

# 2009 Drug Discovery for Neurodegeneration Conference

Washington, DC - February 2-3, 2009

Park Hyatt Washington DC

Presented by the Alzheimer's Drug Discovery Foundation

## CHAIRS, SPEAKERS and PANELISTS

### PROGRAM CHAIR

#### **Howard Fillit, MD**, Alzheimer's Drug Discovery Foundation

Howard Fillit, MD, a geriatrician and neuroscientist, is the founding Executive Director of the Institute for the Study of Aging, Inc. as well as its affiliated public charity the Alzheimer's Drug Discovery Foundation, both of which are dedicated to funding drug discovery for Alzheimer's disease. Dr. Fillit was formally the Corporate Medical Director for Medicare at NYLCare Health Plans (now a division of Aetna, Inc.), where he was responsible for over 125,000 Medicare members in 8 regional markets. He has also had a distinguished academic career at The Rockefeller University and The Mount Sinai Medical Center (NY), where he is currently a clinical professor of geriatrics and medicine and a professor of neurobiology. Dr. Fillit has received many awards and honors, including the Rita Hayworth Award for Lifetime Achievement from the Alzheimer's Association. He is a fellow of the American Geriatrics Society, the American College of Physicians, the Gerontological Society of America, and the New York Academy of Medicine. Dr. Fillit is the author or co-author of more than 250 publications, including the leading international Textbook of Geriatric Medicine and Gerontology. He served as a consultant to a variety of individuals, managed care organizations, health care systems, and pharmaceutical and biotechnology companies.

### SESSION CHAIRS

#### **Neil S. Buckholtz, PhD**, NIH/NIA

Neil S. Buckholtz, Ph.D., is Chief of the Dementias of Aging Branch of the Neuroscience and Neuropsychology of Aging Program at the National Institute on Aging, National Institutes of Health (NIH), Bethesda, Maryland. This involves overall programmatic responsibility for development, coordination, and implementation of basic and clinical Alzheimer's disease research. Specifically Dr. Buckholtz is the program administrator for the areas of diagnosis and treatment and management of Alzheimer's disease. Dr. Buckholtz holds a doctorate in physiological psychology from the University of Wisconsin, Madison and was a faculty member at the Medical University of South Carolina, Department of Psychiatry, from 1970-1983, before coming to NIH.

#### **Kathleen A. Denis, PhD**, Rockefeller University

Kathleen A. Denis, PhD, is the Associate Vice President of Technology Transfer at The Rockefeller University, a premier biomedical research institution located in New York City. She is a Past President of the Licensing Executives Society USA/Canada (LES), and has served on the Board of Directors of the Association of University Technology Managers (AUTM) and the Pennsylvania Biotechnology Association. She is a Certified Licensing Professional.

Specializing in the management of intellectual assets in the life sciences, she has worked with academic institutions and industry clients to manage intellectual property portfolios, evaluate new technologies, market and license technologies and start new

technology-based businesses. Dr. Denis is active in numerous professional organizations and speaks frequently about early stage technology evaluation, formation of start-up companies, conflict of interest and other issues of academic technology transfer.

Dr. Denis holds a Ph.D. in immunology from the University of Pennsylvania, an M.A. in Human Genetics from University of Texas Medical Branch at Galveston and an undergraduate degree in genetics from Cornell University.

**Marcie Glicksman, PhD**, Harvard University

Marcie Glicksman is Senior Director, Leads Discovery Group at LDDN. Dr. Glicksman has extensive experience in assay development, high throughput screening, chemical databases, animal pharmacology and preclinical development. Her bachelor's degree is from Brown University and Ph.D. from Washington University. Before joining LDDN in 2004, she had been in industry for thirteen years. Previously, she was at the start-up company, Descartes Therapeutics focused on imaging techniques. Before this, she was Director of Leads Discovery at Cubist. Before this, she was at DuPont-Merck and at Cephalon, Inc. She led the assay development and screening program for a cell-based protease project, and numerous G-protein coupled receptors, many of which were continued when Bristol Myers Squibb bought DuPont Pharmaceuticals. At Cephalon, she was co-inventor of CEP1347, a neuroprotective agent directed at a novel kinase, currently in Phase III clinical trials. She also consults for industry. She is a board member of the non-profit drug discovery organization Society for Biomolecular Screening and currently serves as the Chairman.

