermont</td>
</tr>
<tr>
<td>Central and Peripheral Muscarinic Cholinergic Receptors</td>
</tr>
<tr>
<td><strong>William B. Ershler, M.D.</strong></td>
</tr>
<tr>
<td>University of Vermont</td>
</tr>
<tr>
<td>Thymic Transplantation of Immunescence</td>
</tr>
<tr>
<td><strong>Caleb E. Finch, Ph.D.</strong></td>
</tr>
<tr>
<td>University of Southern California</td>
</tr>
<tr>
<td>Aging and Monoamine Receptors in the Human Brain</td>
</tr>
<tr>
<td><strong>Phillip K. Fulkerson, M.D.</strong></td>
</tr>
<tr>
<td>Ohio State University</td>
</tr>
<tr>
<td>Crystal Analysis of Mineral Deposits in Senile Aortic Stenosis</td>
</tr>
<tr>
<td><strong>Paula B. Goldberg, Ph.D.</strong></td>
</tr>
<tr>
<td>Medical College of Pennsylvania</td>
</tr>
<tr>
<td>Psychotropic/Antiarrhythmic Drug Interactions in Aging</td>
</tr>
<tr>
<td><strong>Michael Klagsbrun, Ph.D.</strong></td>
</tr>
<tr>
<td>Children’s Hospital, Boston</td>
</tr>
<tr>
<td>Role of Cartilage-derived Growth Factor in Osteoarthritis</td>
</tr>
<tr>
<td><strong>Linda J. Kraus, Ph.D.</strong></td>
</tr>
<tr>
<td>Boston University School of Medicine</td>
</tr>
<tr>
<td>Immune and Neuroendocrine Regulatory Interactions in Alzheimer’s Disease and Aging</td>
</tr>
<tr>
<td><strong>Robert J. Luchi, M.D.</strong></td>
</tr>
<tr>
<td>Baylor College of Medicine</td>
</tr>
<tr>
<td>Left Ventricular Function in Patients 70 Years or Older</td>
</tr>
<tr>
<td><strong>Kenneth L. Minaker, M.D.</strong></td>
</tr>
<tr>
<td>Harvard Medical School</td>
</tr>
<tr>
<td>Mechanism of Age-related Loss of Lean Body Mass</td>
</tr>
<tr>
<td><strong>John T. Pinto, Ph.D.</strong></td>
</tr>
<tr>
<td>Sloan-Kettering Institute</td>
</tr>
<tr>
<td>Psychoactive Drugs and Vitamin B2 Metabolism in Aging</td>
</tr>
<tr>
<td><strong>Marcus M. Reidenberg, M.D.</strong></td>
</tr>
<tr>
<td>Cornell University Medical College</td>
</tr>
<tr>
<td>Polyamine Accumulation in the Elderly</td>
</tr>
<tr>
<td><strong>Douglas L. Schmucker, Ph.D.</strong></td>
</tr>
<tr>
<td>University of California, San Francisco School of Medicine</td>
</tr>
<tr>
<td>Effects of Aging on Hepatobiliary Functions</td>
</tr>
<tr>
<td><strong>David Soifer, Ph.D.</strong></td>
</tr>
<tr>
<td>New York Institute for Basic Research</td>
</tr>
<tr>
<td>Developmental Disabilities</td>
</tr>
<tr>
<td>Monoclonal Antibodies for the Study of Alzheimer’s Disease</td>
</tr>
<tr>
<td><strong>Robert E. Till, Ph.D.</strong></td>
</tr>
<tr>
<td>University of North Dakota</td>
</tr>
<tr>
<td>Effects of Vasopressin on Age Differences in Memory</td>
</tr>
<tr>
<td><strong>Richard F. Walker, Ph.D.</strong></td>
</tr>
<tr>
<td>University of Kentucky College of Medicine</td>
</tr>
<tr>
<td>A Pacemaker for Aging in the Female Reproductive System</td>
</tr>
<tr>
<td><strong>Diana S. Woodruff-Pak, Ph.D.</strong></td>
</tr>
<tr>
<td>Stanford University</td>
</tr>
<tr>
<td>Brain Correlates of Memory in Old Age</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1982 Grantees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Edward D. Bird, M.D.</strong></td>
</tr>
<tr>
<td>Harvard Medical School</td>
</tr>
<tr>
<td>Monoamines in CSF and Postmortem Brain in Alzheimer’s Disease</td>
</tr>
<tr>
<td><strong>Dennis E. Buettow, Ph.D.</strong></td>
</tr>
<tr>
<td>University of Illinois</td>
</tr>
<tr>
<td>O-IRNAs and Aging</td>
</tr>
<tr>
<td><strong>Joseph T. Coyle, M.D.</strong></td>
</tr>
<tr>
<td>Johns Hopkins University School of Medicine</td>
</tr>
<tr>
<td>Cortical Cholinergic Lesion: Model for Alzheimer’s Disease</td>
</tr>
<tr>
<td><strong>John M. Lowenstein, Ph.D.</strong></td>
</tr>
<tr>
<td>Brandeis University</td>
</tr>
<tr>
<td>Molecular Species of Membrane Phospholipids in the Aging Rat</td>
</tr>
<tr>
<td><strong>Peter V. Rabins, M.D.</strong></td>
</tr>
<tr>
<td>Johns Hopkins University School of Medicine</td>
</tr>
<tr>
<td>The Dementia of Depression: CAT Scan Correlates</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2005 Grantees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AFAR-Ohio</strong></td>
</tr>
<tr>
<td><strong>Erik D. Andrusis, Ph.D.</strong></td>
</tr>
<tr>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Mechanisms of mRNA Turnover during Aging</td>
</tr>
<tr>
<td><strong>AFAR-Southeast</strong></td>
</tr>
<tr>
<td><strong>Paul Holzheime, M.D.</strong></td>
</tr>
<tr>
<td>Emory University</td>
</tr>
<tr>
<td>Investigating the Structural and Functional Neuropathology of Late-life Depression</td>
</tr>
<tr>
<td><strong>Anna Moore, Ph.D.</strong></td>
</tr>
<tr>
<td>Emory University</td>
</tr>
<tr>
<td>Subcortical Function: Contributions to Hemispheric Asymmetry Reduction in Older Adults</td>
</tr>
<tr>
<td><strong>Dan Sorensen, M.D.</strong></td>
</tr>
<tr>
<td>Emory University</td>
</tr>
<tr>
<td>The Role of N0x4 in Cardiac Senescence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2004 Grantees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AFAR-Southeast</strong></td>
</tr>
<tr>
<td><strong>Ling Li, D.V.M., Ph.D.</strong></td>
</tr>
<tr>
<td>University of Alabama at Birmingham</td>
</tr>
<tr>
<td>Statins for Enhancing Learning and Memory in Normal Aging</td>
</tr>
<tr>
<td><strong>AFAR-Upstate New York</strong></td>
</tr>
<tr>
<td><strong>Heinrich Jasper, Ph.D.</strong></td>
</tr>
<tr>
<td>University of Rochester Medical Center</td>
</tr>
<tr>
<td>Regulatory Interactions between JNK and Insulin Signaling in the Control of Lifespan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2005 Recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Katrin Andreasson, M.D.</strong></td>
</tr>
<tr>
<td>Johns Hopkins University School of Medicine</td>
</tr>
<tr>
<td>Function of the PGE2EP Receptors in the Development of Alzheimer’s Disease</td>
</tr>
<tr>
<td><strong>Steven Artandi, M.D., Ph.D.</strong></td>
</tr>
<tr>
<td>Stanford University</td>
</tr>
<tr>
<td>Activation of Epidermal Stem Cells by Telomerase</td>
</tr>
<tr>
<td><strong>Anne Brunet, Ph.D.</strong></td>
</tr>
<tr>
<td>Stanford University</td>
</tr>
<tr>
<td>Role of FOXO Transcription Factors in Mammalian Longevity</td>
</tr>
<tr>
<td><strong>Fen-Biao Gao, Ph.D.</strong></td>
</tr>
<tr>
<td>J. David Gladstone Institutes at the University of California, San Francisco</td>
</tr>
<tr>
<td>Identification of Genetic Pathways That Reduce α6 Toxicity on Neuronal Structures</td>
</tr>
</tbody>
</table>
### 2000 Age-related Neurodegenerative Diseases

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azad Bonni, M.D., Ph.D.</td>
<td>Harvard Medical School</td>
<td>Neurotrophin Regulation of Amyloid β-induced Neuronal Degeneration and Cell Death</td>
</tr>
<tr>
<td>Frank M. LaFerla, Ph.D.</td>
<td>University of California, Irvine</td>
<td>Molecular Determinants of Presenilins in Intracellular Calcium Signaling Pathways</td>
</tr>
<tr>
<td>James Lah, M.D., Ph.D.</td>
<td>Emory University</td>
<td>Normal and Abnormal Function of Presenilin-1 in Endosomes</td>
</tr>
<tr>
<td>Glenn C. Telling, Ph.D.</td>
<td>University of Kentucky Medical Center</td>
<td>In Vitro Studies of Human Prions</td>
</tr>
</tbody>
</table>

### 2004 Recipients

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zheng-yi Chen, Ph.D.</td>
<td>Massachusetts General Hospital</td>
<td>Hair Cell Regeneration Through Cell Division</td>
</tr>
<tr>
<td>Jay M. Edelberg, M.D., Ph.D.</td>
<td>Weill Medical College of Cornell University</td>
<td>Cardiac Myocyte Derivation from Aging Bone Marrow Cells</td>
</tr>
<tr>
<td>Biao Zheng, M.D., Ph.D.</td>
<td>Baylor College of Medicine</td>
<td>Overcoming Age-associated Immune Deficiency by Immune Complex Vaccination</td>
</tr>
</tbody>
</table>

### 2005 Scholars

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liana G. Apostolova, M.D.</td>
<td>University of California, Los Angeles</td>
<td>Structural MRI Outcome Predictors in MCI</td>
</tr>
<tr>
<td>Malaz A. Boustani, M.D., M.P.H.</td>
<td>Indiana University School of Medicine</td>
<td>Enhancing Care for Hospitalized Older Adults with CI</td>
</tr>
<tr>
<td>Jennifer S. Brach, Ph.D.</td>
<td>University of Pittsburgh</td>
<td>Gait Variability: Epidemiology, Assessment &amp; Management</td>
</tr>
<tr>
<td>Arleen F. Brown, M.D., Ph.D.</td>
<td>University of California, Los Angeles</td>
<td>Lipid Metabolism &amp; Central Adiposity After Menopause</td>
</tr>
<tr>
<td>Pearl H. Seo, M.D., M.P.H.</td>
<td>Duke University Medical Center</td>
<td>PPARγ: Biomarker, Frontline Drug Candidate in Cancer Prevention</td>
</tr>
<tr>
<td>Arti Hurria, M.D.</td>
<td>Memorial Sloan-Kettering Cancer Center</td>
<td>Can Geriatric Assessment Predict Oncology Outcomes?</td>
</tr>
<tr>
<td>Della F. Terry, M.D., M.P.H.</td>
<td>Boston University School of Medicine</td>
<td>Centenarian Offspring and Vascular Disease Resistance</td>
</tr>
<tr>
<td>Wendylyn S. Gocansky, M.D., M.P.H.</td>
<td>University of Colorado Health Sciences Center</td>
<td>Estrogen and Breast Cancer Risk: Understanding the Role of the Menopause Transition</td>
</tr>
</tbody>
</table>

### 2004 Scholars

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy Chang, M.D., Ph.D.</td>
<td>M.D. Anderson Cancer Center at the University of Texas</td>
<td>Telomere-induced Genomic Instability in Premature Aging</td>
</tr>
</tbody>
</table>

### 2003 Metabolic Control and Late Life Diseases

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yih-Woei C. Fridelli, Ph.D.</td>
<td>University of Connecticut Health Center</td>
<td>Mitochondrial Uncoupling and Aging</td>
</tr>
<tr>
<td>Mary J. Kelley, Ph.D.</td>
<td>Oregon Health and Science University</td>
<td>Integrin Sensing in Late-onset Glaucoma</td>
</tr>
<tr>
<td>Kevin R. Short, Ph.D.</td>
<td>Mayo Clinic, Rochester</td>
<td>Age Effects on Mitochondria: From Gene to Function in Different Tissues</td>
</tr>
<tr>
<td>Hong Yang, M.D.</td>
<td>Meharry Medical College</td>
<td>Age-related Increase in the Sensitivity of Endothelial Cells to Oxidized Lipids: The Role of Reactive Oxygen Species</td>
</tr>
</tbody>
</table>

### 2001 Hormones and Aging

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anne R. Cappola, M.D.</td>
<td>University of Maryland</td>
<td>Androgens, Myostatin, and Sarcopenia in Older Women</td>
</tr>
<tr>
<td>Naibedya Chattopadhyay, Ph.D.</td>
<td>Brigham &amp; Women’s Hospital</td>
<td>Anabolic Actions of Ca2+-sensing Receptor in Osteoblastic Cells</td>
</tr>
<tr>
<td>Karyn M. Frick, Ph.D.</td>
<td>Yale University</td>
<td>Estrogen Replacement in Middle-aged Female Mice: Implications for the Treatment of Menopausal Women</td>
</tr>
<tr>
<td>Joseph M. Zmuda, Ph.D.</td>
<td>University of Pittsburgh</td>
<td>Molecular Epidemiology of Sex Steroid Metabolism Genes and Bone Mass in African-American Women</td>
</tr>
</tbody>
</table>

### 2002 Immunology and Aging

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christopher B. Forsyth, Ph.D.</td>
<td>Rush-Presbyterian-St. Luke’s Medical Center</td>
<td>Effect of Aging on Integrin Regulation of MMP-13 in Human Chondrocytes</td>
</tr>
<tr>
<td>Lap Ho, Ph.D.</td>
<td>Mount Sinai School of Medicine</td>
<td>Characterizing the Influence of Immune Inflammatory Activities in the Clinical Progression of Alzheimer’s Disease Dementia</td>
</tr>
</tbody>
</table>

### 2000 Age-related Diseases and Aging

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vincent L. Cyms, M.D.</td>
<td>Northwestern University Medical School</td>
<td>Role of Mitochondrial Injury in Ischemic Myocardial Cell Death and Myocardial Aging</td>
</tr>
<tr>
<td>Jay M. Edelberg, M.D., Ph.D.</td>
<td>Weill Medical College of Cornell University</td>
<td>Molecular Enhancement of Senescent Cardiac Chronotropy</td>
</tr>
<tr>
<td>Roger J. Hajjar, M.D.</td>
<td>Harvard Medical School</td>
<td>Restoration of Diastolic Function in the Senescent Heart by Gene Transfer</td>
</tr>
<tr>
<td>Domenico Pratico, M.D.</td>
<td>University of Pennsylvania</td>
<td>In Vivo Isotypic-specific Effects of Apolipoprotein E on Advanced Atherosclerosis</td>
</tr>
</tbody>
</table>

### Paul Beeson Career Development Awards in Aging Research Program

(Formerly the Paul Beeson Physician Faculty Scholars in Aging Research Program)

Three-to five-year awards to sustain and promote the research careers of clinically trained individuals who are pursuing research careers in aging. The program is a collaboration between AFAR, the National Institute on Aging (NIA), The John A. Hartford Foundation, The Atlantic Philanthropies, The Starr Foundation, the NIH Office of Dietary Supplements and the Alliance for Aging Research. The Commonwealth Fund was a previous partner in this program.
Catheleen S. Colon-Emeric, M.D.
Duke University Medical Center
Evidence-based Medicine in the Skilled Nursing Facility

William Dale, M.D., Ph.D.
University of Chicago
Emotions in Medical Decision-making in Older Adults

Lee E. Goldstein, M.D., Ph.D.
Brigham and Women's Hospital/Harvard Medical School
Aging and Alzheimer's Disease

Cary P. Gross, M.D.
Yale University
The Impact of Comorbidities on Older Cancer Patients

John J. Lehman, M.D.
Washington University
Mitochondrial Control by PGC-1a in Young and Aging Heart

Andrew P. Lieberman, M.D., Ph.D.
University of Michigan
Modifiers of Polyglutamine Toxicity

Atul Malhotra, M.D., Ph.D.
Brigham and Women's Hospital/Harvard Medical School
Aging Influence on the Development of Sleep Apnea

Marcin Sadowski, M.D., Ph.D.
New York University School of Medicine
Blocking APOEε4 Binding as a Novel AD Therapy

Catherine A. Sarkisian, M.D., M.S.P.H.
University of California, Los Angeles School of Medicine
Intervention to Raise Octogenarians' Walking Levels

Clemens R. Scherer, M.D.
Brigham & Women's Hospital/Harvard Medical School
Genomic and Genetic Analysis of Parkinson's Disease

Lisa C. Silbert, M.D.
Oregon Health and Science University
White Matter Change and CNS Process in the Elderly

Joe Verghese, M.D.
Albert Einstein College of Medicine
Latent Mobility Abnormalities and Disability

2003 Scholars

Mercedeh Hawkins, M.D.
Albert Einstein College of Medicine
The Role of Nutrient Excess in Mediating the Insulin Resistance of Aging

Michael C. Irizarry, M.D.
Massachusetts General Hospital - East/Harvard Medical School
Beta-secretase and Alzheimer’s Risk with Aging

