# **PLENARY GUEST SPEAKERS**

#### **Brenda Banwell**

Dr. Banwell graduated with a degree in Medicine from the University of Western Ontario in 1991. She pursued a residency in paediatrics at the Children's Hospital of Western Ontario, University of Western Ontario, from 1991-1994, and a Paediatric Neurology residency at The Hospital For Sick Children, University of Toronto from 1994-1997.

Dr. Banwell successfully completed the

American Board Certification in Pediatrics, the Canadian Fellowship Examination in Paediatrics in 1994 and the Canadian Neurology Fellowship Examinations in 1997. After completing training in Paediatrics and Neurology, Dr. Banwell spent two years completing a Neuromuscular Disease Fellowship at the Mayo Clinic, Rochester, Minnesota.

Dr. Banwell is the Director of the Paediatric Multiple Sclerosis Clinic, a multidisciplinary clinic dedicated to children with multiple sclerosis and other acquired demyelinating diseases. Dr. Banwell also runs a weekly paediatric neuromuscular disorders clinic.



### Mark Bernstein

Mark Bernstein is a neurosurgeon at Toronto Western Hospital, University Health Network, and Professor of Surgery at the University of Toronto.

His main area of clinical focus is caring for patients with brain tumours. He is also interested in helping advance neurosurgery in the developing world where he makes regular visits to operate and teach. He is also a dedicated educator, having won numerous teaching

awards. In 2003 he completed a Masters of Health Science in Bioethics. His main interests in bioethics are medical error, novel resource utilization, research ethics, informed consent, and neuroethics. He explores these areas using qualitative research methodology. Dr. Bernstein has published well over 200 scientific papers and book chapters, a Textbook of Neuro-Oncology, and over 100 non-medical stories, many of which attempt to bridge the gap between doctors and the public. He is married and has three daughters, and two Labrador retrievers.

#### **Ivar Mendez**

Dr. Ivar Mendez is Professor and Head, Division of Neurosurgery and Director of the Neural Transplantation Laboratory, Dalhousie University. Dr. Mendez received his MD and PhD in Anatomy from the University of Western Ontario, London, Ontario where he also completed his postgraduate training in Neurosurgery. After completion of his neurosurgical residency, Dr. Mendez was awarded the Resident



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and the William P. Van Wagenen Fellowship by the American Association of Neurological Surgeons. His research Fellowship was done at the Department of Medical Cell Research, University of Lund, Sweden. Dr. Mendez is a Fellow of the Royal College of Physicians and Surgeons of Canada and the American College of Surgeons. As a Clinician/Scientist, Dr. Mendez' research focus is in functional neurosurgery, brain repair, stem cells, robotic neurosurgery and computerized systems in neurosurgical applications. In 2002, Dr. Mendez and his team performed the first long-distance robotic telementoring neurosurgery in the world. His laboratory research has been supported by peer-reviewed funding from a number of sources including the Canada National Centers of Excellence, Canadian Institutes of Health Research, Nova Scotia Health Research Foundation, Atlantic Innovation Fund, and Parkinson's Disease Foundation of USA. As recognition of his research, he was awarded the Clinical Scholar Research Award in 1997, the Royal College Medal Award in Surgery in 1999, the Japan Neurosurgical Society Award in 1999, the Murray L. Barr Scientist Award in 2000, and the Professional of Distinction Award by the Discovery Centre in 2003. In 2004, Dr. Mendez was recognized for his humanitarian activities by receiving The Paul Harris Fellowship Award as well as the Dr. Gerald and Gale Archibald Medical Humanities Award. Dr. Mendez was also the recipient of the Dr. John Savage Award in International Health in 2006. He is recognized internationally as an expert in his field and has extensive scientific publications. Dr. Mendez is the Chairman of the Brain Repair Centre, the largest and most comprehensive neuroscience research initiative in Atlantic Canada.



#### **Michael Sinnreich**

Dr. Sinnreich is a neuromuscular neurologist and a clinician scientist. He directs a research laboratory focused on the development of therapeutic strategies for muscular dystrophies and heads the molecular diagnostic laboratory for neuromuscular diseases at the Montreal Neurological Institute.

Dr. Sinnreich has studied medicine and

biochemistry simultaneously. He obtained his PhD degree in molecular neurobiology on research performed at the Friedrich Miescher Institute, Basel and his MD degree from the University of Basel, Switzerland. He did his residency in neurology at the Geneva University Hospital, followed by fellowships in peripheral nerve diseases at the Mayo Clinic in Rochester, Minnesota and in muscle diseases at the Montreal Neurological Institute, McGill University, where he joined the Faculty in 2004.

Dr. Sinnreich is a FRSQ clinician scientist and a Killam Scholar. His research activities are supported by numerous granting agencies, including the Canadian Institutes of Health Research (CIHR), Muscular Dystrophy Association Canada (MDAC), Muscular Dystrophy Association USA (MDA-USA), ALS society of Canada, Association Francaise contre les Myopathies (AFM), Fonds de Recherche en Sante Quebec (FRSQ), as well as grants from the Canada Foundation for Innovation (CFI) and Centres of Excellence for Commercialization and Research (CECR).