**Todd Sherer, PhD**, Michael J. Fox Foundation for Parkinson's Research

Dr. Todd Sherer joined the Foundation as Associate Director, Research Programs, in April 2004, and was promoted to Vice President, Research Programs, in June 2006. Dr. Sherer earned his undergraduate degree in psychology from Duke University and his PhD in Neuroscience from the University of Virginia. His thesis work focused on neurotrophins and cell death pathways in neurodegenerative disease. Dr. Sherer then became a postdoctoral fellow at the Emory University laboratory of Timothy J. Greenamyre. During this fellowship, Dr. Sherer concentrated on understanding the role of environmental factors in Parkinson's disease, as well as on the development of PD model systems. As a result of this work, Dr. Sherer was awarded a Postdoctoral Fellowship from The Michael J. Fox Foundation for Parkinson's Research.

Dr. Sherer is the author of over 20 research articles in the field of neurodegeneration with a focus on Parkinson's disease.

**Edward G. Spack, PhD**, SRI International

Edward G. Spack, Ph.D. is currently Senior Director, Biologics and Senior Director Business Development at SRI International in Menlo Park, California. Dr. Spack is the Senior Director of the PharmaSTART program; a consortium of SRI and four California universities (Stanford, UC Berkeley, UC San Diego and UC San Francisco) designed to chaperone discoveries from the laboratory bench to the clinic.

Dr. Spack has worked in three San Francisco Bay Area biotech companies (Anergen, Valentis and InterMune) for a total of 14 years, with the bulk of his experience in the biologic drugs including humanized monoclonal antibodies, recombinant proteins and peptide vaccines. Dr. Spack has also served on the Board of Directors and the scientific advisory board of the National Myasthenia Gravis Foundation. Dr. Spack was awarded his Doctorate in Cellular Immunology at the Johns Hopkins University and held a post-doctoral fellowship at Stanford University.

**D. Martin Watterson**, PhD, Northwestern University

Dr. Watterson is Co-Director of the University Center for Drug Discovery and Chemical Biology and holds the John G. Searle Endowed Chair in Molecular Biology and Biochemistry at Northwestern University. He also is a Professor of Molecular Pharmacology and Biological Chemistry in the Northwestern University Feinberg School of Medicine in Chicago. Dr. Watterson has published articles in peer-reviewed journals in the areas of drug discovery, signal transduction, structural biology, pharmacology and medicinal chemistry. His Ph.D. training was in the areas of Biophysical Chemistry and Biochemical Pharmacology at Emory University, followed by postdoctoral training at Duke University Medical Center supported by a National Research Service Award in Neurosciences from the National Institutes of Health 1975 to 1977. Dr. Watterson held the positions of Assistant Professor and Associate Professor at The Rockefeller University from 1978-1982 where he was an Andrew Mellon Fellow. He later was a Howard Hughes Investigator and Professor of Pharmacology at Vanderbilt Medical Center before moving to Northwestern University in 1994.

In his role as Co-Director of the Center for Drug Discovery and Chemical Biology, Dr. Watterson has facilitated the development of novel compounds emanating from Center investigators and their movement towards the clinic. Center investigators experiences span the range of the entire drug discovery and development spectrum, including novel compound discovery, candidate compound optimization, preclinical IND-enabling studies, clinical trials, and FDA approval.

## **SPEAKERS**

**William Banks, MD**, Saint Louis University School of Medicine

William A Banks received his MD from University of Missouri-Columbia in 1979. He completed clinical training in Internal Medicine and later in Endocrinology and Metabolism at Tulane University and the Veteran's Affairs Medical Center-New Orleans. He was awarded a Career Development Award by the Veterans Affairs from 1982-1985 and became full professor at Tulane 1995. In 1998, he moved to the VA and Saint Louis University School of Medicine where he is currently Staff Physician and Principal Investigator (VA), Professor in the Department of Internal Medicine and the Department of Pharmacological and Physiological Sciences (SLU), and Visiting Professor of Anatomy (Showa University, Tokyo, Japan). He has published over 350 non-abstract articles, mostly related to functioning of the blood-brain barrier, and is on 10 editorial boards, including being editor-in-chief of Current Pharmaceutical Design. He has received numerous awards including membership in the Musser-Burch Society (Tulane's Clinical Honors Society), the VA Star Award, the 1994 University of Missouri-St. Louis Distinguished Biology Alumni Award (single award annually), the 1998 Outstanding Young Physician Award from the University of Missouri School of Medicine Medical Alumni Organization, and is the 2004 Milton D. Overholser Memorial Lecturer. He belongs to numerous scientific organizations and is a past president of the New Orleans chapter of the Society for Neuroscience and is a Charter member of the American Peptide Society, a Founding Member of the International Behavioral Neuroscience Society, a Charter Member of the International Neuropeptide Society, a Fellow of the American College of Endocrinology, and is currently a council member for the Psychoneuroimmunology Research Society.