Kenneth Langa, M.D., Ph.D.
University of Michigan
Long-term Outcomes of Caring for a Disabled Spouse

Sarah H. Lisanby, M.D.
Columbia University College of Physicians and Surgeons
Brain Stimulation and Pharmacological Strategies to Reduce the Cognitive Side Effects of ECT in Geriatric Depression

Jack M. Parent, M.D.
University of Michigan
Stimulation of Endogenous Neural Stem Cells to Promote Recovery after Stroke

Henry L. Paulson, M.D., Ph.D.
University of Iowa
RNA interference (RNAi) as Novel Therapy for Age-related Disease

Elizabeth A. Phelan, M.D.
University of Washington
Improving Primary Care of Older Adults

Wendy S. Post, M.D.
Johns Hopkins University School of Medicine
Vascular Properties and Genetics Associated with Longevity in the Amish

Norman Sharpless, M.D.
University of North Carolina at Chapel Hill
The Role of the Tumor Suppressor P16 in Mammalian Aging

Michael G. Shlipak, M.D., M.P.H.
University of California, San Francisco
Preventing Heart Failure in Elderly Persons with Chronic Renal Insufficiency

Reisa A. Sperling, M.D., M.M.Sc.
Brigham & Women's Hospital/Harvard Medical School
Investigating the Neural Underpinnings of Memory Impairment in Aging and Early Alzheimer's Disease

Robert A. Marciniak, M.D., Ph.D.
University of Texas Health Science Center at San Antonio
Oxidative Stress and Telomere Maintenance: In Vitro and In Vivo Studies

Laura E. Niklason, M.D., Ph.D.
Duke University School of Medicine
Lifespan Extension of Vascular Cells for Tissue Engineering

Michael A. Schwarzschild, M.D., Ph.D.
Harvard Medical School
Sorting Out Clues to Parkinson's Disease: Caffeine, Postmenopausal Estrogen and Addiction

Jürgen Ünützer, M.D., M.P.H.
University of California, Los Angeles
Neuropsychiatric Institute
Improving Care for Chronic Pain and Late Life Depression

Mary Whooley, M.D.
University of California School of Medicine, San Francisco
Mechanisms of Association Between Depression and Poor Health Outcomes in Older Patients

Kristine Yaffe, M.D.
University of California School of Medicine, San Francisco
Determinants of Cognitive Change and Its Outcomes in African-American and White Elders

2000 Scholars

Brock Beamer, M.D.
Johns Hopkins University School of Medicine
Genetic Variation in PPAR-γ and RXRα: Effects on Body Composition and Metabolism in Older Adults

Gunnar K. Gouras, M.D.
Weill Medical College of Cornell University
Neuronal A-beta Accumulation: Aging and Oxidative Stress

Mary Beth Hamel, M.D., M.P.H.
Harvard Medical School
Decision-making and Outcomes for Elderly Patients with Surgical Problems

Joshua M. Hare, M.D.
Johns Hopkins University School of Medicine
The Role of Nitric Oxide in Aging-related Cardiovascular Adaptations

Fuki M. Hisama, M.D.
Yale School of Medicine
The Molecular Basis of Aging in Werner Syndrome

Jason H. Karlawish, M.D.
University of Pennsylvania School of Medicine
Caregiver and Patient Preferences for the Treatment of Alzheimer's Disease

Jean S. Kuttner, M.D., M.S.P.H.
University of Colorado Health Sciences Center
Symptom Management at the End of Life: Decreasing Distress and Improving Quality of Life

Brett Lauring, M.D., Ph.D.
Columbia University College of Physicians & Surgeons
An In Vitro Assay for Gamma Secretase Processing of the Amyloid Precursor Protein

Frank S. Lee, M.D., Ph.D.
University of Pennsylvania School of Medicine
Protein Kinases and Alzheimer's Disease

R. Sean Morrison, M.D.
Mount Sinai School of Medicine
Interventions to Improve Pain Outcomes

Scott A. Small, M.D.
Columbia University College of Physicians & Surgeons
Functional Imaging of the Hippocampal Formation in Age-related Memory Decline
1999 Scholars

Kenneth E. Covinsky, M.D., M.P.H.
University of California, San Francisco
Outcomes of Frail Nursing Home-eligible Elders Living in the Community

Matthew P. Frosch, M.D., Ph.D.
Harvard Medical School
Estrogen, Aging and Alzheimer’s Disease: Mechanisms and Model Systems

Daniel T. Laskowitz, M.D.
Duke University Medical Center
Apolipoprotein E, Microglial Activation, and Neurodegenerative Disease

Dale Leitman, M.D., Ph.D.
University of California, San Francisco
Role of Coactivators in Estrogen Repression of Gene Transcription

Richard Z. Lin, M.D.
University of Texas Health Science Center at San Antonio
The Role of Oxidative Stress in Aging Effects on Vascular Smooth Muscle Cell Growth and Signal Transduction

David R. Lynch, M.D., Ph.D.
University of Pennsylvania
Excitotoxicity in Neurodegenerative Disorders: New Understanding from MMDA Receptor Subtypes

Edward R. Marcantonio, M.D., S.M.
Harvard Medical School
Reducing Delirium in Post-acute Care: An Intentional Trial

Mitchell S. Nolber, M.D.
Columbia University College of Physicians & Surgeons
Serotonin and PET Neuroimaging in Normal Aging and Geriatric Depression.

Anne Louise Oaklander, M.D., Ph.D.
Harvard Medical School
Cellular Mechanisms of Chronic Neuropathic Pain

Thomas A. Rando, M.D., Ph.D.
Stanford University School of Medicine
Mechanisms of Age-related Muscle Atrophy: The Role of Cellular Antioxidant Defenses

1998 Scholars

Anne M. Kenny, M.D.
University of Connecticut Health Center
Mechanisms of Bone Loss in Older Men with Low Testosterone Levels

Alison A. Moore, M.D., M.P.H.
University of California, Los Angeles School of Medicine
Screening for Harmful and Hazardous Drinking in Older Persons

Thomas T. Perls, M.D., M.P.H.
Harvard Medical School
The Genetics of Longevity

Eric D. Peterson, M.D., M.P.H.
Duke University Medical Center
Toward a Rational Use of Revascularization in the Aged

Scott Turner, M.D., Ph.D.
University of Michigan Medical School
The Role of X11& in Amyloid Precursor Protein

Jeremy D. Walston, M.D.
Johns Hopkins University School of Medicine
Molecular Etiologies of Age-related Changes in Body Composition

Raymond Yang, M.D.
University of Michigan Medical School
Lymphocyte Homing in Aging

1997 Scholars

Nir Barzilai, M.D.
Albert Einstein College of Medicine
The Effect of Age-dependent Increase in Visceral Fat on Insulin Action and Secretion

Michele Bellantoni, M.D.
Johns Hopkins University School of Medicine
Growth Hormone and Sex Steroid Effects on Bone in Older Women

James R. Burke, M.D., Ph.D.
Duke University Medical Center
Polyglutamine Proteins as a Model System for Studying Protein Aggregation and Cell Death in Aging and Neurodegenerative Disease

Mark D’Esposito, M.D.
University of Pennsylvania School of Medicine
Functional Neuroimaging Studies of Working Memory in Normal Human Aging

Thomas M. Gill, M.D.
Yale University School of Medicine
Identifying the Events that Precipitate Functional Dependence Among Community-living Elderly Persons

Bernard F. Godley, M.D., Ph.D.
University of Texas Medical Branch
The Role of Oxidative Damage and Repair in Age-related Macular Degeneration

Todd E. Golde, M.D., Ph.D.
Mayo Clinic Medical School, Jacksonville
Proteolytic Generation of the Amyloid Beta Peptide in Alzheimer’s Disease

Helen Hoenig, M.D., M.P.H.
Duke University Medical Center
An Investigation of the Physical Costs and the Quality of Life Benefits of Wheelchairs for Older Persons

Elan D. Louis, M.D., M.S.
Columbia University College of Physicians and Surgeons
Functional Correlates of Essential Tremor

Charles A. Thornton, M.D.
University of Rochester School of Medicine and Dentistry
Pathophysiologic of Myotonic Dystrophy, a Progeroid Syndrome

1996 Scholars

Christopher M. Callahan, M.D.
Indiana University School of Medicine
The Use of Percutaneous Endoscopic Gastrostomy Among Older Adults in a Community Setting

Robert W. Doms, M.D., Ph.D.
University of Pennsylvania School of Medicine
Presenilin 1, APP, and Alzheimer’s Disease

Murali Doraiswamy, M.D.
Duke University Medical Center
Apolipoprotein E Type 4 Allele and Cerebral Metabolism in Relatives at Risk for Familial Alzheimer’s Disease

Harlan M. Krumholz, M.D.
Yale University School of Medicine
Clinical Spectrum, Treatment and Outcome of Elderly Congestive Heart Failure Patients

Makau Lee, M.D., Ph.D.
University of Mississippi Medical Center
Studies on Aging, Dietary Restriction and Gastric Mucosal Defense

Richard F. Loeser, M.D.
University of Washington School of Medicine
The Role of X11& in Maintaining Neuronal Form and Function

Ashley I. Bush, M.D., D.P.M., Ph.D.
Harvard Medical School
Zinc Exposure as a Risk Factor for Alzheimer’s Disease

Ted M. Dawson, M.D., Ph.D.
Johns Hopkins University School of Medicine
Gene Therapy for Neurologic Disorders

David M. Holtzman, M.D.
Washington University School of Medicine
Molecular and Cellular Factors that Play a Role in Maintaining Neuronal Form and Function in the Normal Aging CNS and How They May Be Altered in AD

Edward H. Koo, M.D.
University of California, San Diego School of Medicine
The Mechanism of Amyloid B-protein (Aβ) Production from the Amyloid Precursor Protein (APP) in Neurons

Mark S. Lachs, M.D., M.P.H.
Weill Medical College of Cornell University
The Morbidity and Mortality of Elder Abuse

Frank M. Longo, M.D., Ph.D.
University of California, San Francisco School of Medicine
New Strategies for Treating Neurodegenerative Disease

Richard A. Marottoli, M.D., M.P.H.
Yale University School of Medicine
Development of a Strategy for Identifying Which Older Drivers are at Risk for Crashes and Moving Violations

Lina M. Obeid, M.D.
University of North Carolina
Role of Ceramide in Inducing the Senescent Phenotype through Activating a Growth Suppressor Pathway and by Inhibiting a Mitogenic Pathway

Peter Reaven, M.D.
University of California, San Diego School of Medicine
The Relationship of Aging and Antioxidant Defense Systems to Atherosclerosis

Alan R. Shuldimer, M.D.
University of Maryland School of Medicine
Genetics of Diabetes and Obesity in the Elderly

1995 Scholars

Elan D. Louis, M.D., M.S.
Columbia University College of Physicians and Surgeons
Functional Correlates of Essential Tremor

Charles A. Thornton, M.D.
University of Rochester School of Medicine and Dentistry
Pathophysiologic of Myotonic Dystrophy, a Progeroid Syndrome

1999 Scholars

Richard Z. Lin, M.D.
University of Texas Health Science Center at San Antonio
The Role of Oxidative Stress in Aging Effects on Vascular Smooth Muscle Cell Growth and Signal Transduction

1998 Scholars

Anne Louise Oaklander, M.D., Ph.D.
Harvard Medical School
Cellular Mechanisms of Chronic Neuropathic Pain

Thomas A. Rando, M.D., Ph.D.
Stanford University School of Medicine
Mechanisms of Age-related Muscle Atrophy: The Role of Cellular Antioxidant Defenses

1997 Scholars

Nir Barzilai, M.D.
Albert Einstein College of Medicine
The Effect of Age-dependent Increase in Visceral Fat on Insulin Action and Secretion

Michele Bellantoni, M.D.
Johns Hopkins University School of Medicine
Growth Hormone and Sex Steroid Effects on Bone in Older Women

James R. Burke, M.D., Ph.D.
Duke University Medical Center
Polyglutamine Proteins as a Model System for Studying Protein Aggregation and Cell Death in Aging and Neurodegenerative Disease

Mark D’Esposito, M.D.
University of Pennsylvania School of Medicine
Functional Neuroimaging Studies of Working Memory in Normal Human Aging

Thomas M. Gill, M.D.
Yale University School of Medicine
Identifying the Events that Precipitate Functional Dependence Among Community-living Elderly Persons

Bernard F. Godley, M.D., Ph.D.
University of Texas Medical Branch
The Role of Oxidative Damage and Repair in Age-related Macular Degeneration

Todd E. Golde, M.D., Ph.D.
Mayo Clinic Medical School, Jacksonville
Proteolytic Generation of the Amyloid Beta Peptide in Alzheimer’s Disease

Helen Hoenig, M.D., M.P.H.
Duke University Medical Center
An Investigation of the Physical Costs and the Quality of Life Benefits of Wheelchairs for Older Persons

Elan D. Louis, M.D., M.S.
Columbia University College of Physicians and Surgeons
Functional Correlates of Essential Tremor

Charles A. Thornton, M.D.
University of Rochester School of Medicine and Dentistry
Pathophysiologic of Myotonic Dystrophy, a Progeroid Syndrome

1996 Scholars

Christopher M. Callahan, M.D.
Indiana University School of Medicine
The Use of Percutaneous Endoscopic Gastrostomy Among Older Adults in a Community Setting

Robert W. Doms, M.D., Ph.D.
University of Pennsylvania School of Medicine
Presenilin 1, APP, and Alzheimer’s Disease

Murali Doraiswamy, M.D.
Duke University Medical Center
Apolipoprotein E Type 4 Allele and Cerebral Metabolism in Relatives at Risk for Familial Alzheimer’s Disease

Harlan M. Krumholz, M.D.
Yale University School of Medicine
Clinical Spectrum, Treatment and Outcome of Elderly Congestive Heart Failure Patients

Makau Lee, M.D., Ph.D.
University of Mississippi Medical Center
Studies on Aging, Dietary Restriction and Gastric Mucosal Defense

Richard F. Loeser, M.D.
University of Washington School of Medicine
The Role of X11& in Maintaining Neuronal Form and Function

Ashley I. Bush, M.D., D.P.M., Ph.D.
Harvard Medical School
Zinc Exposure as a Risk Factor for Alzheimer’s Disease

Ted M. Dawson, M.D., Ph.D.
Johns Hopkins University School of Medicine
Gene Therapy for Neurologic Disorders

David M. Holtzman, M.D.
Washington University School of Medicine
Molecular and Cellular Factors that Play a Role in Maintaining Neuronal Form and Function in the Normal Aging CNS and How They May Be Altered in AD

Edward H. Koo, M.D.
University of California, San Diego School of Medicine
The Mechanism of Amyloid B-protein (Aβ) Production from the Amyloid Precursor Protein (APP) in Neurons

Mark S. Lachs, M.D., M.P.H.
Weill Medical College of Cornell University
The Morbidity and Mortality of Elder Abuse

Frank M. Longo, M.D., Ph.D.
University of California, San Francisco School of Medicine
New Strategies for Treating Neurodegenerative Disease

Richard A. Marottoli, M.D., M.P.H.
Yale University School of Medicine
Development of a Strategy for Identifying Which Older Drivers are at Risk for Crashes and Moving Violations

Lina M. Obeid, M.D.
University of North Carolina
Role of Ceramide in Inducing the Senescent Phenotype through Activating a Growth Suppressor Pathway and by Inhibiting a Mitogenic Pathway

Peter Reaven, M.D.
University of California, San Diego School of Medicine
The Relationship of Aging and Antioxidant Defense Systems to Atherosclerosis

Alan R. Shuldimer, M.D.
University of Maryland School of Medicine
Genetics of Diabetes and Obesity in the Elderly
AFAR/Merck Junior Investigator Award in Geriatric Clinical Pharmacology

Two-year awards addressed the critical need of developing more physicians with a command of geriatric clinical pharmacology. Sponsored by the Merck Company Foundation. This program was active from 1988 to 2005.

2005 Investigators
Muralindhar Beeram, M.D.
University of Texas Health Science Center at San Antonio

Steven M. Handler, M.D.
University of Pittsburgh School of Medicine

2004 Investigators
Oumitana Kajkenova, M.D.
University of Arkansas for Medical Sciences

Josh F. Peterson, M.D., M.P.H.
Vanderbilt University

2003 Investigators
Joseph V. Agostini, M.D.
Yale University School of Medicine

Robert G. Rielse, M.D.
Seattle Institute for Biomedical & Clinical Research

2002 Investigators
Cynthia M. Carlsson, M.D.
Madison Veterans Affairs Geriatric Research, Education and Clinical Center (GRECC)

Margaret Pisani, M.D.
Yale University School of Medicine

2001 Investigators
Arti Hurria, M.D.
Memorial Sloan Kettering Cancer Center

Cathy C. Lee, M.D.
University of Michigan Health Systems

2000 Investigators
Helen K. Edelberg, M.D.
Mount Sinai School of Medicine

Wesley Ely, M.D., M.P.H., F.C.C.P.
Vanderbilt University School of Medicine

1999 Investigators
James B. Wendt, M.D.
University of Illinois at Chicago

1998 Investigators
Edward S. Connolly, Jr., M.D.
Columbia University College of Physicians & Surgeons

Richard Lin, M.D.
University of Texas Health Science Center at San Antonio

1997 Investigators
Hoang Duong, M.D.
Columbia University College of Physicians & Surgeons

Tina V. Hartert, M.D.
Vanderbilt University Medical Center

1996 Investigators
Rebecca J. Beyth, M.D.
Case Western Reserve University School of Medicine

Daniel T. Kaufer, M.D.
University of Pittsburgh School of Medicine

1995 Investigators
Barbara Clark, M.D.
Harvard Medical School

Rahmawati Sih, M.D.
Saint Louis University School of Medicine

1994 Investigators
Adalsteinn Gudmundsson, M.D.
University of Wisconsin

Fouzia Lagrahissi-Thode, M.D.
University of Pittsburgh School of Medicine

AFAR/Ellison Medical Foundation Senior Postdoctoral Fellows Research Program

Two-year fellowships to encourage and further the careers of postdoctoral fellows (both M.D.’s and Ph.D.’s) with at least 3 and not more than 5 years of postdoctoral training, in the fundamental mechanisms of aging.