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## Gary K. Steinberg

Gary K. Steinberg was born on July 31, 1952 in Brooklyn, New York and was raised in Westchester County, New York. He graduated summa cum laude with Honors in Biology from Yale University, where he was elected to Phi Beta Kappa. Before attending medical school he studied classical trumpet on a music study scholarship at the Institute for Advanced

Musical Studies in Montreux, Switzerland. He was accepted into the Medical Scientist Training Program at Stanford University School of Medicine and graduated with a MD and PhD in Neurosciences in 1980. He completed his surgical internship and residency in Neurological Surgery at Stanford. During his training he received an NIH NINDS Individual National Research Service Award to investigate aneurysmal subarachnoid hemorrhage, and he spent one year studying cerebrovascular surgery with Charles Drake in London, Canada.

In 1987 Dr. Steinberg joined the faculty at Stanford as an Assistant Professor in Neurosurgery, being promoted to Associate Professor with tenure in 1993 and Professor in 1997. He was instrumental in forming the Stanford Stroke Center in 1991 and is currently the Co-Director. He was appointed Chairman of the Department of Neurosurgery at Stanford in 1995 and holds the Bernard and Ronni Lacroute–William Randolph Hearst Endowed Chair of Neurosurgery and the Neurosciences. Dr. Steinberg has also been a member of the Neuroscience Institute at Stanford Executive Committee since its inception in 2004. In October, 2008 Dr. Steinberg was appointed Director of the Stanford Institute for Neuro-Innovation and Translational Neurosciences.

Dr. Steinberg's experimental research investigates the pathophysiology and treatment of acute cerebral ischemia, as well as methods to restore function after stroke. His laboratory has studied the role of excitatory amino acids, oxidative stress, inflammation and gene expression on necrotic and apoptotic ischemic injury, and has explored various therapeutic strategies such as NMDA antagonists, antiinflammatory agents, mild brain hypothermia, gene transfer therapy, stem cell transplantation, and enhanced neurogenesis. He has received numerous grants including the AANS Research Foundation Young Faculty Award, American Heart Association Grant-in-Aid, and NIH NINDS R01 and P01 grants, with continuous NIH funding as Principal Investigator since 1991.

Dr. Steinberg currently serves on the editorial boards of Neurosurgery, Cerebrovascular Diseases, and the Journal of Stroke and Cerebrovascular Diseases. He has been elected to Castle Connelly's Top Doctors in America, America's Top Surgeons, National Register's Who's Who, Best Doctors in America and International Health Professional of the Year. He is an active member of the American Association of Neurological Surgeons, Congress of Neurological Surgeons, Society of Neurological Surgeons, American Academy of Neurological Surgeons, AANS/CNS Joint Section on Cerebrovascular Surgery, American Heart Association Stroke Council, Society of Cerebral Blood Flow and Metabolism, Society for Neuroscience and Western Neurosurgical Society.

Dr. Steinberg is married to Sandra Garritano and they have two children, Jeff and Liz.



without occluding the brain arteries.

He is still full time dedicated to the project and is spending time in pre clinical research, tutoring PhD students, teaching (foreign) neurosurgeons and supporting new hospitals that have started utilizing the ELANA technique in Europe, North America and Canada.

From 2007 to 2008 he has been an associate of the faculty of St. Luke's Hospital Roosevelt Hospital Centre in New York, USA.

#### **Michael West**

Dr. West was raised in Winnipeg and graduated from Vincent Massey Collegiate. He attended the University of Manitoba, Faculty of Sciences for pre-medical training and received his MD from the University of Manitoba. After completion of Medical School he trained in Neurosurgery with Dr. Dwight Parkinson. After completing fellowship training, he practiced Neurosurgery in Winnipeg at the St.



Boniface General Hospital and Health Sciences Centre from 1981 to 1994, introducing computer-guided stereotactic surgery in 1986.

He practiced Neurosurgery in the USA from 1994 to 2000, and was recruited to Winnipeg in 2000, from the Cleveland Clinic, as Professor and Head of the Section of Neurosurgery, Winnipeg Regional Health Authority and University of Manitoba. In this role, Dr. West recruited five neurosurgeons and a neurophysiologist. Each member of the Section has a special area of expertise, contributing to the development of new programs in pediatric neurosurgery, vascular neurosurgery (including endovascular treatment of vascular disorders of the brain and spine), deep brain stimulation for movement disorders, surgical treatment for epilepsy, and in collaboration with the Section of Orthopedics, minimally invasive surgery for spinal disorders. In 2003, with support of the Winnipeg Regional Health Authority and the University of Manitoba Department of Surgery, Dr. West established the first Gamma Knife in Canada. Since that time the Winnipeg Unit has been used to treat over 1100 patients from Manitoba and across Canada. He is currently spearheading the development of an extra-cranial radiosurgery program. As well, he is coordinating plans for a neurosurgical operating room that incorporates intra-operative MRI and digital subtraction angiography.

Dr. West's main interests are cerebrovascular surgery, brain tumor surgery, skull base surgery and radiosurgery. Dr. West has won several teaching awards and authored or co-authored over 90 scientific publications and invited lectures. He has been an Examiner in Neurosurgery for the Royal College of Physicians and Surgeons of Canada. He is presently a member of the Accreditation Committee of the Royal College and has completed a seven-year term as Chair of the Specialty Committee in Neurosurgery of the Royal College.



#### **Cornelius Tulleken**

Prof. Dr. C.A.F. Tulleken is emeritus professor neurosurgeon at the Department of Neurosurgery at the University Medical Centre Utrecht in the Netherlands.

Professor Tulleken has carried out extensive research in the field of neurovascular surgery and is the founder of the ELANA (excimer laser assisted nonocclusive anastomosis) technique which makes it possible to create a bypass