**Duncan Beniston**, ChemBridge Corporation

Duncan Beniston is Executive Director Sales & Marketing at ChemBridge Corporation. He has been working with academic, biotech and pharmaceutical researchers for the last 17 years in the areas of chemistry, biochemistry and informatics for basic research and drug discovery. He currently heads the sales and marketing group at ChemBridge Corporation, a leading provider of commercial and exclusive screening libraries for drug discovery and of discovery chemistry services.

**Daniela Brunner, PhD**, PsychoGenics, Inc.

Dr. Brunner received her Ph.D. in Experimental Psychology at Cambridge University, England and was Research Fellow of Psychiatry at Columbia University, New York State Psychiatric Institute, for many years. She has worked in mathematical models of behavior, information processing in animals and then in the characterization of genetically manipulated animal models of psychiatric and neurodegenerative disorders such as Huntington Disease (HD), schizophrenia, Wolfram Disorder, and others. As part of her work in the biotech sector, Dr. Brunner has been involved in the discovery and preclinical characterization of a drug for ADHD, currently in clinical trials, and holds patents covering highthroughput analysis of behavior for drug discovery. Dr. Brunner has worked in the last six years in the characterization of several animal models of HD, resulting in a large drug screening operation at PsychoGenics, Inc. She is particularly interested in the translation from the bench to the clinic of aspects of psychiatric and neurodegeneration pathology, in particular cognitive and psychomotor symptoms.

**Louis P. Berneman, PhD**, Texelerate

Louis P. Berneman is an experienced intellectual property licensing and business development executive. He has founded and financed intellectual property-based entrepreneurial ventures, built and managed university technology transfer programs, and has been involved in patenting and licensing since 1982 as both a licensee and licensor. Since September 2005, Lou has been the Principal of Texelerate, a consultancy specializing in monetizing intellectual property. From 1995-2005, Lou was Managing Director of the Center for Technology Transfer (CTT) at the University of Pennsylvania. Under his leadership, CTT assessed more than 3,000 technology disclosures, filed more than 1500 patents, completed more than 600 commercialization agreements including negotiating a number of substantial corporate research collaborations and creating about 80 new start up ventures, and generated more than \$100 million in license income. From 1989-1995, Berneman was Director, Licensing and Business Development at Virginia's Center for Innovative Technology patenting and licensing on behalf of the eight public research universities in Virginia. Berneman is a Past President of the Association of University Technology Managers (AUTM) and a former Vice President and Trustee of the Licensing Executives Society (LES USA & Canada). He has served as a member of the Board of the Pennsylvania Biotechnology Association, Greater Philadelphia Venture Group and the LES Foundation. Dr. Berneman is the 2005 recipient of the LES Barnes Mentoring Award, the 2003 recipient of an Award of Excellence from the Association of University Research Parks, and 2002 service award from the Pennsylvania Biotechnology Association. Berneman currently serves as an advisor and member of the Advisory Board of the Paul Capital Partners Royalty Healthcare Fund. Dr. Berneman holds a baccalaureate degree in history from the Pennsylvania State University, a teaching credential from University of California at Santa Barbara, and masters and doctoral degrees in education from Teachers College, Columbia University.

**Alan Kozikowski**, PhD, University of Illinois at Chicago

Dr. Alan P. Kozikowski is a professor of Department of Medicinal Chemistry and Pharmacognosy at the University of Illinois at Chicago, Director of International Drug Discovery Institute. He has published more than 400 peer reviewed research papers in a variety of prestigious scientific journals and also has over 100 patents.

Dr. Kozikowski has an Alzheimer's disease drug in phase II clinical trials, an Akt inhibitor going into Phase 0 trials at the NCI last year, and a prostate cancer imaging agent being taken into the clinic this year at Hopkins.