2005 Fellows
Johannes H. Bauer, Ph.D.
Brown University
Mechanism(s) of p53-dependent Lifespan Extension

Malene Hansen, Ph.D.
University of California, San Francisco
Molecular Mechanisms of Lifespan Regulation by the Insulin/IGF-1 Pathways in C. elegans

Supriya Srinivasan, Ph.D.
University of California, San Francisco
The Role of Serotonergic Signaling in Energy Homeostasis During Aging

Jeong Hyeon Park, Ph.D.
The Rockefeller University
The Roles of p53-interacting Chromatin Modifying Complexes in Human Cellular Aging

Sarah Sagl, Ph.D.
University of California, San Diego
NSAID Modulation of γ- and β-secretase

2003 Fellows
Haim Cohen, Ph.D.
Harvard Medical School
DNA Break Repair Controlled by SIRT1 via the Deacetylation of Ku70 and Ku80

Coleen T. Murphy, Ph.D.
University of California, San Francisco
Discovery and Analysis of C. elegans Lifespan Genes

Marc F. Poitras, Ph.D.
New York University School of Medicine
Molecular Mechanisms of Tankurase1-induced Telomere Elongation
### 2004 Fellows

- **Paul D. Allen, Ph.D.**
  University of Rochester
  Aging-related Neural Desynchronization in the Auditory Brainstem

- **Johannes H. Bauer, Ph.D.**
  University of Connecticut Health Center
  The Role of p53 in Lifespan Extension

- **Robert Dekroon, Ph.D.**
  Duke University Medical Center
  The Role of Intracellular Pathways Mediated by Lipoproteins in the Regulation of Apoptosis

- **Rugang Zhang, Ph.D.**
  Fox Chase Cancer Center
  Molecular Basis of Cellular Senescence

### 2003 Fellows

- **Arjumand Ghazi, Ph.D.**
  University of California, San Francisco
  Role of the Somatic Gonad in the Regulation of Caenorhabditis elegans Aging

- **David W. Killilea, Ph.D.**
  Children’s Hospital Oakland Research Institute
  Cellular Aging Alters Intracellular Iron Homeostasis

- **Gawain McColl, Ph.D.**
  Buck Institute for Age Research
  The Role of KU70 in Stress Resistance and Aging

- **Andrei Podlutsky, Ph.D.**
  University of Texas Health Science Center at San Antonio
  Stress Tolerance and Bat Aging

### 2002 Fellows

- **Adam H. Gazzaley, M.D., Ph.D.**
  University of California, Berkeley
  Neural Mechanisms of Memory Function in Normal Aging

- **Dejan Milatovic, Ph.D.**
  Vanderbilt University
  Cerebral Oxidative Damage in the Models of Advanced Age, Inflammation and Excitotoxicity

- **Anne Simon, Ph.D.**
  California Institute of Technology
  Study of Long-lived Mutants of the Ecdysone Receptor

- **Meng-Ping Tu, Ph.D.**
  Brown University
  Yeast-restriction in Juvenile State Extends Adult Lifespan in Drosophila melanogaster

### 2001 Fellows

- **Debdupta Bandyopadhyay, Ph.D.**
  Baylor College of Medicine
  Role of Histone Deacetylation in Melanocytes Senescence

- **Kathy Barsz, Ph.D.**
  University of Rochester Medical Center
  The Effect of Aging on Physiological Correlates of Masked Intensity Judgments

- **Nilufer Ertekin-Taner, M.D.**
  Mayo Clinic, Jacksonville
  Identification of the Novel Late-onset Alzheimer’s Disease Gene on Chromosome 10 Using Plasma Amyloid Beta Levels as a Surrogate Genetic Marker

- **Faith Gunning-Dixon, Ph.D.**
  Hospital of the University of Pennsylvania
  The Neural Basis of Age-related Declines in Episodic Memory

- **Kimmo J. Hatnapa, M.D., Ph.D.**
  Johns Hopkins University
  Catabolism of Alzheimer Amyloid Beta-protein

- **Shunai Jiang, M.D., Ph.D.**
  Emory University
  Fas Ligand and Fas in Aging

- **Pankaj Kapahi, Ph.D.**
  California Institute of Technology
  Isolation and Characterization of Genes That Extend Lifespan and Prevent Neurodegeneration Using Drosophila melanogaster as a Model System

- **Plamen D. Penev, M.D., Ph.D.**
  University of Chicago
  Poor Sleep Quality and Testosterone Decline in Older Men

- **Claus U. Pietrzik, Ph.D.**
  University of California, San Diego
  Role of the LRP in Cytoplasmic Domain in APP Processing

- **Leanne Rae Stewart, Ph.D.**
  Washington University School of Medicine
  The Involvement of Mutant PrP Accumulation and Apoptosis in Neurodegeneration in Tg2576 Mice

### 2004 Scholars

- **Mary Jo Hessert**
  University of New England
  Assessing Medication Compliance for Elderly Patients in a New York Rural Family Practice

- **Patricia A. McHazellet**
  Texas Tech University Health Sciences Center
  Divalent Ion Channels as Drug Targets in Alzheimer’s Disease

- **Sarah E. Smith**
  University of California, Irvine
  Medication Use in Dementia Patients in Adult Day Health Centers

### 2003 Scholars

- **Kelly Gauthier**
  Virginia Commonwealth University
  Cognitive, Functional and Behavioral Outcomes of Reducing Anticholinergic Drug Use in Alzheimer’s Disease Patients Taking Cholinesterase Inhibitors

- **Courtney Hoelting**
  Texas Tech University Health Sciences Center
  Characterization of the Agnostic and Antagonistic Effects of Selective Estrogen Receptor Modulators (SERMs) and Estrogen-related Compounds in Septal Cholinergic Neurons

- **Olga Kaufman**
  University of Southern California
  Depression and Pain Management of Disabled Patients Using Effective Age Model Medications

- **Paul McConnell**
  West Virginia University School of Medicine
  Measurement of Antioxidative Protection in Mammalian Cells as a Means to Possibly Prevent Neurodegenerative Aging Disorders

- **Angelo A. Baccala**
  Johns Hopkins University School of Medicine
  In Vitro RU-486 Gene Switch Regulation of iNOS for the Treatment of Erectile Dysfunction in Men Taking Nitrates Containing Drugs and Those Suffering from the Side Effects of Viagra

- **Jennifer W. Childress**
  University of Maryland, Baltimore
  Evaluation of Oral Inhaler Technique Pre- and Post-interventions in Elderly Individuals

- **Jay Chyung**
  Harvard Medical School
  Characterization of the IDE-mediated Degradation of C. elegans Membrane and Intracellular Vesicular Compartments of Cells

- **Yana Dadianova**
  Mount Sinai School of Medicine
  Medication Management and Health Literacy in Community-dwelling Older Adults

- **Reza Kafri**
  University of Michigan Medical Center
  Topical Vitamin A (All-trans Retinol) in the Treatment of Aged Skin

### AFAR/AFAR Scholarship in Geriatric Pharmacology

- **Meng-Ping Tu, Ph.D.**
  University of California, San Francisco
  Aging-related Neural Desynchronization in the Auditory Brainstem

- **Johannes H. Bauer, Ph.D.**
  University of Connecticut Health Center
  The Role of p53 in Lifespan Extension

- **Robert Dekroon, Ph.D.**
  Duke University Medical Center
  The Role of Intracellular Pathways Mediated by Lipoproteins in the Regulation of Apoptosis

- **Rugang Zhang, Ph.D.**
  Fox Chase Cancer Center
  Molecular Basis of Cellular Senescence

### AFAR/AFAR Research Grant for Postdoctoral Fellows

- **Arjumand Ghazi, Ph.D.**
  University of California, San Francisco
  Role of the Somatic Gonad in the Regulation of Caenorhabditis elegans Aging

- **David W. Killilea, Ph.D.**
  Children’s Hospital Oakland Research Institute
  Cellular Aging Alters Intracellular Iron Homeostasis

- **Gawain McColl, Ph.D.**
  Buck Institute for Age Research
  The Role of KU70 in Stress Resistance and Aging

- **Andrei Podlutsky, Ph.D.**
  University of Texas Health Science Center at San Antonio
  Stress Tolerance and Bat Aging

### AFAR/AFAR Research Grant for Postdoctoral Fellows

- **2004 Fellows**
  - Paul D. Allen, Ph.D.
  - Johannes H. Bauer, Ph.D.
  - Robert Dekroon, Ph.D.
  - Rugang Zhang, Ph.D.

- **2003 Fellows**
  - Arjumand Ghazi, Ph.D.
  - David W. Killilea, Ph.D.
  - Gawain McColl, Ph.D.
  - Andrej Podlutsky, Ph.D.

- **2002 Fellows**
  - Adam H. Gazzaley, M.D., Ph.D.
  - Dejan Milatovic, Ph.D.
  - Anne Simon, Ph.D.
  - Meng-Ping Tu, Ph.D.

### AFAR/AFAR Scholarship in Geriatric Pharmacology

- **2004 Scholars**
  - Mary Jo Hessert
  - Patricia A. McHazellet
  - Sarah E. Smith

- **2003 Scholars**
  - Kelly Gauthier
  - Courtney Hoelting
  - Olga Kaufman

- **2002 Scholars**
  - Paul McConnell
  - Angelo A. Baccala
  - Jennifer W. Childress

### AFAR/AFAR Research Grant for Postdoctoral Fellows

- **2004 Fellows**
  - Paul D. Allen, Ph.D.
  - Johannes H. Bauer, Ph.D.
  - Robert Dekroon, Ph.D.
  - Rugang Zhang, Ph.D.

- **2003 Fellows**
  - Arjumand Ghazi, Ph.D.
  - David W. Killilea, Ph.D.
  - Gawain McColl, Ph.D.
  - Andrej Podlutsky, Ph.D.

- **2002 Fellows**
  - Adam H. Gazzaley, M.D., Ph.D.
  - Dejan Milatovic, Ph.D.
  - Anne Simon, Ph.D.
  - Meng-Ping Tu, Ph.D.
2000 Scholars

Jeffrey R. Bishop
University of Iowa
Neuronal Susceptibility to Environmental Stressors in Parkinson's Disease: The Role of α-synuclein.

Dena Dubal
University of Kentucky
Estrogen-mediated Neuroprotection Against Stroke Injury in Aging Female Rats: Potential Mechanisms

Yvonne C. Huckleberry
Washington State University

2004 Scholars

Jennifer A. Greenhall
University of California, San Diego
The Impact of 17β and 17β on the Preservation of Cortical Neurons in the Aging Mouse

Shilpa Iyer
University of Georgia
Kstrn-M1: A Novel Yeast Model System to Study Telomere Capping Defects and Recombination Telomere Elongation

William W. Ja
California Institute of Technology
Characterization of Methuselah, a Drosophila G Protein-coupled Receptor Associated with Longevity

Youngmok Charles Jang
University of Florida, Gainesville
Long-term Caloric Restriction (CR) as a Strategy to Prevent Sarcopenic Reticulum (SR) Stress Induced Cardiomyocytes Apoptosis In Vivo

Jennifer Q. Kwong
Well Medical College of Cornell University
Modulation of Mitochondrial Homeostasis by Bcl-2 in Cells with Mitochondrial DNA Mutations

2004 Scholars

Ezana M. Azene
Johns Hopkins University
Gene Therapy for Peripheral Neuropathic Pain

Melynda A. Barnes
Mount Sinai School of Medicine
Immunohistochemical Analysis of Spinal Cord from Disulfiram-Treated G6PR Superoxide Dismutase-1 Transgenic Mice

Ala Berdichevsky
Massachusetts Institute of Technology
Identification of Molecular Targets of sir-2.1 Gene, which Promotes Extension of Lifespan of the Nematode Caenorhabditis elegans

Eric Hau-Yun Chang
New York University
Receptor Dysfunction in Double Knock-in APP+PS1 Mice

Aimee M. Wright
University of Florida
Exposed to Alzheimer Plaque Fragments Protecting Nerve Cells from Death that is Exposed to Alzheimer Plaque Fragments

The Importance of Neuron-Astrocyte Interactions in Adult Basal Forebrain

Cynthia O. Howell
University of Florida College of Pharmacy
The Effect of Estrogen Deprivation on Heat Shock Protein-70 Expression in Rat Skeletal Muscle

Louis J. Kim
Columbia University
Active Site-blocked Factor Xa as a Novel Treatment for Stroke in a Murine Model of Focal Cerebral Ischemia

David D. Limbrick, M.S.
Virginia Commonwealth University
Characterization of Intracellular Calcium Kinetics Following Glutamate Exposure in an In vitro Model of Stroke and Aging

1997 Scholars

Ron Devlin
University of Colorado Health Sciences Center
Computerized Identification of Potential Adverse Drug Events in the Elderly and the Effect on Physician Response and Drug Program Utilization

1998 Scholars

Lanning R. Baker
Idaho State University
Morphine Metabolites and Gender Differences in Pain Responses in the Elderly

Irina D. Burd
University of Medicine and Dentistry of New Jersey
The Importance of Neuron-Astrocyte Interactions in Adult Basal Forebrain

Jersey Chen
Yale University School of Medicine
β-blocker Therapy for the Treatment of Acute Myocardial Infarction in Elderly Medicare Beneficiaries with Diabetes

James A. Edwards, Ph.D.
Virginia Commonwealth University
Analysis of Plasma Levels of Scopolamine in Healthy Elderly Volunteers

Kevin L. Ferguson
Stanford University
The Effects of Metformin on the Development of Visceral Obesity and Insulin Resistance in Fat-fed Rats

Rahul Garg
Duke University
RhoA and its Role in the Mechanism of Action of Common Glaucoma Drugs

AFAR/Glenn Scholarships for Research in the Biology of Aging

Three-month awards provided M.D. and Ph.D. students the opportunity to conduct a research project in an area of biomedical research in aging, under the auspices of a mentor. Sponsored by the Glenn Foundation for Medical Research. This program was active from 1995 to 2004.
Richard D’Alonzo  
Saint Louis University  
Physical Interaction Between Osteoblastic Transcription Factors

Rajesh Dash  
University of Cincinnati  
Phospholamban Phosphorylation as a Compensatory Mechanism of the Endangered Myocardium

Allison W. Dobson  
University of South Alabama  
Enhancing mtDNA Repair in Down’s and Cockayne’s Syndromes

Delia Garigan  
University of California, San Francisco  
Mapping and Characterization of Novel Lifespan Mutations in C. elegans

David Gordon  
University of Chicago  
Investigation of the Structure of Beta Amyloid Fibris

Elise Grenier  
Northwestern University  
Regional Differences of Astrocytes in the Development or Acceleration of Alzheimer's Disease

Andrea P. Haley  
University of Virginia  
A Magnetic Resonance Spectroscopic Examination of Hippocampal Volume and N-acetyl-aspartate Levels in Healthy Aging

Jeffrey P. Henderson  
Washington University  
Halogenation of DNA by the Myeloperoxidase System of Activated Phagocytes: Implications for Carcinogenesis at Sites of Inflammation

Vicki Kule  
University of Michigan  
Characteristics of Disulfide Intermediate in the Aging of Phosphoglycerate Kinase

Justine Levin  
Rockefeller University  
Estrogen Effect in a Mouse Model of Alzheimer Disease

Stephen S. Lin  
Washington University  
SnRl Kinase and Aging in S. cerevisiae

J. Andy Mengshol  
Dartmouth University Medical School  
IL-1 Regulation of Collagenase-3 in Osteoarthritis

Renee Miller  
University of Rochester  
Gene Expression Profiling in Parkinson’s Disease

Kevin Monahan  
University of Colorado  
Do Reductions in Carotid Arterial Compliance Modulate the Age-related Decline in Arterial Baroreflex Function in Sedentary and Regularly Exercising Humans?