**Christopher A. Lipinski, PhD**, Melior Discovery, Inc.

Dr. Christopher Lipinski was Adjunct Senior Research Fellow at the Pfizer Global R&D Groton CT Laboratories following his retirement in June 2002 and is now a Scientific Advisor to Melior Discovery, a drug repurposing startup. He is a member of the American Chemical Society (ACS), the American Association of Pharmaceutical Scientists, the Society for Biomolecular Sciences (SBS) and the European Federation for Pharmaceutical Sciences. A consultant on drug-like properties he serves on numerous scientific advisory and journal editorial boards and on the SAB's of not for profit and academic drug discovery organizations. He is the author of the "rule of five" a widely used filter to select for acceptable drug oral absorption and is a member of the ACS "Medicinal Chemistry Hall of Fame". In 2006 he received an honorary law degree from the University of Dundee and is also the 2006 SBS Achievement Award winner. In 2005 he was the ACS winner of the E. B. Hershberg Award for Important Discoveries in Medicinally Active Substances and in 2004 the winner of the Division of Medicinal Chemistry Award of the ACS Division of Medicinal Chemistry. He is an adjunct faculty member at the University of Massachusetts Amherst, and has over 225 publications and invited presentations and 17 issued US patents.

**Menelas N. Pangalos, PhD**, Wyeth Research

Menelas Pangalos began his career with Wyeth as Vice President of Neuroscience Research in 2003. Dr. Pangalos oversees the neuroscience portfolio focusing on psychiatric and neurological diseases of high unmet medical need. In particular his group is working on developing novel therapies to treat Depression, Anxiety, Schizophrenia, Bipolar Disorder, Alzheimer's disease, Stroke, Parkinson's disease and chronic pain. Dr Pangalos completed his undergraduate studies with first class honors in Biochemistry from the Imperial College of Science and Technology and earned a Ph.D. in Neurochemistry from the Institute of Neurology, both at the University of London. He has subsequently worked in the Psychiatry Department at Mt. Sinai School of Medicine in New York, with Janssen Pharmaceutica in Belgium, and as Group Director of Neurodegeneration at GlaxoSmithKline. In 2008 Dr. Pangalos was named by R&D Directions as one of 6 "Notable people in R&D". He is an Adjunct Professor of Neuroscience at the University of Pennsylvania and a Visiting Professor at King's College, London. He is an executive editor for Neuropharmacology, on the editorial boards of Molecular and Cellular Neuroscience, and The Scientific World and on scientific advisory boards for the Wolfson Centre for Age Related Diseases (King's College London University), Rider University and the National Association for Mental Illness, NJ. He has published over 100 peer-reviewed articles in journals such as *PNAS*, *Neuron*, *Journal of Neuroscience*, *Nature Neuroscience*, *The Lancet*, *British Journal of Psychiatry* and *Journal of Biological Chemistry*.

**Suzana Petanceska, PhD**, National Institute on Aging

Dr Suzana Petanceska received a B.S. degree in molecular biology and physiology from the University of Belgrade, Yugoslavia and a Ph.D. degree in Pharmacology from New York University. Following her postdoctoral training at Rockefeller University (1995-1998) and at the Nathan Kline Institute of NYU (1998-2000) she became an Assistant Professor of Psychiatry and Pharmacology at the Nathan Kline Institute of NYU (2001-2005). Her research focused on the role of disrupted sterol metabolism in the development of Alzheimer's disease amyloidosis and the mechanisms by which estrogens and cholesterol-lowering drugs might exert neuroprotection.

In 2005 she joined the Neuroscience and Neuropsychology of Aging Program at the National Institute on Aging where she serves as a Program Director covering research areas that address the role of metabolic and vascular factors in normal brain aging and in Alzheimer's disease. She also facilitates the development of NIA's drug discovery and preclinical drug development initiatives for AD, mild cognitive impairment and age-associated cognitive decline.

**Lorenzo M. Refolo, PhD**, National Institute of Neurological Disorders and Stroke

Dr. Lorenzo M. Refolo received a BSc. from the University of Connecticut, and was awarded a Ph.D. in Molecular Genetics from the Department of Molecular Genetics at the Rutgers University School of Medicine and Dentistry. Subsequently, Dr. Refolo trained as a post-doctoral fellow at Mt Sinai Medical Center in New York, investigating the molecular and cell biology of the Alzheimer's Amyloid Precursor Protein. After concluding his post-doctoral training Dr. Refolo served as Transgenics Group Leader at Athena Neurosciences and later held faculty positions at the Mayo Clinic Jacksonville and New York University's Nathan Kline Institute for Psychiatric Research. In 2001, Dr. Refolo was named the Scientific Director at the Institute for the Study of Aging, a private, disease-focused foundation with a mission to fund the discovery and clinical development of drugs for the treatment of Alzheimer's disease.

Since 2005, Dr. Refolo is Program Director in the Neurodegeneration Cluster at NINDS where his major responsibility is the management of a portfolio of grants on ALS, Alzheimer's and Parkinson's diseases and Vascular Cognitive Impairment.

**Colin G. Sandercock**, Proskauer Rose LLP

**Richard B. Silverman, PhD**, Northwestern University

Professor Silverman received his B.S. degree in chemistry from The Pennsylvania State University in 1968 and his Ph.D. degree in organic chemistry from Harvard University in 1974 (with time off for a two-year military obligation from 1969-1971). After two years as a NIH postdoctoral fellow in the laboratory of the late Professor Robert Abeles in the Graduate Department of Biochemistry at Brandeis University, he joined the chemistry faculty at Northwestern University. In 1986 he became Professor of Chemistry and Professor of Biochemistry, Molecular Biology, and Cell Biology. In 1996 he was named the Arthur Andersen Professor of Chemistry for a period of two years, in 2001 he became the Charles Deering McCormick Professor of Teaching Excellence for three years, and in the fall of 2004 he was named the John Evans Professor of Chemistry for an indefinite period of time. His awards include a DuPont Young Faculty Fellowship in 1976, an Alfred P. Sloan Research Fellowship in 1981-1985, a NIH Research Career Development Award 1982-1987, being named a Fellow of the American Institute of Chemists in 1985 and a Fellow of the American Association for the Advancement of Science in 1990, and recipient of an Arthur C. Cope Senior Scholar Award from the American Chemical Society in 2003. He is the recipient of several teaching awards, including the E. LeRoy Hall Award for Teaching Excellence and the Excellence in Chemistry Education Award from the Northwestern University Chapter of Alpha Chi Sigma Chemistry Fraternity in 1999, the Northwestern University Alumni Teaching Award in 2000, and the Charles Deering McCormick Chair in Teaching Excellence in 2001. Silverman is the inventor of Lyrica™ (pregabalin), marketed worldwide by Pfizer for refractory epilepsy, neuropathic pain, fibromyalgia, and (in Europe) for generalized anxiety disorder. He has published over 240 research articles, holds 39 domestic and foreign patents, and has written three books (one translated into German and another in its second edition).

**Karen L. Steinmetz, PhD**, DABT, SRI International

Dr. Karen Steinmetz, PhD, DABT, has over 25 years experience in the fields of early drug discovery, safety and preclinical development in a wide variety of pharmaceutical products. She has served as Study Director on numerous GLP studies in support of regulatory applications worldwide, as Principal Investigator on NIH preclinical testing contracts including those with the National Institute on Aging and National Institute of Diabetes & Digestive & Kidney Diseases, and as the preclinical representative on industrial project teams.

Dr. Steinmetz holds a doctorate in toxicology from Indiana University. Her industrial background includes overseeing preclinical development activities and IND preparation for several San Francisco Bay Area biotechnology pharmaceutical companies.

Dr. Steinmetz' is currently the Director of the Mammalian Toxicology Program at SRI International in Menlo Park, CA.

**John S. Swartley, PhD**, University of Pennsylvania

John S. Swartley, MBA, PhD, is Senior Director of New Ventures at the Center for Technology Transfer at the University of Pennsylvania, where he leads a team that fosters the formation of new ventures based on Penn technologies and faculty expertise.

Prior to joining Penn in 2007, Dr. Swartley served as Senior Vice President and Partner of BCM Technologies (BCMT), the venture capital investment subsidiary of Baylor College of Medicine. Dr. Swartley joined BCMT in 2003 from the Yale University Office of Cooperative Research where he served as Associate Director of the Medical Campus. Dr. Swartley has participated in the formation and oversight of more than two dozen university spin-out companies that have collectively raised nearly one billion dollars of investment capital. He holds a B.S. in Biology from Bates College, an MBA from the Goizueta School of Business at Emory University, and a Ph.D. in Microbial & Molecular Genetics from Emory University.