Bhagavathi Ramamurthy  
Penn State University  
The Effect of Glycation of Myosin on the In Vitro Motility of Actin with Respect to Aging

Jody L. Short  
Western University of Health Sciences  
Effects of Human Apolipoprotein E Isoforms on Olfactory Nerve Plasticity in Mice

Jennifer E. Stine  
University of Texas Health Science Center at San Antonio  
Structural Study of FALS-associated Cu-Zn Superoxide Dismutase Mutants

David A. Sun  
Medical College of Virginia/Virginia Commonwealth University  
Molecular Basis for Stroke Induced Epilepsy

Leslie P. Tao  
University of California, Los Angeles  
A Progesterone-dependent Mechanism to Delay Reproductive Aging

Robert T. Turner III  
Oklahoma University  
Substrate Specificity of B-Secretase: Towards Design of Inhibitor Drugs

Baiping Wang  
University of Washington  
In Vivo Analysis of the Role of F66S in Alzheimer's Disease

Fei-Shiuann Clarissa Yang  
McGill University  
Role of Telomere-associated Senescence in Wound Healing

1999 Scholars

Erin K. Baehr  
Northwestern University  
Low-intensity Exercise at Night to Phase-delay Circadian Rhythms of Older Adults

Jennifer Berkeley  
Emory University  
Muscarinic Regulation of Amyloid Precursor Protein Metabolism

Erik D. Bernstein  
Allegeny University of the Health Sciences  
RAGE, Aging and Peripheral Nerve Regeneration

Wende R. Buras  
Boston University School of Medicine  
The Role of Threonine Phosphorylation in EGFR Dysfunction with Aging

Manu Chakravarty  
University of Texas Medical School at Houston  
Proliferative Capacity of Skeletal Muscle Satellite Cells with Aging

Judy Y. Chen  
Meharry Medical College  
A Clinical and Molecular Genetic Analysis of Early-onset Parkinson's Disease in an Asian American Family

Frank A. Dinенко  
University of Colorado at Boulder  
Femoral Artery Intima-media Thickness: Effects of Aging and Habitual Physical Activity

Andrew Doan  
Johns Hopkins University  
Identification and Characterization of Interacting Proteins That Modify the Cell Biology and Neurodegenerative Properties of Presenilin 1, an Alzheimer’s Disease-linked Protein

Shawn P. Gallagher  
University of Delaware  
Detecting Early Glaucomatic Visual Field Loss with Neural Networks

Bradley S. Henson  
University of Michigan  
Impact of Parotid-sparing Radiation on Xerostomia and Quality of Life in Head and Neck Cancer Patients

Kailiang Jia  
University of Missouri at Columbia  
Genetic Study ofdaf-9, A Modulator of Life Span in C. elegans

Elizabeth Kengsinger  
Massachusetts Institute of Technology  
Uncovering the Relation Between Short-term Memory and Long-term Memory

Elaine Khatod  
Wake Forest University  
The Effects of Age and Exogenous Estrogen on the Synaptic Density of Layer II Prefrontal Cortex: Does Estrogen Replacement Increase Synaptic Density in this Cognition-associated Region of the Old OVX Female Brown Novay x Fischer 344 Rat?

David W. Killilea  
University of South Alabama  
Physiological Oxidant Generators Alter Genomic Integrity

Daniel E. Kolker  
Northwestern University  
Circadian Gene Expression in Young and Old Hamsters

Joseph E. Labrie III  
University of Massachusetts  
Is U(DJ) Recombine Activity Decreased in Aged Mice?

James K. Leung  
Baylor College of Medicine  
Characterizing the MORF4-Related Gene on Chromosome X (MRGX)

Janet A. Martin  
University of California, Irvine  
Astrocyte Degeneration and Vascular Changes in Frontotemporal Dementia

Ryan A. McTaggart  
Columbia University  
Amyloid-β and ABAD: A Convergence of Alzheimer’s Disease and Stroke

James F. Mele  
The University of Texas Health Science Center at San Antonio  
The Development of a Transgenic Model to Study the Role of Manganese Superoxide Dismutase in Oxidative Stress

David Merrill  
University of California San Diego  
Neurodegeneration of the Hippocampal Formation with Aging and Treatment with Neurotrophic Factors

Daniel W. Mudrick  
Johns Hopkins University  
Effects of Age on NOS2 Induction and Response to β-Adrenergic Stimulation in LPS and γ-INF Exposed Rat Hearts

Anaelys Ortiz-Suarez  
University of Michigan  
Characterization of Expanded T-cell Clones in Old Mice

James P. Passinault  
Loyola University Medical Center  
Angiogenesis and Aging

Nicholas K. Priest  
University of Georgia  
The Maternal Effects of Stress Resistance and Senescence

Eric S. Rawson  
University of Massachusetts  
Creatine Loading in Elderly Men

Hailong Song  
University of Maryland, Baltimore  
Altered Responses of Aged 8 Cells to CD40 Stimulation

Veena Viswanath  
University of Southern California  
The Role of Apoptosis in Age-related Neurodegenerative Disorders: Caspases and Their Inhibition as a Potential Therapeutic Intervention

Theodore A. Zainal  
University of Wisconsin  
Histologic Quantitation of Age-dependent Oxidative Damage in Rhesus Monkey Skeletal Muscle: Effects of Caloric Restriction

1998 Scholars

Stuart K. Amateu  
University of Maryland Baltimore  
Estrogen Modulation of Glutamate Neurotransmission in the Aging Brain

Peter J. Bayley  
University of California, San Diego  
Serial Position Effects In Rats' Spatial Memory

Louis K. Chang  
Washington University School of Medicine  
Isform-specific Effects of ApoE on Beta-amyloid Deposition and Inflammation In Vivo

Isaac S. Cheng  
Tufts University  
Identification and Characterization of Caspase(s) Responsible for the Alternative Endoproteolysis of Presenilins During Neuronal Apoptosis
Christen M. Cullen
Massachusetts Institute of Technology
Hemodynamics in Aging and Alzheimer’s Disease: An fMRI Study

Limor Deutsch
Boston University
Gene Transfer in the Aging Myocardial Cell

Christopher DeVry
University of California, Los Angeles
Protein Repair in the Biology of Aging

Dena Dubal
University of Kentucky
Neuroprotective Effects of Estrogen in Aging

Melissa Gill
Brown University
Effect of D1 Receptor Modulation on Memory in Aged Mice

Gerald J. Gracia
University of Florida
Host Defense Against Influenza in Aged Mice

Allen Harrison
University of Michigan
Aging and the Ubiquitination of the CD3-epsilon Chain

John M. Hollander
University of Wisconsin, Madison
Aging and Antioxidant Enzyme Gene Regulation: Superoxide Dismutase Brought to Focus

Elizabeth T. Hsiao-Weckslr
University of California, Berkeley
Influence of Lower Extremity Joint Torques on Balance Recovery by Stepping

Lyndon Joseph
University of Arkansas
Weight Loss, Exercise, and Age: Effects on Insulin Action

Vivek Kaliraman
University of Medicine and Dentistry of New Jersey
Role of the SLX Proteins in rDNA Stability and Aging in Yeast

Richard Kwun
New York Medical College
The Use of Pulse Wave Velocity to Measure Age-related Arterial Stiffening in the Mouse

Peter H.U. Lee
Brown University
Tissue-engineered BioArtificial Muscles Transduced with the IGF-1 Gene Can Promote Motoneuron Sprouting and Muscle Fiber Inervation In Vitro

Malcolm A. Leissring
University of California, Irvine
Effects of Presenilin-1 on Calcium Signaling

Oren Levy
Emory University
Effects of FAD-Linked Presenilin-1 Mutations on Notch Signaling

Marisol E. Lopez
University of Wisconsin, Madison
Characterization of Age-associated Electron Transport System Abnormalities and Associated Fiber Atrophy in Rhesus Monkey Skeletal Muscle

Kevin M. Owen
Loyola University Medical Center
The Kinetics of B-Lymphocyte Production in Aged Animals

Marc D. Paradis
Massachusetts Institute of Technology
Presenilins 1 and 2: Effects of Pharmacologic Stimulation of Neurotransmitter Receptors Coupled to Phospholipase C, Phospholipase A2, or Adenyl Cyclase Activity on their Cleavage, Transcription and Translation

Echo V. Rowe
University of Washington
Complementation of 4NQO Sensitivity in Ssp1 Mutant Strains of S. cerevisiae by the Human Werner Syndrome Protein

Aileen Wiglesworth
University of Kentucky
Quantitative Assessment of Synaptic Density in Superior Parietal Lobule in Alzheimer’s Disease

Tong Zhu
Case Western Reserve University
Aging-related Defects in Complex III of Cardiact Mitochondria

Kevin M. Owen
Loyola University Medical Center
The Kinetics of B-Lymphocyte Production in Aged Animals

Marc D. Paradis
Massachusetts Institute of Technology
Presenilins 1 and 2: Effects of Pharmacologic Stimulation of Neurotransmitter Receptors Coupled to Phospholipase C, Phospholipase A2, or Adenyl Cyclase Activity on their Cleavage, Transcription and Translation

Echo V. Rowe
University of Washington
Complementation of 4NQO Sensitivity in Ssp1 Mutant Strains of S. cerevisiae by the Human Werner Syndrome Protein

Aileen Wiglesworth
University of Kentucky
Quantitative Assessment of Synaptic Density in Superior Parietal Lobule in Alzheimer’s Disease

Tong Zhu
Case Western Reserve University
Aging-related Defects in Complex III of Cardiact Mitochondria

1997 Scholars

Nael Al-Abdulla
Johns Hopkins University School of Medicine
Neocortical Brain Transplantation to Reverse Neuronal Apoptosis in the Adult Lateral Genuculate Nucleus and Restore Connectivity

Kaveh Ashrafi
Washington University School of Medicine
The Role of Protein N-myristoylation in Controlling Survival of Saccaromyces cerevisiae During Stationary Phase and Cellular Aging

Randall Bateman
Case Western Reserve University
Human Mesenchymal Stem Cell Interaction with Endothelial Cells During In Vitro Angiogenesis

Tammie Benzinger
University of Chicago
Stabilization and Characterization of an Intermediate Conformation of the Beta-amylloid Peptide of Alzheimer’s Disease

Mark Borden
Allegeny University of the Health Sciences
Age-related Effects of Fracture Non-union Treatment Using a Novel Synthetic Bone Replacement

Connie Chen
Johns Hopkins School of Medicine
The Individual Impact of Dietary Fats and Antioxidant Vitamin Supplements in the Risk of Alzheimer’s Disease

Jeff Coombes
University of Florida
The Effects of Vitamin E and Lipoic Acid Supplementation on Myocardial Ischemia-reperfusion in Senescent Rats

Michael Dobrowolsky
New York University School of Medicine
Angiogenesis and Prognosis of Colorectal Cancer

Kimberley Ekis
University of Michigan
Correlated Patterns of Epstein-Barr Virus Reactivation in Elderly Humans

Sara Evans
Baylor College of Medicine
Analysis of the Role of the Human Homolog of an Est2 Interacting Protein in Human Telomere Biology

Jonathan Fisher
Washington University School of Medicine
Effects of Ovariectomy and Estrgen Replacement on Rat Skeletal Muscle

Ariel Friedman
Columbia University
Enhanced Interaction of Advanced Glycation Endproducts (AGEs) with Their Cellular Receptor RAGE: Implications for the Pathogenesis of Diabetic Neuropathy

Barry Hoopengardner
University of Connecticut Health Center
Identification of a Temporally-responsive Region in the Genome of Drosophila melanogaster

Scott Jenkins
University of Alabama at Birmingham
Microtubule-associated Protein II as a Signal Transducer: Modulation by Signals Present in the Alzheimer’s Disease Brain

Terry Jones
University of Kansas
Functional Consequences of Altered Expression Levels and Conformation of the Ryonidine Receptor Calcium Release Channel in Aged Skeletal Muscle

James Lee
Stanford University
In Vivo Target Specific Delivery of Liposome-encapsulated Doxorubicin into Mouse Tumor Model Using Magnetic Resonance Guided Focused Ultrasound

Paul Mack
University of Georgia
Repair Capacity in Human Brain

Lemuel Newton
University of Florida College of Medicine
Enteric Immunization with Recombinant Vaccinia Virus

Christopher Norris
University of Virginia
Threshold for a Novel Form of Synaptic Plasticity: A Link between Ca2+ Regulation and Impaired Memory During Aging

Moyosore Onifade
University of Michigan
Defense Against Influenza in Aged Mice

Reactivation in Elderly Humans

Kevin M. Owen
Loyola University Medical Center
The Kinetics of B-Lymphocyte Production in Aged Animals

Marc D. Paradis
Massachusetts Institute of Technology
Presenilins 1 and 2: Effects of Pharmacologic Stimulation of Neurotransmitter Receptors Coupled to Phospholipase C, Phospholipase A2, or Adenyl Cyclase Activity on their Cleavage, Transcription and Translation

Echo V. Rowe
University of Washington
Complementation of 4NQO Sensitivity in Ssp1 Mutant Strains of S. cerevisiae by the Human Werner Syndrome Protein

Aileen Wiglesworth
University of Kentucky
Quantitative Assessment of Synaptic Density in Superior Parietal Lobule in Alzheimer’s Disease

Tong Zhu
Case Western Reserve University
Aging-related Defects in Complex III of Cardiact Mitochondria

1996 Scholars

Kristin Baker
Tufts University
Neural Adaptation to Strength Training in the Elderly

Alex Dranovsky
Stony Brook Medical College, State University of New York
Role of APP in Microtubule Dynamics

Michael Eisenbraun
University of Michigan
Age-sensitive T-cell Subsets Marked by P-glycoprotein: Specific Responses to a Closely Restricted Protein Antigen (Pigeon Cytochrome C)

Astrid Gutsmann
University of Texas Health Science Center
Does Overexpression of HSFI in Human Diploid Fibroblasts Correct for the Age-related Decline in the Induction of Heat Shock Protein 70 Expression?

Nathan Hall
University of Cincinnati College of Medicine
Edema Reduction and White Matter Protection Following Treatment with a Phenylketnitrine Spine Trap in Experimental ICH

Edward Huey
Stanford University
The Intracellular Effects of Stress Hormones on Neurons

Peter Kennedy
University of Washington
Mechanisms of Age-dependent Loss of DNA Repair Capacity in Human Brain

Steven Kleopoulos
Trinity College
Manipulation of Hypothalamic Neuropeptide Y Gene Expression During Aging

Shi Li
University California, San Diego
Glutamate Transporters and Synaptic Pathology in Alzheimer’s Disease

David Lieberman
University of California, Los Angeles
Second Messenger Actions of Beta-amylloid Peptides
<table>
<thead>
<tr>
<th>1995 Scholars</th>
<th>1994 Scholars</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Harleen Abuja</strong>&lt;br&gt;Queens College&lt;br&gt;A Genetic Approach to Understanding Molecular Mechanisms of Cell Death</td>
<td><strong>Rupinder Bal</strong>&lt;br&gt;Case Western Reserve&lt;br&gt;Biological Effects of Protein Glycation</td>
</tr>
<tr>
<td><strong>Kaveh Ashrafi</strong>&lt;br&gt;Washington University&lt;br&gt;Protein N-Myristoylation and Cellular Aging</td>
<td><strong>Deborah Ferrington</strong>&lt;br&gt;University of Kansas&lt;br&gt;The Role of Protein Turnover in Aging of the Sarco/Endoplasmic Reticulum Ca-ATPase</td>
</tr>
<tr>
<td><strong>Jay Binder</strong>&lt;br&gt;Case Western Reserve University&lt;br&gt;Probing of Glucose-mediated Crosslinking Sites in Y Crystallins Using Site Directed Mutagenesis</td>
<td><strong>Timothy Hughes</strong>&lt;br&gt;Baylor College of Medicine&lt;br&gt;Initial Work Toward Characterization of the SH3-3 Gene</td>
</tr>
<tr>
<td><strong>Kit Mui Chiu</strong>&lt;br&gt;University of Wisconsin-Madison&lt;br&gt;Effects of Age on Apoptosis of Pig Osteoblast-progenitor Cell Culture</td>
<td><strong>Van Khanh Huynh</strong>&lt;br&gt;Tufts University School of Medicine&lt;br&gt;Effect of Aging on the In Vitro Formation of Haloperidol Pyridinium, a Potentially Neurotoxic Metabolite of Haloperidol</td>
</tr>
<tr>
<td><strong>David DiLoreto, Jr.</strong>&lt;br&gt;University of Rochester&lt;br&gt;The Effects of Retinal Transplantation on the Age-related Retinal Degeneration in the Fischer 344 Rat</td>
<td><strong>Mark Kadrofske</strong>&lt;br&gt;Michigan State University&lt;br&gt;Regulation of Expression of a Lectin in Senescent Human Fibroblasts</td>
</tr>
<tr>
<td><strong>Oren Friedman</strong>&lt;br&gt;Thomas Jefferson University&lt;br&gt;Replacement of SV40 T antigen by IRS-1 and She As Factors in Cellular Transformation</td>
<td><strong>Soo-Hyun Kim</strong>&lt;br&gt;University of Medicine and Dentistry of New Jersey&lt;br&gt;University of Medicine and Dentistry of New Jersey&lt;br&gt;Characterization of Growth Suppressor Gene on Human Chromosome 6</td>
</tr>
<tr>
<td><strong>Joshua Garren</strong>&lt;br&gt;Brown University&lt;br&gt;A Model for Studying Activity-driven Synaptic Plasticity</td>
<td><strong>2002 Fellows</strong></td>
</tr>
<tr>
<td><strong>Leslie Pejcic</strong>&lt;br&gt;University of Illinois&lt;br&gt;Mechanisms of Neuron Aging</td>
<td><strong>Julie Bynum, M.D., M.P.H.</strong>&lt;br&gt;Johns Hopkins University&lt;br&gt;Analysis of Expenditures for AD Patients</td>
</tr>
<tr>
<td><strong>Michael Rogers</strong>&lt;br&gt;Kent State University&lt;br&gt;Mycosis Heavy Chain Alterations During Eight Weeks of Heavy Resistance Training in Active Elderly Females</td>
<td><strong>Lisa Honkanen, M.D.</strong>&lt;br&gt;University of Pennsylvania School of Medicine&lt;br&gt;External Hip Protectors</td>
</tr>
<tr>
<td><strong>Neha Shah</strong>&lt;br&gt;Florida University of Medicine&lt;br&gt;Aging and NPY Expression After AAV-Mediated Gene-delivery in Brain</td>
<td><strong>Grace Y. Jenq, M.D.</strong>&lt;br&gt;The Yale University School of Medicine&lt;br&gt;Determining Adherence to a Pain Management Model in the Nursing Home Setting</td>
</tr>
<tr>
<td><strong>Jordan Shin</strong>&lt;br&gt;University of Alabama at Birmingham&lt;br&gt;Fibroblast/Growth Factor Modulates Peroxynitrite-induced Apoptosis</td>
<td><strong>Jennifer M. Kapo, M.D.</strong>&lt;br&gt;University of Pennsylvania&lt;br&gt;How Can We Improve Services for the Elderly at the End-of-Life?</td>
</tr>
<tr>
<td><strong>Michael Toth</strong>&lt;br&gt;University of Maryland at Baltimore&lt;br&gt;Energy Metabolism in Congestive Heart Failure Patients</td>
<td><strong>Reena Karani, M.D.</strong>&lt;br&gt;Mount Sinai School of Medicine&lt;br&gt;An Evidence-based Unfolding Case with a Linked Objective Structured Clinical Examination (OSCE)</td>
</tr>
<tr>
<td><strong>Kevin King</strong>&lt;br&gt;University of Missouri&lt;br&gt;Genetic Interactions of daf-2 with daf-3 &amp; daf-5 with Respect to Life Span &amp; Larval Development in C. elegans</td>
<td><strong>Victor J. Legner, M.D.</strong>&lt;br&gt;University of Washington School of Medicine&lt;br&gt;The Importance of Medical Comorbidity and Preoperative Functional Status in Predicting Functional Decline in Older Adults Undergoing Nonemergent Surgery</td>
</tr>
<tr>
<td><strong>Ewan McNay</strong>&lt;br&gt;University of Virginia&lt;br&gt;Dithiocarbamates and MPTP Degeneration after Exposure to The Parkinson’s Institute</td>
<td><strong>Cari R. Levy, M.D.</strong>&lt;br&gt;University of Colorado Health Sciences Center&lt;br&gt;Hospital versus Nursing Home: Determinants of Site and Cost of Death Among Nursing Home Residents</td>
</tr>
<tr>
<td><strong>Tessa Walters</strong>&lt;br&gt;The Parkinson’s Institute&lt;br&gt;Biochemical and Immunocytochemical-stereological Analysis of Mouse Nigrostriatal Degeneration after Exposure to Dithiocarbamates and MPTP</td>
<td><strong>Robert J. Pignolo, M.D., Ph.D.</strong>&lt;br&gt;University of Pennsylvania School of Medicine&lt;br&gt;The GNAS1 Gene as a Regulator of Osteoblast Differentiation and Molecular Target for the Stimulation of Bone Formation</td>
</tr>
<tr>
<td><strong>Jason Ogiste</strong>&lt;br&gt;Case Western Reserve University&lt;br&gt;Osteoblast-progenitor Cell Culture</td>
<td><strong>James L. Rudolph, M.D.</strong>&lt;br&gt;University of Virginia&lt;br&gt;The Importance of Medical Comorbidity and Preoperative Functional Status in Predicting Functional Decline in Older Adults Undergoing Nonemergent Surgery</td>
</tr>
<tr>
<td><strong>Sheila Scoville</strong>&lt;br&gt;Eastern Virginia Medical School&lt;br&gt;The Impact of Menopause on Primary Sensory Neurons</td>
<td><strong>Oren Friedman</strong>&lt;br&gt;Alma College&lt;br&gt;Regeneration of Nerve &amp; Spinal Cord Transplants in Fischer 344 Rats</td>
</tr>
<tr>
<td><strong>Andrew Rogove</strong>&lt;br&gt;State University of New York, Stony Brook&lt;br&gt;+PA Mediates Microglial Activation via a Non-protolytic Mechanism</td>
<td><strong>Rupinder Bal</strong>&lt;br&gt;Case Western Reserve&lt;br&gt;Biological Effects of Protein Glycation</td>
</tr>
<tr>
<td><strong>Xiaoming Sun</strong>&lt;br&gt;University of Connecticut Health Center&lt;br&gt;Optimal Stimulus Parameters for the Measurement of Distortion Product Otoacoustic Emissions in a Mouse Model of Presbycusis</td>
<td><strong>Deborah Ferrington</strong>&lt;br&gt;University of Kansas&lt;br&gt;The Role of Protein Turnover in Aging of the Sarco/Endoplasmic Reticulum Ca-ATPase</td>
</tr>
<tr>
<td><strong>Gina VandenLangenberg</strong>&lt;br&gt;University of Wisconsin&lt;br&gt;Relationship Between Antioxidant Supplement Use and Risk of Age-related Maculopathy</td>
<td><strong>Timothy Hughes</strong>&lt;br&gt;Baylor College of Medicine&lt;br&gt;Initial Work Toward Characterization of the SH3-3 Gene</td>
</tr>
<tr>
<td><strong>Lisa Honkanen, M.D.</strong>&lt;br&gt;University of Washington&lt;br&gt;Determination of the Effects of Aging on Energy Metabolism in Congestive Heart Failure Patients</td>
<td><strong>Van Khanh Huynh</strong>&lt;br&gt;Tufts University School of Medicine&lt;br&gt;Effect of Aging on the In Vitro Formation of Haloperidol Pyridinium, a Potentially Neurotoxic Metabolite of Haloperidol</td>
</tr>
<tr>
<td><strong>Oren Friedman</strong>&lt;br&gt;Thomas Jefferson University&lt;br&gt;Replacement of SV40 T antigen by IRS-1 and She As Factors in Cellular Transformation</td>
<td><strong>Mark Kadrofske</strong>&lt;br&gt;Michigan State University&lt;br&gt;Regulation of Expression of a Lectin in Senescent Human Fibroblasts</td>
</tr>
<tr>
<td><strong>Christopher Kirk</strong>&lt;br&gt;University of Michigan&lt;br&gt;Role of 14-3-3 Proteins in T-cell Activation: Affects on Aging</td>
<td><strong>Soo-Byun Kim</strong>&lt;br&gt;University of Medicine and Dentistry of New Jersey&lt;br&gt;University of Medicine and Dentistry of New Jersey&lt;br&gt;Characterization of Growth Suppressor Gene on Human Chromosome 6</td>
</tr>
<tr>
<td><strong>Joshua Garren</strong>&lt;br&gt;Brown University&lt;br&gt;A Model for Studying Activity-driven Synaptic Plasticity</td>
<td><strong>2002 Fellows</strong></td>
</tr>
<tr>
<td><strong>Leslie Pejcic</strong>&lt;br&gt;University of Illinois&lt;br&gt;Mechanisms of Neuron Aging</td>
<td><strong>Julie Bynum, M.D., M.P.H.</strong>&lt;br&gt;Johns Hopkins University&lt;br&gt;Analysis of Expenditures for AD Patients</td>
</tr>
<tr>
<td><strong>Michael Rogers</strong>&lt;br&gt;Kent State University&lt;br&gt;Mycosis Heavy Chain Alterations During Eight Weeks of Heavy Resistance Training in Active Elderly Females</td>
<td><strong>Lisa Honkanen, M.D.</strong>&lt;br&gt;University of Pennsylvania School of Medicine&lt;br&gt;External Hip Protectors</td>
</tr>
<tr>
<td><strong>Neha Shah</strong>&lt;br&gt;Florida University of Medicine&lt;br&gt;Aging and NPY Expression After AAV-Mediated Gene-delivery in Brain</td>
<td><strong>Grace Y. Jenq, M.D.</strong>&lt;br&gt;The Yale University School of Medicine&lt;br&gt;Determining Adherence to a Pain Management Model in the Nursing Home Setting</td>
</tr>
<tr>
<td><strong>Jordan Shin</strong>&lt;br&gt;University of Alabama at Birmingham&lt;br&gt;Fibroblast/Growth Factor Modulates Peroxynitrite-induced Apoptosis</td>
<td><strong>Jennifer M. Kapo, M.D.</strong>&lt;br&gt;University of Pennsylvania&lt;br&gt;How Can We Improve Services for the Elderly at the End-of-Life?</td>
</tr>
<tr>
<td><strong>Michael Toth</strong>&lt;br&gt;University of Maryland at Baltimore&lt;br&gt;Energy Metabolism in Congestive Heart Failure Patients</td>
<td><strong>Reena Karani, M.D.</strong>&lt;br&gt;Mount Sinai School of Medicine&lt;br&gt;An Evidence-based Unfolding Case with a Linked Objective Structured Clinical Examination (OSCE)</td>
</tr>
<tr>
<td><strong>Kevin King</strong>&lt;br&gt;University of Missouri&lt;br&gt;Genetic Interactions of daf-2 with daf-3 &amp; daf-5 with Respect to Life Span &amp; Larval Development in C. elegans</td>
<td><strong>Victor J. Legner, M.D.</strong>&lt;br&gt;University of Washington School of Medicine&lt;br&gt;The Importance of Medical Comorbidity and Preoperative Functional Status in Predicting Functional Decline in Older Adults Undergoing Nonemergent Surgery</td>
</tr>
<tr>
<td><strong>Cari R. Levy, M.D.</strong>&lt;br&gt;University of Colorado Health Sciences Center&lt;br&gt;Hospital versus Nursing Home: Determinants of Site and Cost of Death Among Nursing Home Residents</td>
<td><strong>Robert J. Pignolo, M.D., Ph.D.</strong>&lt;br&gt;University of Pennsylvania School of Medicine&lt;br&gt;The GNAS1 Gene as a Regulator of Osteoblast Differentiation and Molecular Target for the Stimulation of Bone Formation</td>
</tr>
<tr>
<td><strong>James L. Rudolph, M.D.</strong>&lt;br&gt;University of Virginia&lt;br&gt;The Importance of Medical Comorbidity and Preoperative Functional Status in Predicting Functional Decline in Older Adults Undergoing Nonemergent Surgery</td>
<td><strong>Oren Friedman</strong>&lt;br&gt;Alma College&lt;br&gt;Regeneration of Nerve &amp; Spinal Cord Transplants in Fischer 344 Rats</td>
</tr>
</tbody>
</table>
2001 Fellows

Howard J. Aizenstein, M.D., Ph.D.
University of Pittsburgh Medical Center
Functional MRI Investigations of the Frontostriatal System in Late-life Depression

Robert C. Blackmon, M.D.
Medical College of Virginia
Does Reading Religious Literature Reduce Cortisol Secretion in Elderly Patients?

Cynthia M. Boyd, M.D., M.P.H.
Johns Hopkins University School of Medicine
Hospitalization and Disability in a Cohort of Moderately to Severely Disabled Older Women

Cynthia J. Brown, M.D.
Yale University School of Medicine
Immobility in the Hospitalized Elderly Patient: Prevalence and Impact on Functional Decline

Bruce Carruthers Bonnell, M.D.
Harvard Medical School
Medications as Risk Factors for Falls Among the Hospitalized Elderly

Yohannes Endeshaw, M.D., M.P.H., F.A.C.P.
Emory University School of Medicine
Is Obstructive Sleep Apnea More Prevalent in Older Adults with Nocturia Compared to Older Adults without Nocturia?

Karen E. Glasser Scandrett, M.D.
Harvard Medical School
Measures of Religiosity in a Frail and Aged Jewish Population: Validity and Application

Michele Y. Lee, M.D.
University of New Mexico
Hospice/Palliative Care Training of Family Practice Residents

Felice LePar, M.D.
University of Pennsylvania School of Medicine
Older Cancer Patients’ Attitudes Toward Participation in Research

Stacie Levine, M.D.
Mount Sinai School of Medicine
Risk Factors and Outcomes in Hospitalized Adults over Age 85

2000 Fellows

Julie Beales, M.D.
Medical College of Virginia
Does the Resident Assessment Instrument Improve Identification and Treatment of Pressure Ulcer or Falls

Malaz Boustanli, M.D.
University of North Carolina
Clinical Trial of the Effect of Donepezil on Aggressive Behavior in Institutionalized Persons with Moderate/Advanced Dementia and Severe Behavioral Problems

Donna M. Brady Raziano, M.D., M.B.A.
University of Pennsylvania
Do ACE Units Work?

Jennifer B. Brenzay, M.D.
Mount Sinai School of Medicine
Communication Among Health Professionals in the Home Care Setting

Cynthia M. Carlson, M.D.
University of Wisconsin Medical School
The Effect of Folic Acid Supplements on Endothelial Function in Older Adults with Hyperhomocysteinemia

Malaz Boustanli, M.D.
University of North Carolina
Clinical Trial of the Effect of Donepezil on Aggressive Behavior in Institutionalized Persons with Moderate/Advanced Dementia and Severe Behavioral Problems

Donna M. Brady Raziano, M.D., M.B.A.
University of Pennsylvania
Do ACE Units Work?

Jennifer B. Brenzay, M.D.
Mount Sinai School of Medicine
Communication Among Health Professionals in the Home Care Setting

Joseph Shega, M.D.
University of Chicago
Enteral Nutrition - Who Should We PEG next? Reasons for Percutaneous Endoscopy Gastrostomy Tubes in Endstage Dementia Patients

Debora A. Terry, M.D., M.P.H.
Harvard Medical School
New England Centenarian Offspring Study

Michi Y. Suzuki, M.D.
University of Washington
Involuntary Weight Loss in the Older Adults: The Influence of Cytokines and Leptin

1999 Fellows

Shiraz S. Ahmed, M.D.
University of Washington School of Medicine
Physical Function and Aging: Therapeutic Potential of Estrogen and Testosterone

Ali Ahmed, M.D.
University of Alabama at Birmingham
Association of Hospital Care Quality with Heart Failure Mortality and Readmissions

Jacob Blumenthal, M.D.
University of Maryland School of Medicine
The Neuropeptide Y1/5 Receptor and its Relationship to Obesity and Diabetes Mellitus

Stephen Bonasera, M.D., Ph.D.
University of California, San Francisco
5 HT Receptor Subtypes: Molecular and Behavioral Approaches to Study the Regulation of Posture and Locomotion

Ursula Braun, M.D.
Baylor College of Medicine
A Brief Cognitive Behavioral Intervention to Improve Functioning in Elderly Patients with Chronic Obsturactive Pulmonary Disease

Jessica L. Israel, M.D.
Mount Sinai School of Medicine
Breaking Bad News to Older Adults

Laurie L. Lavery, M.D.
University of Pittsburgh
Are Long-term Care Needs Predicted by Screening for Executive Control Dysfunction?

Cathy Lee-Chopra, M.D.
University of Michigan
Effect of Raloxifene on Insulin Sensitivity in Postmenopausal Women

Erik J. Lindbloom, M.D.
University of Missouri at Columbia
The Missouri Elder Mistreatment Fatality Study

James M. Martau, M.D.
University of Colorado
Evaluation of a Community-based Telephone Intervention to Increase Physical Activity Among Seniors
Medical Student Summer Research Training in Aging Program

(formerly known as the Medical Student Geriatrics Scholars Program)

Eight- to twelve-week awards encourage medical students — particularly budding researchers — to undertake research projects and consider a career in geriatrics. AFAR collaborates with the NIA and several foundations to continue and strengthen the original Hartford/AFAR Medical Student Geriatric Scholars Program. Current sponsors include: National Institute on Aging, The John A. Hartford Foundation, The William Randolph Hearst Foundation, The Cleveland Foundation, Cardinal Health Foundation, Lillian R. Gleitsman Foundation, Community Health Foundation of Western & Central New York, The New York Community Trust and an anonymous donor. The Fan Fox and Leslie R. Samuels Foundation was a sponsor from 2000-2003.