**Jordan Tang, PhD**, Oklahoma Medical Research Foundation

Dr. Jordan Tang is J. G. Puterbaugh Chair and Head, Protein Studies Program, Oklahoma Medical Research Foundation and Professor of Biochemistry and Molecular Biology, University of Oklahoma Medical Center, Oklahoma City, Oklahoma. The research interest of Dr. Tang was for many years in the structure and biological function of proteases. In 1999, his laboratory cloned memapsin 2 identified it to be beta-secretase and have since studied the regulation mechanism of memapsin 2 and worked in the development of memapsin 2 inhibitor as a drug to treat Alzheimer's disease. In 2000, Dr. Tang and coworkers reported the design of first potent inhibitor for memapsin 2 and determined the crystal structure of memapsin 2 bound to this inhibitor. These developments have permitted the use of structure-based design to develop new generations of potent and selective memapsin 2 inhibitors. Significant progress in drug development of this inhibitor has led to a Phase I clinical trial of a memapsin 2 inhibitor by CoMentis, a biotech/pharmaceutical company founded by Dr. Tang and his collaborator, Dr. Arun K. Ghosh of Purdue University. Recent research from Dr. Tang's laboratory has established the roles of various cellular proteins and membrane receptors in the regulation of memapsin 2 activity and amylo-beta production. For his research in memapsin 2, Dr. Tang received the Pioneer Award in 2000 from the American Alzheimer's Association.

**Linda Jo Van Eldik, PhD**, Northwestern University

Linda Jo Van Eldik, PhD, is Co-Director of the Center for Drug Discovery and Chemical Biology at Northwestern University, and is Associate Director of the Cognitive Neurology and Alzheimer's Disease Center, and Professor of Cell and Molecular Biology at the Northwestern University Feinberg School of Medicine in Chicago. Dr. Van Eldik has published peer-reviewed articles in neuroscience, glia cell biology, signal transduction, virology, and drug discovery.

Dr. Van Eldik received her Ph.D. in Microbiology/Immunology from Duke University in 1977, followed by postdoctoral training at The Rockefeller University from 1978 to 1981 where she was awarded a National Science Foundation postdoctoral fellowship and National Research Service Award in cell biology from the National Institutes of Health. She later held the positions of Assistant Professor, Associate Professor and Professor of Pharmacology and Cell Biology at Vanderbilt University School of Medicine, and was an Associate Investigator with the Howard Hughes Medical Institute before moving to Northwestern University Feinberg School of Medicine in Chicago in 1994.

**Nancy G. Wehner, PhD**, Elan Pharmaceuticals

Dr. Wehner received her PhD degree in Immunology from the University of Minnesota (Minneapolis, MN) in 1987. Her postdoctoral fellowship was at the same institution in the Department of Chemistry. Dr. Wehner began her career in medical diagnostics research with Sanofi Diagnostics Pasteur where she specialized in assay development for autoimmune disease diagnosis. Following a move to California, she joined Anergen where she was head of Bioanalytical Assays (clinical and nonclinical support service), Quality Control, and Pharmacology & Toxicology. While there, she was responsible for the development of monoclonal antibodies, complex biologics and vaccines for the treatment of autoimmune diseases.

Dr. Wehner currently holds the position of Vice President of Nonclinical Safety Evaluation at Elan Pharmaceuticals, South San Francisco, CA. She is responsible for pharmacology and toxicology programs in support of the development of biologic and small molecule drug products in the areas of autoimmunity and neurology.

### "ASK THE EXPERTS" PANELISTS

**P. Jeffrey Conn, PhD**, Vanderbilt University

Dr. Conn is the Lee E. Limbird Professor of Pharmacology at Vanderbilt University and Director of the Vanderbilt Program in Drug Discovery. Dr. Conn received the PhD degree in Pharmacology from Vanderbilt University in 1986 and pursued postdoctoral studies in the Department of Pharmacology at Yale University. Dr. Conn joined the faculty of the Department of Pharmacology at Emory University in 1988 where he rose to the rank of Full Professor and established himself as a leader in studies of neurotransmitter receptors and their roles in regulating brain function in circuits involved in psychiatric and neurological disorders. In 2000, Dr. Conn moved to Merck and Company to assume the position of Senior Director and Head of the Department of Neuroscience at Merck's site in West Point, PA. Dr. Conn moved to Vanderbilt University in 2003 to start a new Program in Drug Discovery, with a primary mission of facilitating translation of recent advances in basic science to novel therapeutics. Dr. Conn is Editor in Chief of *Molecular Pharmacology*, Regional Editor (North America) of *Current Neuropharmacology* and serves on the editorial boards of 6 other international journals. Dr. Conn serves on the Scientific Advisory Boards of Addex Pharmaceuticals, Precient Neuropharma, Invitrogen Life Technologies, Seaside Therapeutics, Cephalon Inc., AstraZeneca US, Hoffman La Roche, Michael J. Fox Foundation, and the Dystonia Medical Research Foundation and Eyeforpharma Advisory Board on CNS Drugs. He is Chairman of the Neuropharmacology Division of the American Society for Pharmacology and Experimental Therapeutics (ASPET). He serves on several national and international committees, including International Union of Pharmacology (IUPHAR) subcommittee on receptor nomenclature, the American Society for Pharmacology and Therapeutics (ASPET) Publications Board of Trust, ASPET Awards Committee, and is an Expert Consultant, Compound Selection Committee, Treatment Units for Research on Neurocognition and Schizophrenia (TURNS). Dr. Conn's current research is focused on development of novel treatment strategies for schizophrenia, Parkinson's disease, and other brain disorders.