2005 Scholars

Alan Bengtzen
Emory University

Ariel Bulua
Mount Sinai School of Medicine

Olatubosun Chinwokwu
Saint Louis University

Neela Dasgupta
Johns Hopkins School of Medicine

Ohm Deshpande
Cornell University

Sharon Engel
Emory University

David Fish
University of New England College of Medicine

Andrew Fisher
University of Pittsburgh School of Medicine

Michael Ford
Cornell University

Daniel Freedberg
Harvard Medical School

Molly Fuentes
University of Michigan Medical School

Gina Fujikami
John A. Burns School of Medicine at the University of Hawaii at Manoa

Shanti Ganesh
Duke University School of Medicine

Matthew Garrett
Case Western Reserve University

Benjamin Goldsmith
Mount Sinai School of Medicine

Elizabeth Goodman
Washington University School of Medicine

Jacqueline Green
Emory University

Joy Guerrieri-Bang
University of New England College of Medicine

Nitin Gupta
University of Michigan

Elizabeth Harlow
Emory University

Ben Harris
Mount Sinai School of Medicine

John Hopkins
University of North Carolina at Chapel Hill

David Horowitz
Johns Hopkins University School of Medicine

Brian Houston
Emory University

Kathleen Khong
Northwestern Feinberg School of Medicine

Sandy Liang
Mount Sinai School of Medicine

Kyla Miller
Case Western Reserve University

Margaret Moscato
Emory University

Anjali Nigamaye
University of Chicago

Shantanu Nundy
Johns Hopkins University School of Medicine

Theodore Pasquali
University of California, Los Angeles

Laura Raducha-Grace
University of Pittsburgh

Simha Ravven
Tulane University School of Medicine

Brandon Roberts
Case Western Reserve University

Shawn Rosen
University of Rochester School of Medicine

Alexandra Shaw
Mount Sinai School of Medicine

Megan Skibitsky
University of California, Los Angeles

Lon Steinberg
Albert Einstein College of Medicine

Malini Sur
Mount Sinai School of Medicine

Ryan Takenaga
Johns Hopkins University School of Medicine

Eva Teitelbaum
Mount Sinai School of Medicine

Christie Tung
Case Western Reserve University

Brant Ullery
Cornell University

Ryan Ungaro
Mount Sinai School of Medicine

Deborah Weener
University of Michigan

Daniel Wei
Case Western Reserve University

Victor Wu
Emory University

Priscilla Yee
John A. Burns School of Medicine at the University of Hawaii at Manoa

Jacqueline Yuen
University of Michigan Medical School

Andrea Zapeda
University of Michigan

David Zinn
Brown University

2004 Scholars

Yachna Ahuja
Case Western Reserve University

Hannah H. Alphs
Johns Hopkins University

Kathryn A. Artis
Mount Sinai School of Medicine

Donald M. Banik
University of New England College of Medicine

Aisha Baqai
Cornell University

Russell Berger
Mount Sinai School of Medicine

Gwen Bernacki
State University of New York, Buffalo

Laurel E. Blackman
University of North Texas Health Science Center- Texas College of Osteopathic Medicine

Brittany N. Bohinc
Northeastern Ohio Universities College of Medicine

Yasmin Bootwala
Baylor College of Medicine

Catherine Buell
Drew University/University of California, Los Angeles

Julie Burke
Saint Louis University School of Medicine

Joel Escobedo
University of Michigan

Anne E. Finefrock
University of North Carolina at Chapel Hill

Maximilian Gomez-Trochez
Mount Sinai School of Medicine

Matthew Hansen
Case Western Reserve University

Maryam Haque
Drexel University College of Medicine

Lianne Hirano
Yale University

Joey Y. Kohatsu
University of Hawaii

Melissa H. Kujawski
Mount Sinai School of Medicine

Margaret W. Leung
University of California, San Diego

Cathy Liu
Emory University

Jeffrey Loh
Cornell University

Alecia R. Mack
Oklahoma State University

Kristin K. Martin
Oklahoma State University

Loren L. Martinez
Ohio State University College of Medicine and Public Health

Matthew Mei
Case Western Reserve University

Meredith J. Montero
University of Michigan

Leah Y.K. Nakamura
University of Hawaii

Claude Nguyen
Medical College of Wisconsin

Barbara C. Overend
Emory University
Hasra K. Phillip  
State University of New York, Upstate Medical University

Lhasa Ray  
Albert Einstein College of Medicine

Donna J. Roybal  
University of California, Los Angeles

Sima Shah  
Case Western Reserve University

Marc P. Simpao  
University of Texas Health Science Center at San Antonio

Anthony N. Sireci  
Johns Hopkins University

Risa Small  
Mount Sinai School of Medicine

Amir Soumekh  
Mount Sinai School of Medicine

Hana Takusagawa  
Mount Sinai School of Medicine

Joseph Tang  
Mount Sinai School of Medicine

Sarah K. Tighe  
Johns Hopkins University

Elizabeth H. Tsai  
University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine

Veronica Vasquez  
Cornell University

Giorgio Veneziano  
Case Western Reserve University

Pauline Wu  
University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine

Cong-Zhi Cecile Zhao  
Medical College of Wisconsin

2003 Scholars

Crystal L. Adams  
University of Texas Health Science Center at San Antonio

April Alford  
Baylor College of Medicine

Jonathan Austrian  
Cornell University

Lisa M. Bowe  
Ohio State University

Daniel J. Burdick  
Johns Hopkins University

Michelle M. Cabrera  
University of Maryland School of Medicine

Shannon M. Campbell  
Ohio University College of Osteopathic Medicine

Connie Chang  
Cornell University

Joseph C. Chiang  
Mount Sinai School of Medicine

Anne K. Chung  
University of Arizona

Jarrod Collins  
University of North Texas Health Science Center

Luis G. Cruz  
University of Hawaii

Kirsten Dacal  
University of Pittsburgh

Dilsher S. Dhoot  
Chicago Medical School

Kerry A. Donegan  
Mount Sinai School of Medicine

Margaret Donlon  
University of Rochester

Steven D’Sa  
University of Michigan

Rachel Fogel  
Johns Hopkins University

Michael C. Forney  
Case Western Reserve University

Katherine Freeman  
Northeastern Ohio Universities College of Medicine

Ewina Fung  
University of California, Los Angeles

Matthew R. Garrett  
Case Western Reserve University

Annie Hall  
University of Alabama, Birmingham

Mary J. Hessert  
University of New England College of Osteopathic Medicine

Christopher A. Jones  
Jefferson Medical College

Beth H. Justice  
Emory University

Christin Knowlton  
State University of New York, Stony Brook

Thomas A. Leeson  
University of New England College of Osteopathic Medicine

Serena Lo  
University of Hawaii

Monica G. Majmundar  
Emory University

Danielle A. McClellan  
Saint Louis University

Daniel E. Motter  
Philadelphia College of Osteopathic Medicine

C. Ariel Nason  
Boston University

Anoma Nellore  
University of Pennsylvania

Michael Nystrom  
University of California, Los Angeles

Monica I. Oshita  
University of Hawaii

Joon Hong Park  
University of Virginia School of Medicine

Schonze F. Peck-Del Pozo  
Johns Hopkins University

Angela S. Peng  
University of Texas Health Science Center at San Antonio

Christopher H. Perkins  
Baylor College of Medicine

Tracy Prachthauser  
Medical College of Wisconsin

Carl T. Ratliff, Jr.  
Ohio University College of Osteopathic Medicine

Elizabete M. Santos  
University of New England College of Osteopathic Medicine

Sarah Schellhorn  
Cornell University

Shauna Schwartz  
State University of New York, Stony Brook

Sona S. Shah  
Emory University

Janet E-H Shu  
Brown University

Jennifer N. Stojan  
University of Michigan

Kathleen A. Walker  
Medical College of Ohio

Melanie C. Wuerstle  
University of California, Los Angeles

Anthony Yin  
Saint Louis University

Beata Zubrowski  
Philadelphia College of Osteopathic Medicine

2002 Scholars

Stephanie J. Anderson  
Saint Louis University

Srilatha Atluri  
Indiana University School of Medicine

Isabel Balderas  
Harvard University

Amy Baxi  
Saint Louis University

Julia B. Becker  
University of Michigan

Pablo E. Bedoya  
Emory University

Michael A. Blair  
University of Maryland, Baltimore

Jessica K. Bland  
University of Texas Health Science Center at San Antonio

Jonathan Blau  
State University of New York, Stony Brook

Catherine A. Bluteau  
University of Michigan

Brooke N. Bosley  
University of Pittsburgh

Kathryn E. Callahan  
Mount Sinai School of Medicine

Amy Carroll  
Emory University

Richard B. Carter, Jr.  
Baylor College of Medicine

Yamileth R. Cazorla-Lancaster  
University of North Texas Health Science Center

Kenneth V. Chong  
New York Medical College

Jessica Colburn  
University of Pittsburgh

Alan Coon  
Saint Louis University

Rahul Desikan  
Boston University

Kimiko Domoto-Reilly  
New York Medical College

Lanelle Dulloog  
University of Hawaii

Paul Edwards  
University of Arkansas

Michael Ehrlich  
Jefferson Medical College

Rebecca Epstein  
Indiana University

Monica T. Epstein  
Johns Hopkins University

Sunita G. Ferreira  
New York Medical College

Kathleen Gilchrist  
University of Florida

Eve Freeman  
National Institutes of Health

Mark A. Freidenberg  
University of Pennsylvania

Laura T. Friess  
University of Texas Southwestern Medical Center

Santosh G. Garg  
University of North Carolina School of Medicine

Kathleen A. Gaul  
University of Rochester

Jennifer S. Gebhart  
University of Pennsylvania

Connie L. Geffner  
Emory University

Sharon Gehan  
New York Medical College

Alex Hechtman  
University of California, San Francisco

William C. Heimberg  
University of Pennsylvania

Rebecca J. Herman  
University of California, San Francisco

Carolien E. Holyoke-Czernecki  
University of Pittsburgh

Sarah Z. Houndley  
University of Pennsylvania

Susan L. Houtsmuller  
Case Western Reserve University

Sarah T. Hsu  
Baylor College of Medicine

June E. Hwang  
University of California, San Francisco

Karen Jenett  
University of California, San Francisco

Rachelle Jungreis  
University of Pennsylvania

Veronica Vasquez  
Cornell University

Giorgio Veneziano  
Case Western Reserve University

Pauline Wu  
University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine

Cong-Zhi Cecile Zhao  
Medical College of Wisconsin

2003 Scholars

Crystal L. Adams  
University of Texas Health Science Center at San Antonio

April Alford  
Baylor College of Medicine

Jonathan Austrian  
Cornell University

Lisa M. Bowe  
Ohio State University

Daniel J. Burdick  
Johns Hopkins University

Michelle M. Cabrera  
University of Maryland School of Medicine

Shannon M. Campbell  
Ohio University College of Osteopathic Medicine

Connie Chang  
Cornell University

Joseph C. Chiang  
Mount Sinai School of Medicine

Anne K. Chung  
University of Arizona

Jarrod Collins  
University of North Texas Health Science Center

Luis G. Cruz  
University of Hawaii

Kirsten Dacal  
University of Pittsburgh

Dilsher S. Dhoot  
Chicago Medical School

Kerry A. Donegan  
Mount Sinai School of Medicine

Margaret Donlon  
University of Rochester

Steven D’Sa  
University of Michigan

Rachel Fogel  
Johns Hopkins University

Michael C. Forney  
Case Western Reserve University

Katherine Freeman  
Northeastern Ohio Universities College of Medicine

Ewina Fung  
University of California, Los Angeles

Matthew R. Garrett  
Case Western Reserve University

Annie Hall  
University of Alabama, Birmingham

Mary J. Hessert  
University of New England College of Osteopathic Medicine

Christopher A. Jones  
Jefferson Medical College

Beth H. Justice  
Emory University

Christin Knowlton  
State University of New York, Stony Brook

Thomas A. Leeson  
University of New England College of Osteopathic Medicine

Serena Lo  
University of Hawaii

Monica G. Majmundar  
Emory University

Danielle A. McClellan  
Saint Louis University

Daniel E. Motter  
Philadelphia College of Osteopathic Medicine

C. Ariel Nason  
Boston University

Anoma Nellore  
University of Pennsylvania

Michael Nystrom  
University of California, Los Angeles

Monica I. Oshita  
University of Hawaii

Joon Hong Park  
University of Virginia School of Medicine

Schonze F. Peck-Del Pozo  
Johns Hopkins University

Angela S. Peng  
University of Texas Health Science Center at San Antonio

Christopher H. Perkins  
Baylor College of Medicine

Tracy Prachthauser  
Medical College of Wisconsin

Carl T. Ratliff, Jr.  
Ohio University College of Osteopathic Medicine

Elizabete M. Santos  
University of New England College of Osteopathic Medicine

Sarah Schellhorn  
Cornell University

Shauna Schwartz  
State University of New York, Stony Brook

Sona S. Shah  
Emory University

Janet E-H Shu  
Brown University

Jennifer N. Stojan  
University of Michigan

Kathleen A. Walker  
Medical College of Ohio

Melanie C. Wuerstle  
University of California, Los Angeles

Anthony Yin  
Saint Louis University

Beata Zubrowski  
Philadelphia College of Osteopathic Medicine

2002 Scholars

Stephanie J. Anderson  
Saint Louis University

Srilatha Atluri  
Indiana University School of Medicine

Isabel Balderas  
Harvard University

Amy Baxi  
Saint Louis University

Julia B. Becker  
University of Michigan

Pablo E. Bedoya  
Emory University

Michael A. Blair  
University of Maryland, Baltimore

Jessica K. Bland  
University of Texas Health Science Center at San Antonio

Jonathan Blau  
State University of New York, Stony Brook

Catherine A. Bluteau  
University of Michigan

Brooke N. Bosley  
University of Pittsburgh

Kathryn E. Callahan  
Mount Sinai School of Medicine

Amy Carroll  
Emory University

Richard B. Carter, Jr.  
Baylor College of Medicine

Yamileth R. Cazorla-Lancaster  
University of North Texas Health Science Center

Kenneth V. Chong  
New York Medical College

Jessica Colburn  
University of Pittsburgh

Alan Coon  
Saint Louis University

Rahul Desikan  
Boston University

Kimiko Domoto-Reilly  
New York Medical College

Lanelle Dulloog  
University of Hawaii

Paul Edwards  
University of Arkansas

Michael Ehrlich  
Jefferson Medical College

Rebecca Epstein  
Indiana University
Tina Fan  
Mount Sinai School of Medicine

Laura Fanning  
Cornell University

Alla Feldbarg  
City University of New York Medical School

Scott J. Genshaft  
Case Western Reserve University

Lisa Giulii  
Cornell University

Sheena Gleason  
Saint Louis University

Andrew Godbey  
Saint Louis University

Karim Gokal  
Emory University

Mark L. Gripp  
Mount Sinai School of Medicine

Divya Gupta  
Northwestern University Medical School

Nancy Han  
Ohio State University

Salma Haque  
Louisiana State University

Lindsey Hartmann  
University of Nebraska

Peyton L. Hays  
Cornell University

Hebah M.S. Hefzy  
Northeastern Ohio Universities College of Medicine

Jeffrey S. Highfill  
University of Pittsburgh

Susan A. Hodes  
University of California, Irvine

Julia Hsu  
Boston University

Tracy N. Huynh  
Boston University

Kelly J Ishizuka  
Ohio State University

D. Krysten James  
University of Texas Health Science Center at San Antonio

Beverly K. Johnson  
Brown Medical School

Elizabeth A. Johnson  
Medical College of Wisconsin

Rebecca Jones  
University of Alabama, Birmingham

Abha Khandelwal  
Ohio State University

Rose Khavari  
University of Texas Medical Branch

Heidi A. Koerner  
University of South Dakota

Izabela Koprowska  
State University of New York, Downstate

Meenal G. Kulkarni  
Northeastern Ohio Universities College of Medicine

Lawrence D. Lazar  
University of California, Los Angeles

Andrew B. Lee  
Washington University

Wei Weil Li  
Sophie Davis School of Biomedical Education at the City University of New York

Elaina E. Lin  
Johns Hopkins University

Nicole Longanecker  
Vanderbilt University

Aisha Macedo  
Mount Sinai School of Medicine

Anne Mani  
Johns Hopkins University

Kara B. Markham  
University of Michigan

Veronica Mendoza-Jenkins  
University of Washington

Aaron K. Mory  
Thomas Jefferson University

Megan B. Muilenburg  
University of North Dakota

Jae H. Park  
Johns Hopkins University

Alisha Patel  
Baylor College of Medicine

Avni Patel  
University of Pittsburgh

Oscar E. Penate  
University of Washington

Carmel Person  
University of Louisville

Joshua D. Phillips  
University of Nebraska College of Medicine

Christine Pineda  
University of Washington

Angela Poppe  
Duke University

Rajeev Raghavan  
Ohio State University

Kristen N. Rice  
University of Colorado

Jeanne B. Robinson  
Baylor College of Medicine

Carmela Rocchetti  
Robert Wood Johnson Medical School at the University of Medicine and Dentistry of New Jersey