**Frank Longo, MD, PhD**, Stanford University

Dr. Longo received his MD in 1981 and PhD in Neurosciences in 1983 from the University of California, San Diego. Following an internship in medicine at NYU/VA, he trained as a resident in neurology and fellow in neurobiology at University of California, San Francisco. While at UCSF he created the Neurogenetics Clinic which was the first West Coast site in the U.S. to offer DNA testing for families with Huntington's disease. He also led the creation of a national referral center for deep brain stimulation for Parkinson's disease and contributed to the development of programs in dementia, epilepsy and other areas. At UCSF he became professor and vice chair of the Department of Neurology and in 2001 he was recruited to become chair of the Department of Neurology at the University of North Carolina, Chapel Hill. While at UNC, Dr. Longo launched or expanded programs for Alzheimer's disease and other dementias, stroke, epilepsy, sleep disorders, multiple sclerosis and Parkinson's disease. In January 2006, Dr. Longo became chair of the Department of Neurology and Neurological Sciences at Stanford where he is focused on building and expanding multidisciplinary programs in neurology and neuroscience. In 2006 he was named a Stanford Fellow. Dr. Longo's research team focuses on elucidating novel mechanisms that prevent neural degeneration and promote regeneration. He and his colleagues have pioneered the development of small, drug-like, molecules that target neurotrophin receptors to delay onset of or slow progression of Alzheimer's and other neurodegenerative disorders.

**Fred D. Lublin, MD**, Mount Sinai School of Medicine

Fred D. Lublin, M.D. is the Saunders Family Professor of Neurology at Mount Sinai School of Medicine and Director of the Corinne

Goldsmith Dickinson Center for Multiple Sclerosis at that institution. Dr. Lublin received his medical degree in 1972 from Jefferson Medical College, Philadelphia, PA. He completed his internship in Internal Medicine from the Bronx Municipal Hospital, Albert Einstein Medical Center, and his residency at the New York Hospital, Cornell Medical Center.

As a neuroimmunologist, Dr. Lublin has a special interest in immune functions and abnormalities affecting the nervous system. He has been involved in both basic science and clinical research. He and his colleagues were among the first in the country involved with studies of Interferon beta-1b, which was approved by the Food & Drug Administration in 1993 to treat the relapsing-remitting form of Multiple Sclerosis. He is currently involved with several new clinical research protocols on promising agents for treating various aspects of MS. He was chairman of the National MS Society (USA) advisory committee on clinical trials of new drugs in Multiple Sclerosis and the National Multiple Sclerosis Society's Research Programs Advisory Committee. He is a member of the National MS Society National Board of Directors and their medical advisory board. Dr. Lublin and his colleagues at the National MS Society have re-defined the clinical course definitions of MS using data from a survey of the international MS community. He has chaired a task force on the ethics of placebo-controlled trials in MS. Dr. Lublin was a member of the panel that redefined the diagnostic criteria for MS. Dr. Lublin has published numerous scientific articles and belongs to many professional societies and advisory boards. Dr. Lublin has served as a consultant to the National Institutes of Health and to many pharmaceutical/biotech companies in all phases of new drug development and in preparation for presentation to the FDA and their advisory panels. He is the Principal Investigator of the NIH-sponsored multicenter Combination Therapy study in Multiple Sclerosis.

#### **Jeffrey Rothstein, MD, PhD**, Johns Hopkins University

Dr. Rothstein is Professor of Neurology and Neuroscience and a faculty member of the Graduate Program in Cellular and Molecular Medicine at Johns Hopkins University. He is the Director of the Robert Packard Center for ALS Research at Johns Hopkins, the Co-Director of the Brain Science Institute (BSI) and the Director of the BSI Neurotranslation Program. He directs the MDA/ALS Clinic and oversees one of the largest ALS clinics in the USA.