Bunja Rungruang  
University of Alabama, Birmingham

Amy Rybak  
Ohio University College of Osteopathic Medicine

Maria Samenfeld-Specht  
Mount Sinai School of Medicine

Christopher Scintorto  
Case Western Reserve University

Karen Shahar  
Baylor College of Medicine

Jeremy Shelton  
Cornell University

Sara M. Shunkwiler  
University of Iowa

Stephanie A. Sieg  
Ohio University College of Osteopathic Medicine

Gabriel K. Silverman  
University of Pittsburgh

Marc P. Simpao  
University of Texas Health Science Center at San Antonio

Toby Smith  
Western University

Lauren Snow  
Mount Sinai School of Medicine

M. Karleen Su  
University of California, Los Angeles

Demian Szyld  
Mount Sinai School of Medicine

Tomoko Tagawa  
Finch University/Chicago Medical School

Connie K. Tang  
Ohio State University

Monica L. Tegeler  
Saint Louis University

Katheryn Thomas  
Emory University

Justin To  
State University of New York, Stony Brook

Carmen A. Traywick  
Emory University

W. Jeff Trillo  
Baylor College of Medicine

Jadwiga J. Truty  
University of California, Los Angeles

Christopher Vernon  
Western University of Health Sciences

Naveed Wagle  
Chicago Medical School

Dexter Wong  
Boston University

Irene Wu  
University of Medicine and Dentistry of New Jersey

Brett Yamane  
University of Hawaii

Sallis Yip  
University of Hawaii

Chung Chi Yu  
Albert Einstein College of Medicine

2001 Scholars

Jennifer N. Alzos  
Weill Medical College of Cornell University

Suzanne V. Arnold  
Ohio State University

Karen Au  
University of Pittsburgh

Sunnya Austin  
Ohio University

Sarah Babineau  
Brown University

James F. Bartscher  
Weill Medical College of Cornell University

Michon Bechamps  
Eastern Virginia Medical School

Paula Becker  
Saint Louis University

Robert Bercovitch  
Brown University

Christina Bertao  
University of Hawaii

Lindsay-Rose Boynton  
University of Michigan

Lynea E. Brandt  
University of Pittsburgh

Shu-Hong Holly Chang  
Johns Hopkins University

Elaine Cheng  
Weill Medical College of Cornell University

Sze Mei Chung  
University of Hawaii

Calandra Diamond  
Western University

Marcie Dreisbach  
Ohio State University
<table>
<thead>
<tr>
<th>Name</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laura Phang</td>
<td>University of California, San Francisco</td>
</tr>
<tr>
<td>Ashutosh A. Pradhan</td>
<td>Duke University</td>
</tr>
<tr>
<td>Cynthia I. Resendez</td>
<td>University of California, San Francisco</td>
</tr>
<tr>
<td>Todd E. Schmidt</td>
<td>Indiana University</td>
</tr>
<tr>
<td>Lauren K. Schwartz</td>
<td>Cornell University</td>
</tr>
<tr>
<td>Jeffrey R. Scott</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Joanna B. Sheinfeld</td>
<td>Yale University</td>
</tr>
<tr>
<td>Elliott Sohn</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Angela Y. Song</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Rui Song</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Ellen E. Squire</td>
<td>Kansas University Medical Center</td>
</tr>
<tr>
<td>Craig Stewart</td>
<td>Indiana University</td>
</tr>
<tr>
<td>Calvin G. Sy</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Melba M. Taylor</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Jo-Anne Teoh</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Nghí K. Tran</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Stephanie N. Turnage</td>
<td>Ohio State University</td>
</tr>
<tr>
<td>Jay Ufford</td>
<td>Mount Sinai School of Medicine</td>
</tr>
<tr>
<td>Wendy D. Wasden</td>
<td>University of Alabama, Birmingham</td>
</tr>
<tr>
<td>Jonathan D. Weaver</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>Melissa E. Wellons</td>
<td>Duke University School of Medicine</td>
</tr>
<tr>
<td>Haoiling Holly Weng</td>
<td>Duke University</td>
</tr>
<tr>
<td>Barton L. Wise</td>
<td>Boston University</td>
</tr>
<tr>
<td>Terri L. Woodard</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Jason Yeh</td>
<td>University of California, Los Angeles</td>
</tr>
</tbody>
</table>

### 1998 Scholars

<table>
<thead>
<tr>
<th>Name</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yeran Bao</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>Jeremy R. Bariola</td>
<td>University of Arkansas for Medical Sciences</td>
</tr>
<tr>
<td>Michael R. Bibighaus</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Doug Borg</td>
<td>University of Arkansas for Medical Sciences</td>
</tr>
<tr>
<td>Heather E. Brooks</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Jeremy D. Bufford</td>
<td>University of Arkansas for Medical Sciences</td>
</tr>
<tr>
<td>Ian S. Caccam</td>
<td>University of Miami School of Medicine</td>
</tr>
<tr>
<td>Kerri L. Cavanaugh</td>
<td>Yale University</td>
</tr>
<tr>
<td>Roger S. Chan</td>
<td>University of California, San Diego</td>
</tr>
<tr>
<td>Peter J. Chase</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>Johnson Y. Chiu</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>Sarah J. Crane</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>Jessica Critchfield</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Joy E. Cuezze</td>
<td>University of Kansas Medical Center</td>
</tr>
<tr>
<td>Carrie A. Czarnecki</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>Anne B. Davis</td>
<td>University of Alabama, Birmingham</td>
</tr>
<tr>
<td>Dustin L. Dierks</td>
<td>University of South Dakota School of Medicine</td>
</tr>
<tr>
<td>Mark T. Dillon</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Lisa M. Filion</td>
<td>University of Washington</td>
</tr>
<tr>
<td>LaTosha Y. Flowers</td>
<td>University of Arkansas for Medical Sciences</td>
</tr>
<tr>
<td>Tanya E. Froehlich</td>
<td>Yale University</td>
</tr>
<tr>
<td>Jennifer R. Garreau</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>Jonathan B. Gill</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>Philip F. Gogel</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>John A. Guerriero</td>
<td>Ohio University College of Osteopathic Medicine</td>
</tr>
<tr>
<td>Verna C. Guo</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Heidi J. Haapala</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Randall K. Harada</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>James C. Hardy</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Kevin M. Henderzahs</td>
<td>Indiana University</td>
</tr>
<tr>
<td>Hilary M. Hochberg</td>
<td>Cornell University Medical College</td>
</tr>
<tr>
<td>Emily E. Hooi</td>
<td>Ohio State University</td>
</tr>
<tr>
<td>Evaileen F. Hsieh</td>
<td>University of Miami School of Medicine</td>
</tr>
<tr>
<td>Chandra M. Ivey</td>
<td>Cornell University Medical College</td>
</tr>
<tr>
<td>Randall E. Jack</td>
<td>University of Nevada, Reno</td>
</tr>
<tr>
<td>Sherry L. Johnson</td>
<td>Ohio University College of Osteopathic Medicine</td>
</tr>
<tr>
<td>Cornelia M. Kacir</td>
<td>Ohio University College of Osteopathic Medicine</td>
</tr>
<tr>
<td>Jonathan Kantor</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Youjeong Kim</td>
<td>University of Texas, Houston Medical School</td>
</tr>
<tr>
<td>Karen M. Knops</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>Negar G. Knowles</td>
<td>University of Washington</td>
</tr>
<tr>
<td>E. Scott Kopetz</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Elizabeth M. Kwong</td>
<td>University of California, San Diego</td>
</tr>
<tr>
<td>Melinda J. Landchild</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Anthereca E. Lane</td>
<td>Ohio State University</td>
</tr>
<tr>
<td>Janie M. Leonardt</td>
<td>Northeastern Ohio Universities College of Medicine</td>
</tr>
<tr>
<td>Jimmy M. Liao</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Tina M. Lusignolo</td>
<td>Ohio State University</td>
</tr>
<tr>
<td>Lisa M. Manimala</td>
<td>University of Rochester</td>
</tr>
<tr>
<td>Thomas A. Manning</td>
<td>University of Arkansas for Medical Sciences</td>
</tr>
<tr>
<td>Rotonya L. McCants</td>
<td>Cornell University Medical College</td>
</tr>
<tr>
<td>Gina M. Merritt</td>
<td>Ohio University College of Osteopathic Medicine</td>
</tr>
<tr>
<td>Kathleen M. Mitchell</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>Smita Nayak</td>
<td>Hackensack University Medical Center</td>
</tr>
<tr>
<td>Huy V. Nguyen</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Michael H. Nguyen</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>Cynthia Y. Ohata</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Mihwa C. Pak</td>
<td>Chicago Medical School</td>
</tr>
<tr>
<td>Jonathon D. Palmer</td>
<td>University of Arkansas for Medical Sciences</td>
</tr>
<tr>
<td>Tahira A. Palmer</td>
<td>University of Alabama</td>
</tr>
<tr>
<td>Amie L. Peterson</td>
<td>Medical College of Georgia</td>
</tr>
<tr>
<td>Anthony T. Pham</td>
<td>University of North Texas Health Science Center</td>
</tr>
<tr>
<td>Basil Pittenger</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Catherine J. Rees</td>
<td>Wake Forest University</td>
</tr>
<tr>
<td>Brent Ridge</td>
<td>University of North Carolina at Chapel Hill</td>
</tr>
<tr>
<td>Matthew J. Robon</td>
<td>Ohio State University</td>
</tr>
<tr>
<td>Jennifer L. Rupert</td>
<td>University of Washington</td>
</tr>
<tr>
<td>Sepehr B. Sani</td>
<td>Medical College of Ohio</td>
</tr>
<tr>
<td>Elizabeth A. Schneider</td>
<td>University of Arkansas for Medical Sciences</td>
</tr>
<tr>
<td>Melinda P. Shaw</td>
<td>Emory University</td>
</tr>
<tr>
<td>Grace L. Shih</td>
<td>Yale University</td>
</tr>
<tr>
<td>Jill Z. Simon</td>
<td>Cornell University Medical College</td>
</tr>
</tbody>
</table>
Sarah M. Snelgrove  
Cornell University Medical College

Natalie P. Steele  
University of Washington

Michael E. Stern  
Cornell University Medical College

Michael M. Takamura  
University of California, San Diego

Sonja L. Talvi  
University of Chicago

William H. Thom  
Saint Louis University

Keith Thompson  
University of Arkansas for Medical Sciences

Nyree K. Thorne  
State University of New York, Syracuse Health Science Center

Mark C. Tsai  
University of Pittsburgh

Lauren G. Varney  
Tufts University School of Medicine

Gina R. Vaughn  
University of Washington

Ariana J. Vora  
Mount Sinai Medical Center

Vicki K. Wall  
University of Nevada, Reno

Thomas H. Watson  
Emory University

Alyssa N. Wenger  
University of Arkansas for Medical Sciences

Beverly E. White  
Baylor College of Medicine

Susan M. Womeldorf  
Oregon Health Sciences University

Andrea Wong  
University of Medicine and Dentistry of New Jersey

Christine A. Wu  
University of California, Los Angeles

Zimu N. Zheng  
University of California, San Diego

1997 Scholars

Tanya Barauskas  
University of California, Los Angeles

Julie Bartik  
Ohio University College of Osteopathic Medicine

Naveena Bobba  
University of Pittsburgh

Deborah Boyle  
University of Massachusetts

Karl Buekers  
Ohio State University

Ian Caccam  
University of Miami

Milan Chheda  
Albert Einstein College of Medicine

Kara Cummins  
Saint Louis University

Tracy DeAmicis  
Johns Hopkins University

David DeGuzman  
University of Michigan

Nancy Dunbar  
University of Connecticut Health Center

Arom Evans  
University of Washington

Darlene Gabeau  
Yale University

David Ganz  
Harvard Medical School

Colin Gillespie  
Fisch University of Health Sciences

Shannon Gosslidier  
University of South Dakota

Colin Hamblin  
University of Rochester

James Hekman  
University of Chicago

Aram Hezel  
State University of New York, Buffalo

Radjena Hilliard  
Mount Sinai School of Medicine

Cheryl Ho  
University of California, San Diego

Kristin Humphreys  
The Pennsylvania State University College of Medicine

Joachim Ix  
University of Chicago Pritzker School of Medicine

Jennifer Jackson  
University of Pittsburgh School of Medicine

Jason Kahn  
University of Rochester

Kevin Kerber  
University of South Carolina School of Medicine

Aaieya Koreishi  
University of Michigan

Jacqueline Kramer  
Indiana University

Sandhya Krishnan  
University of Michigan

Alayne Kulvicki  
University of Texas Health Science Center

James Lai  
Bowman Gray School of Medicine at Wake Forest University

Dawn Lazarus  
Mount Sinai School of Medicine

David Lieberman  
Stanford University

Ronnie Lu  
Boston University

Kimberly Mark  
University of South Dakota

Silbey Mui  
Albert Einstein College of Medicine

Mark Musco  
Chicago Medical School

Shyam Parekh  
University of Michigan

Andreea Partal  
Case Western Reserve University

Stephanie Peppler-Swope  
Saint Louis University

Supriya Rajpal  
University of Michigan

Louis Ramos  
University of Rochester

Alvie C. Richardson  
University of Nevada, Reno, School of Medicine

John Rogowski  
University of California, Los Angeles

Andrew Ross  
Mount Sinai School of Medicine

James Rudolph  
Loyola University Chicago Stritch School of Medicine

Tanya Ruff  
Ohio State University

Neha Sangwan  
University of Buffalo

Donna Sassaman  
University of Medicine and Dentistry of New Jersey

Mary Sehl  
Brown University

Victoria Sokolove  
University of Pennsylvania

Timothy Ta  
Medical College of Wisconsin

William Tew  
University of Rochester

Blake Weathersby  
University of Alabama School of Medicine

Heather Whitson  
Cornell University

Cecilia Wieslander  
University of California, Los Angeles

Jennifer Winters  
Ohio University College of Osteopathic Medicine

David Wu  
University of Michigan

Carrie Zimmer  
University of Michigan

1996 Scholars

Matthew Anderson  
University of South Dakota

Alex Auseon  
Ohio University College of Medicine

Todd Bailey  
Saint Louis University

Gavin Baumgardner  
Ohio University College of Medicine

Christine Bittner  
Ohio University College of Medicine

David Broumandi  
Emory University

Kathleen Burgess  
University of Washington

Craig Calhoun  
Saint Louis University

Scott Carlos  
University of Michigan

Michael Chen  
University of Michigan

Lillian Chiang  
University of California, Los Angeles
Yu-Chi Chung
University of Texas Health Science Center at San Antonio

Paul Cunningham
University of Washington

Dolon Das
Baylor College of Medicine

Mohak Dave
University of South Carolina

Linda V. DeCherrie
University of Chicago

Michael Felsony
Saint Louis University

Debbie Fishkind
Mount Sinai School of Medicine

Suet-Ying Fung
Cornell University

Poonam Jha
University of Michigan

Kenneth Jung
Saint Louis University

Meryem Koker
University of Michigan

Naveendra Korivi
University of North Texas

Susan Krieg
University of Pittsburgh

Vidya Krishnan
University of Michigan

Dave Lee
Saint Louis University

William Lew
University of Michigan

Krystina Liaugaudas
Saint Louis University

Moe Lim
Harvard Medical School

Kenneth Lin
Case Western Reserve University

Heather Liszka
University of Pittsburgh

Karen Ludlow
New York Medical College

David Mandel
Medical College of Ohio

Kimberly Mark
University of South Dakota

Jill Mhyre
University of Michigan

Babak Mokari
Ohio University College of Osteopathic Medicine

Laurie Muller
Saint Louis University

Ryan O’Connell
New York University

Ghadir Oloumi
Mount Sinai School of Medicine

Vipul Parikh
University of Michigan

Luon Peng
Ohio University College of Osteopathic Medicine

Hoang Pham
University of Pennsylvania

Louis Ramos
University of Rochester

Alvie C. Richardson
University of Nevada, Reno

Neha Sangwan
State University of New York, Buffalo

Christopher Skidmore
Saint Louis University School of Medicine

Hans Stohrer
University of Rochester

Andrew Sword
University of Michigan

Manoj Thakker
Mount Sinai School of Medicine

Jessica Ulbrich
University of Michigan

Jason Van Ittersum
University of Michigan

Seamus Walsh
Ohio University College of Medicine

Crispin Webb
University of South Dakota

Carlos Weiss
University of Michigan

Michael Widlansky
University of Michigan

Timothy Willingham
Mayo Clinic

Flora Yao
Loma Linda University

1995 Scholars

Julie Abrahamson
Johns Hopkins University

Eugene Ahn
New York University Medical Center

Angela Allen
Saint Louis University

Rendell Ashton
Johns Hopkins University

Neeraj Badjatia
Emory University

James Boyd
Saint Louis University

D. Allen Brantley
Wake Forest University

Jan Brink
University of California, Los Angeles

William Buxton
Emory University

Julie Bynum
Johns Hopkins University

Kimberly Carter
Baylor College of Medicine

Annie Chen
Cornell University School of Medicine

Francis Coyle
University of Connecticut

Cynthia Dechene
University of Rochester

Sophie Deng
University of Rochester

Cynthia Dennison
Saint Louis University School of Medicine

Ron Devlin
University of Colorado

Elaine DiCostanzo
Mount Sinai School of Medicine

Vamli Divan
State University of New York, Buffalo

Jesse Eissler
Mount Sinai School of Medicine

Frederick Faust
Case Western Reserve

Sara Fischer
Mount Sinai School of Medicine

Tamara Fong
Ohio State University College of Medicine

Anne Galbraith
University of Utah

Ruth Graupera
Johns Hopkins University

Jennifer Grot
Saint Louis University

Lucy Guerra
Mount Sinai School of Medicine

Susan Hall
Loma Linda University

Sara Howe
New York Medical College

Jordan Karp
University of Pittsburgh

Pamela Kirschner
Harvard University

Alayne Kulvicki Markland
University of North Texas

George Kunz
University of Michigan

Siavash Kurdistani
Harvard University

Timothy Kuwada
University of Connecticut

Alpa Laheri
Johns Hopkins University

Timothy Lewis
Wayne State University

Hallie Lightdale
Mount Sinai Medical Center

Jerry Lin
Harvard Medical School

Elizabeth Lindenberger
Stanford University

Shaden Marzouk
Saint Louis University

Maritess Mauricio
Stanford University

Lisa McAllister
Ohio University College of Medicine

R. Steven Meadows
Wake Forest University School of Medicine

Ellen Marie Mongan
Columbia University

Anna Monias
Mount Sinai School of Medicine

Brian Mulhall
Saint Louis University

Christopher Ng
University of California, Los Angeles

Philip Nivatpumin
University of California, Los Angeles
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghadir Oloumi</td>
<td>Mount Sinai School of Medicine</td>
</tr>
<tr>
<td>Elizabeth Rashley</td>
<td>University of South Carolina</td>
</tr>
<tr>
<td>Katherine Shiue</td>
<td>Washington University</td>
</tr>
<tr>
<td>Crystal Simpson</td>
<td>University of Texas Health Science Center at San Antonio</td>
</tr>
<tr>
<td>Nitin Soorya</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>Jeanne Thompson</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Raymond Thornton</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Thao Truong</td>
<td>Harvard University</td>
</tr>
<tr>
<td>Frances Valdes</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Brinda Vora</td>
<td>Jefferson Medical College</td>
</tr>
<tr>
<td>Neal Waechter</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Herschel Wallen</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Kathleen Walsh</td>
<td>University of Des Moines College of Osteopathic Medicine</td>
</tr>
<tr>
<td>Katie Ward</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>Paul Wise</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Danielle Woodall</td>
<td>State University of New York, Buffalo</td>
</tr>
<tr>
<td>Edward Yian</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Marcia Zuckerman</td>
<td>Harvard University</td>
</tr>
<tr>
<td>Preetinder Brar</td>
<td>Harvard University</td>
</tr>
<tr>
<td>Julie Bynum</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Kimberly Cingle</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Judith Cymerman</td>
<td>University of Southern California</td>
</tr>
<tr>
<td>Laura B. Dunn</td>
<td>University of California, San Francisco</td>
</tr>
<tr>
<td>Jesse Eisler</td>
<td>Mount Sinai School of Medicine</td>
</tr>
<tr>
<td>William Garner</td>
<td>New York Medical College</td>
</tr>
<tr>
<td>Ceri Hadda</td>
<td>Mount Sinai School of Medicine</td>
</tr>
<tr>
<td>Argye Hillis</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Mwango Kashoki</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Hai Kenney</td>
<td>Ohio University College of Medicine</td>
</tr>
<tr>
<td>Sally Lee</td>
<td>University of North Texas</td>
</tr>
<tr>
<td>Moshe Lewis</td>
<td>Mount Sinai School of Medicine</td>
</tr>
<tr>
<td>Mehran Mandegar</td>
<td>University of Rochester</td>
</tr>
<tr>
<td>R. Steven Meadows</td>
<td>Wake Forest University</td>
</tr>
<tr>
<td>Marc Mendes</td>
<td>George Washington University</td>
</tr>
<tr>
<td>Lisa Moran</td>
<td>Saint Louis University</td>
</tr>
<tr>
<td>Christine Murphy</td>
<td>University of Minnesota</td>
</tr>
<tr>
<td>Thomas Murray</td>
<td>University of Connecticut</td>
</tr>
<tr>
<td>Jeff Odiet</td>
<td>Harvard Medical School</td>
</tr>
<tr>
<td>Medda Rauhut</td>
<td>Baylor College of Medicine</td>
</tr>
<tr>
<td>Samantha Segal</td>
<td>University of Connecticut</td>
</tr>
<tr>
<td>Lydia Shajenko</td>
<td>University of Connecticut</td>
</tr>
<tr>
<td>Jeffrey Suchniak</td>
<td>Bowman Gray School of Medicine at Wake Forest University</td>
</tr>
<tr>
<td>Joyce Tang</td>
<td>Stanford University</td>
</tr>
<tr>
<td>Susan Thomas</td>
<td>Texas A&amp;M University</td>
</tr>
<tr>
<td>Chris Tsuneishi</td>
<td>Chicago Medical School</td>
</tr>
<tr>
<td>Cordelia Uddoh</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Kimberly Vesco</td>
<td>University of California, San Diego</td>
</tr>
<tr>
<td>Richard Wong</td>
<td>New York University Medical Center</td>
</tr>
<tr>
<td>Rhonda Yantiss</td>
<td>Harvard Medical School</td>
</tr>
</tbody>
</table>

### 2005 Scholars

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeremy Broadmax</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Mita Deoras</td>
<td>Northeastern Ohio Universities College of Medicine</td>
</tr>
<tr>
<td>Paul Gunn</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Maxwell Hill</td>
<td>University of Cincinnati College of Medicine</td>
</tr>
<tr>
<td>Jessica Holmes</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Evan Howe</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Christine Hung</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Alexander Larson</td>
<td>Ohio State University College of Medicine</td>
</tr>
<tr>
<td>Ovidiu Marina</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Eric McLoney</td>
<td>Ohio State University College of Medicine &amp; Public Health</td>
</tr>
<tr>
<td>Leland Metheny</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Jeanie Wang</td>
<td>Northeastern Ohio Universities</td>
</tr>
<tr>
<td>Aimee Wing</td>
<td>Case Western Reserve University</td>
</tr>
</tbody>
</table>

### 1994 Scholars

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preetinder Brar</td>
<td>Harvard University</td>
</tr>
<tr>
<td>Julie Bynum</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Kimberly Cingle</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Judith Cymerman</td>
<td>University of Southern California</td>
</tr>
<tr>
<td>Laura B. Dunn</td>
<td>University of California, San Francisco</td>
</tr>
<tr>
<td>Christine Hung</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Alexander Larson</td>
<td>Ohio State University College of Medicine</td>
</tr>
<tr>
<td>Ovidiu Marina</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Eric McLoney</td>
<td>Ohio State University College of Medicine &amp; Public Health</td>
</tr>
<tr>
<td>Leland Metheny</td>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Jeanie Wang</td>
<td>Northeastern Ohio Universities</td>
</tr>
<tr>
<td>Aimee Wing</td>
<td>Case Western Reserve University</td>
</tr>
</tbody>
</table>
AFAR/Hartford Gero-Physician-Scientist Training Program

This fellowship program aimed to develop a cadre of physician-scientists qualified to teach and do research in their fields of specialization as they relate to the treatment of the elderly, and to establish a knowledge base to enhance medical student, resident and fellowship training in these disciplines. This program was active from 1992 to 1993.

1992 Fellows in Anesthesiology

G. Alec Rooke, M.D., Ph.D.
University of Washington School of Medicine

Randall M. Schell, M.D.
Duke University Medical Center

1993 Fellows in Geriatric Gynecology

Lauren Nathan, M.D.
University of California, Los Angeles

Carmen Sultana, M.D.
University MacDonald Womens Hospital/
Case Western Reserve University

M. Chrystie Timmons, M.D.
Duke University Medical Center

2000 Recipient

Jack T. Rogers, Ph.D.
Harvard Medical School
A New Translation Regulatory Target in the Alzheimer’s APP Transcript

2001 Recipients

Beth Tyler-McMahon, Ph.D.
Mayo Clinic, Jacksonville
Peptide Nucleic Acids Targeted to the Amyloid Precursor Protein

Yanming Wang, Ph.D.
University of Pittsburgh Medical Center
Amyloid Probes in Aging and Alzheimer’s Disease: Dual Agents for Both PET and SPECT

AFAR/ISOA Program for Drug Discovery in Cognitive Decline and Alzheimer’s Disease

One-to two-year awards provided support for innovative drug discovery projects by junior faculty (M.D.’s and Ph.D.’s) interested in a career in drug discovery in Alzheimer’s disease and related dementias. Sponsored by the Institute for the Study of Aging. This program was active from 2000 to 2001.

2001 Recipients

Deborah A. Ferrington, Ph.D.
University of Minnesota
Proteomics of Modified Retinal Proteins with Aging

Vassiliki Poulaki, M.D.
Massachusetts Eye and Ear Infirmary
Mechanisms of Neovascularization in Age-Related Macular Degeneration

AFAR/The Foundation for Fighting Blindness Joint Program for Career Development Awards in Support of Research on Age-Related Macular Degeneration

One-to two-year awards created for junior investigators to facilitate advances in laboratory and clinical research, enhance the understanding of the etiology and pathogenesis of age-related macular degeneration, and develop innovative strategies to prevent, treat or cure this blinding disease.

2001 Recipients

Lauren Nathan, M.D.
University of California, Los Angeles

Carmen Sultana, M.D.
University MacDonald Womens Hospital/
Case Western Reserve University

M. Chrystie Timmons, M.D.
Duke University Medical Center
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>Irving S. Wright, M.D., gathers aging research leaders at the annual meeting of the American College of Physicians in New Orleans and founds AFAR.</td>
</tr>
<tr>
<td>1982</td>
<td>The first AFAR Research Grants are awarded.</td>
</tr>
<tr>
<td></td>
<td>First Irving S. Wright Award given to Nathan W. Shock, Ph.D.</td>
</tr>
<tr>
<td>1984</td>
<td>First AFAR state affiliate formed in Ohio.</td>
</tr>
<tr>
<td>1986</td>
<td>Charles A. Dana AFAR Traveling Scholars Program established to encourage interest in geriatric medicine among future physicians.</td>
</tr>
<tr>
<td>1987</td>
<td>George E. Doty is elected Chair of the Board of Directors.</td>
</tr>
<tr>
<td></td>
<td>The Merck Company Foundation sponsors new fellowships in geriatric clinical pharmacology.</td>
</tr>
<tr>
<td>1988</td>
<td>AFAR holds first grantee conference, bringing scientists together to share information, discuss research and create opportunities for future cooperation.</td>
</tr>
<tr>
<td>1991</td>
<td>The John A. Hartford Foundation funds new Gero-Physician-Scientist Training Program to provide physicians in various specialties an opportunity to pursue training and research in geriatric medicine.</td>
</tr>
<tr>
<td>1993</td>
<td>Hadley Ford is elected Chair of the Board of Directors.</td>
</tr>
<tr>
<td>1994</td>
<td>AFAR receives $14 million grant from The John A. Hartford Foundation, The Atlantic Philanthropies and The Commonwealth Fund to administer the Paul Beeson Physician Faculty Scholars in Aging Research Program, the nation’s largest non-governmental award program in academic geriatrics and aging research.</td>
</tr>
<tr>
<td></td>
<td>AFAR and The John A. Hartford Foundation collaborate to start the Hartford/AFAR Medical Student Geriatric Scholars Program.</td>
</tr>
<tr>
<td></td>
<td>The Glenn Foundation for Medical Research funds new Glenn/AFAR Student Scholarship Program for Research in the Biology of Aging.</td>
</tr>
<tr>
<td></td>
<td>Annual AFAR Research Grants top $1 million.</td>
</tr>
<tr>
<td>1996</td>
<td>AFAR launches four-part media briefing series on older women’s health with support from the Bristol-Myers Squibb Foundation.</td>
</tr>
<tr>
<td>1997</td>
<td>AFAR launches Dorothy Dillon Eweson Lecture Series to educate medical specialists on advances in aging research within their own fields.</td>
</tr>
<tr>
<td></td>
<td>Diane Nixon names grant in memory of her mother, Nan Allen Nixon.</td>
</tr>
<tr>
<td></td>
<td>The John A. Hartford Foundation funds AFAR to establish a Coordinating Center for the Hartford Foundation’s Centers of Excellence Initiative.</td>
</tr>
<tr>
<td></td>
<td>AFAR launches Lifelong, a newsletter for older patients published in Geriatrics magazine.</td>
</tr>
<tr>
<td></td>
<td>The Merck Company Foundation and AFAR create the Merck/AFAR Research Scholarships in Geriatric Pharmacology.</td>
</tr>
<tr>
<td></td>
<td>First “Friends of AFAR” dinner is held in New York City.</td>
</tr>
<tr>
<td></td>
<td>AFAR goes global with the first International Conference on Biomedical Aspects of Aging Research held in Venice, Italy.</td>
</tr>
<tr>
<td></td>
<td>Sponsors of the Paul Beeson Physician Faculty Scholars in Aging Program commit additional $14 million to fund 31 new Scholars.</td>
</tr>
<tr>
<td>1998</td>
<td>The John A. Hartford Foundation and AFAR create the Academic Fellowship Program in Geriatric Medicine and Geriatric Psychiatry.</td>
</tr>
<tr>
<td>1999</td>
<td>Pfizer Inc joins with AFAR to create the Pfizer/AFAR Research Grant Program.</td>
</tr>
<tr>
<td></td>
<td>The Fan Fox and Leslie R. Samuels Foundation adds support for local medical students through the AFAR/Samuels Foundation Medical Student Geriatric Scholars Program.</td>
</tr>
<tr>
<td></td>
<td>AFAR launches Infoaging.org, a consumer information website.</td>
</tr>
<tr>
<td></td>
<td>The Starr Foundation joins the team of Beeson Program sponsors.</td>
</tr>
<tr>
<td>2001</td>
<td>AFAR and the Glenn Foundation for Medical Research create awards program for post-doctoral fellows.</td>
</tr>
<tr>
<td></td>
<td>Foundation for Fighting Blindness and AFAR establish a joint program for career development awards in support of research on age-related macular degeneration.</td>
</tr>
</tbody>
</table>
2002

- AFAR receives funding from the Merck Company Foundation with a matching grant from the Glenn Foundation for Medical Research to co-fund a segment of the Science of Aging Knowledge Environment (SAGE-KE) project.
- The William Randolph Hearst Foundation contributes to the AFAR Research Grant Program.

2003

- AFAR launches upstate affiliate program in Rochester, NY, funded by the Starr Foundation.
- The Ellison Medical Foundation and AFAR team up to support senior post-doctoral fellows.
- AFAR and the Merck Institute on Aging and Health create HealthCompass.org.

2004

- Diana Jacobs Kalman elected Chair of the Board of Directors.
- AFAR launches southeast affiliate at Emory University in Atlanta, GA.
- AFAR celebrates the 10th anniversary of the Beeson Program with the added support of the National Institute on Aging and the new name of the Paul B. Beeson Career Development Awards in Aging Research.
- The Pfizer/AFAR Innovations in Aging Research Award is created.
- The William Randolph Hearst Foundation adds support to the Medical Student Geriatric Scholars Program.
- Terrapin Society created.

2005

- The Glenn Foundation and AFAR collaborate to create the Glenn/AFAR Breakthroughs in Gerontology (BIG) Award.
- AFAR, The John A. Hartford Foundation and other foundations partner with the NIA on the Medical Student Geriatric Program, renamed the Medical Student Summer Research Training in Aging Program. Foundations include The William Randolph Hearst Foundation, The Cleveland Foundation, Cardinal Health Foundation, Lillian R. Gleitsman Foundation, Community Health Foundation of Western & Central New York, The New York Community Trust and an anonymous donor.
- The Novartis Foundation joins with AFAR to establish the Aging Well Initiative.

2006

- The Julie Martin Mid-Career Award in Aging Research is created by the Ellison Medical Foundation.
- The Fannie E. Rippel Foundation establishes the Fannie E. Rippel Foundation/AFAR New Investigator Awards on Gender Differences in Cardiovascular Disease in Older Adults.
The American Federation for Aging Research (AFAR) is a nonprofit organization whose mission is to support biomedical research on aging. We fulfill this mission by:

- Supporting biomedical research that furthers our understanding of the aging process and its associated diseases and disorders;
- Offering opportunities for scientists and physicians to exchange new ideas and knowledge about aging;
- Building a cadre of early career scientists in aging research and in the practice of geriatric medicine; and
- Promoting awareness among the general public about the importance of aging research.

Since 1981, AFAR has awarded nearly $87 million to more than 2,100 early to mid-career investigators and students, with the goal of encouraging more of the nation’s scientists and physicians to enter and stay in the fields of gerontology and geriatric medicine. These scientists are conducting cutting-edge research on aging and age-related diseases, such as Alzheimer’s, cancer, osteoporosis, diabetes and heart disease. Support for AFAR grants comes from the generous contributions of corporations, foundations and individuals.


Major Supporters of the 2005 Grant Programs

The AFAR Board of Directors
Anonymous Donor
The Atlantic Philanthropies
The Bedminster Fund
Cardinal Health Foundation
The Clarence and Anne Dillon Dunwalke Trust
The Cleveland Foundation
Community Health Foundation of Western & Central New York
Eisai Inc.
The Ellison Medical Foundation
Lillian R. Gleitsman Foundation
The Glenn Foundation for Medical Research
The Partners of Goldman Sachs & Company
The John A. Hartford Foundation
William Randolph Hearst Foundation
Diana J. and C. A. Kalman
F. M. Kirby Foundation, Inc.
Merck Company Foundation
National Institute on Aging
The New York Community Trust
Diane Nixon
Pfizer Inc.
The Richard and Hinda Rosenthal Foundation
Joseph L. K. Snyder Trust
The Starr Foundation
The Irving S. Wright Endowment