In 2000 Dr. Rothstein organized the Robert Packard Center for ALS Research at Johns Hopkins and serves as medical Director. This is the first multi-Institutional, Multi-National collaborative academic organization devoted toward understanding the cause of ALS and translating the information into new drug and cell based therapies. It uses an aggressive model of funding research among the leading young and senior researchers with funding based on performance expectations and mandatory collaboration. Currently the Center funds approximately 30 researchers, spending \$2-3 million/yr. In the last 5 years the vast majority of leading ALS achievements, by researchers from around the country, has been the result of the various investigators supported via this approach. In recent years the collaboration has been extended to ALS and Neurodegenerative Disease non-profit organizations and NIH. The approach has led to the unprecedented generation of new animal models of the disease and new clinical therapeutic targets.

### **FOUNDATION RESOURCES PANELISTS**

#### **Lucie Bruijn, PhD**, ALS Association

Lucie Bruijn, PhD joined The ALS Association in January 2001 as Science Director and Vice President. Prior to that Dr. Bruijn led a team at Bristol Myers Squibb developing in vitro and in vivo model systems for neurodegenerative disease. She focused on developing an improved mouse model for Alzheimer's disease and established assays for high throughput screens. She worked with the Genomics group and used array technology to look for new therapeutic targets. Realizing the potential of stem cell therapy for neurodegenerative diseases, her team worked with experts in academia to establish stem cell studies.

Dr. Bruijn received her Bachelor's degree in Pharmacy at Rhodes University, South Africa. She received a Master's degree in Neuroscience and a PhD in Biochemistry, specializing in disease mechanisms of Alzheimer's disease, at the University of London, United Kingdom. She joined Dr. Don Cleveland's laboratory at Johns Hopkins University in 1994 where she developed and characterized a mouse model of ALS (mice expressing the familial-linked SOD1 mutation). Using this model her studies focused on disease mechanisms. In addition, in collaboration with Dr. Robert Brown she looked for neurofilament mutations in familial and sporadic ALS patients. At The ALS Association, Dr. Bruijn leads ALS research effort. She has expanded on the existing grant programs, launching a new research initiative **Translational Research to Advance Therapies for ALS (TREAT ALS)** with the goal to move treatment options from "bench to bedside." She has made it a priority to collaborate with other funding agencies, in particular The National Institute of Health and many other not-for-profit ALS organizations, as well as other foundations focusing on neurodegenerative research. Dr. Bruijn represents The ALS Association on several scientific and research committees worldwide and acts as advisor to scientists, government officials and industry leaders seeking council in the field of ALS research. She publishes in the field in peer-reviewed journals and remains actively engaged in understanding the most recent research developments. She holds an adjunct faculty position at the University of South Florida and is a member of the National Institute of Neurological Disorders and Stroke (NINDS) advisory council.

#### **Antony Horton, PhD**, International Rett Syndrome Foundation

Dr. Horton is Chief Scientific Officer of the International Rett Syndrome Foundation, the world's leading private funder of basic and clinical Rett syndrome research. Prior to this, Dr. Horton served as the Director of Scientific Affairs of the Alzheimer's Drug Discovery Foundation. He gained his Doctoral degree at St. Andrews University in Scotland U.K., where he was trained in the areas of developmental neurobiology and neuronal cell survival. Following this, he conducted four years of post-doctoral research into neurodegenerative diseases at the Rockefeller University in New York. Dr. Horton has published on aspects of neurodegeneration and neuronal cell survival in a number of research papers and journal articles.

Dr. Horton had 5 years experience working in a non-profit setting, where as Program Director at the Juvenile Diabetes Research Foundation, he led a small team that helped set the research agenda for Diabetes Complications.

**Cynthia Joyce**, SMA Foundation

**Kim Hunter-Schaedle, PhD**, The Children's Tumor Foundation

Dr. Kim Hunter-Schaedle is Chief Scientific Officer of the Children's Tumor Foundation, which is dedicated to ending neurofibromatosis through research. In 2007 CTF launched a \$5M preclinical drug screening consortium and pilot clinical trials program as well as the first NF Clinic Network. Prior to joining the Children's Tumor Foundation Dr. Hunter-Schaedle held positions with Science and Technology Ventures, the technology transfer & research commercialization office of Columbia University; and the Juvenile Diabetes Research Foundation, where as Director of Industry Relations she established the Industry Discovery and Development Partnerships grants program. Dr. Hunter-Schaedle has served on the scientific research staff of University of London, The Rockefeller University, and the biotechnology company Ontogeny, Inc. (now Curis, Inc.). Dr. Hunter-Schaedle has a B.Sc. (Hons) from St. Andrews University, Scotland; a Ph.D. in Neuroscience from the University of London.

**Robert Pacifici, PhD**, CHDI, Inc. and High Q Foundation