#### Anthony A. Amato

Anthony A. Amato, M.D. graduated Magna Cum Laude with a B.S. degree at Case Western Reserve University in 1982 and had a fully paid scholarship (US Air Force) for medical school at the University of Cincinnati where he

obtained his M.D. degree in 1986. He did his internal medicine internship and neurology residency at Wilford Hall Medical Center (WHMC) in San Antonio and his neuromuscular fellowship Ohio State University with Jerry Mendell, M.D. Dr. Amato returned to WHMC as the Chief of the Neuromuscular Division from 1992-1996. After fulfilling his military obligation he joined the Department of Neurology at the University of Texas Health Science Center at San Antonio where he was co-Director of the Neuromuscular Service.



In August 1999 following a national search he was recruited to Brigham and Women's Hosital (BWH) to be the Chief of the Neuromuscular Division and Director of

the Clinical Neurophysiology Laboratory with an appointment as Associate Professor of Neurology at Harvard Medical School. He is now the vicechairman of the Department of Neurology at BWH. He initiated and directed the integrated BWH-MGH Clinical Neurophysiology Fellowship program which is ACGME. In 2006, he started an ACGME-approved Neuromuscular Medicine Fellowship (6 new fellows per year) that encompasses BWH, MGH and Children's Hospital.

Dr. Amato has been a principle investigator or co-investigator in many clinical trials sponsored by the NIH, FDA, or industry in various neuromuscular disorders. He is a founding member of the Muscle Study Group, a consortium of scientific investigators from academic and research centers who are committed to the cooperative planning, implementation, analysis and reporting of controlled clinical trials and of other research for muscle and other neuromuscular diseases. The MSG aims to advance knowledge about the cause(s), pathogenesis, epidemiology, and clinical manifestations of muscle disease and related neuromuscular disorders and to develop and implement strategies to examine promising therapeutic interventions.

Dr. Amato is a grant reviewer for the NIH and The Myositis Association. He is a member of the Data and Safety Monitoring Board (DSMB) for all gene therapy trials for the National Heart, Lung and Blood Institute and also a member of the DSMB for the Familial Amyloid Polyneuropathy Trial for NINDS/NIH. He is Associate Editor for Muscle & Nerve. He has authored or co-authored 91 journal articles, 45 book chapters, and 2 books.



# Amin B. Kassam

Amin Kassam, MD, completed his medical and undergraduate education at the University of Toronto and his residency and fellowship training at the University of Ottawa. Dr. Kassam pursued additional post-graduate training in epidemiology and clinical outcomes. Dr. Kassam joined the faculty of the Department of Neurological Surgery at the University of Pittsburgh in February of 1998. He spent the next year focusing on microvascular surgery. Dr. Kassam has performed over 1,000 microvascular decompression procedures for cranial nerve neuropathy and has provided a unique perspective by using the endoscope to visualize and enhance difficult regions. Since his appointment, he has also focused on building a collaborative center to provide comprehensive care for complex pathology of the skull base. This center builds on the strength of combining the talents of surgeons from multiple specialties. This allows for the use of proven conventional approaches in conjunction with new minimally invasive endoscopic approaches to provide safe and effective treatment for patients. This has culminated in the development of the multidisciplinary Minimally Invasive Neurosurgical Center (MINC). Dr. Kassam along with Carl Snyderman, MD, and Ricardo Carrau, MD, were directly involved with the development of the Expanded Endonasal Approach (EEA). This approach represents an entirely new paradigm to remove complex lesions of the skull base and brain without incisions. The center, under the direction of Dr. Kassam, has pioneered and developed much of the technology and instrumentation used during the EEA surgeries. With continued research and experience, he now uses the EEA surgery for most tumors affecting the skull base. Dr. Kassam has performed over 3,000 neurosurgical procedures including over 700 minimally invasive endoscopic procedures. Dr. Kassam remains active in cerebrovascular surgery and has helped to develop a program to better understand the genetic alterations that lead to the development of intracranial aneurysms

In July 2006, Dr. Kassam was named Interim Chairman of the Department of Neurological Surgery. Since then he has focused on increasing interdisciplinary activities between neurosurgery and radiology, medical, radiation and surgical oncology, anesthesiology, neurology, and otolaryngology. It is hoped that these cooperative ventures will lead to new innovations in care for patients with a variety of neurologic abnormalities. Dr. Kassam has over 80 peer reviewed publications, an additional 11 book chapters currently published or in press, and is funded by both industry and the NIH. He lectures extensively nationally and internationally on surgery of the cranial nerves, skull base and on minimally invasive endoscopic techniques.

### Walter Kucharczyk

Walter Kucharczyk was born, raised and educated in Toronto. He graduated from the University of Toronto's Faculty of Medicine in 1979, after which he undertook specialty training in Radiology in Toronto, followed by subspecialty training in Neuroradiology and Magnetic Resonance Imaging at



the University of California, San Francisco from 1984 to 1986. He returned to a faculty position at the University of Toronto in 1986, and became the inaugural Director of Magnetic Resonance Imaging at what was then the Toronto General Hospital. He has remained Director of MRI ever since. At the University, he became Professor and Chair of the Department of Medical Imaging in 1991, a position he has held until today. He is Past-President of the International Society of Magnetic Resonance in Medicine (ISMRM), the largest research and education group in the world (5000 members) devoted to developing and teaching magnetic resonance to doctors and scientists.

During the past 10 years. Dr. Kucharczyk's research has focused on developing and applying modern high-speed 3D imaging technologies for non-invasive and minimally invasive treatment. He has been awarded several multi-million dollar grants from Technology Ontario (the predecessor of

ORDCF), the Canadian Foundation for Innovation, the Ontario Research and Development Challenge Fund (CFI), and most recently, the Leading Edge Fund of CFI. Starting in 1997, he has worked closely with key UHN co-investigators, especially Dr. Mark Bernstein in Neurosurgery and Dr. John Trachtenburg in Urology, to bring these innovative methods to the patient.

Dr. Kucharczyk has led the Toronto University Health Network in a multidisciplinary, multi-institutional, \$33M CFI grant (Functional Imaging Research Network) that has been a foundation for MRI research and image guidance therapy research at UHN for the past 7 years. In a related program, he has also been PI and co-led a \$26M ORDCF grant for the Ontario Consortium of Image Guided Therapy and Surgery (OCITS). He is one of three provincial leaders in the OCITS consortium. Two years ago he became a Project Leader of the UHN "Guided Therapeutics" Programme and co-leader of the new \$25M UHN initiative "The operating room of the future" in which image-guided therapy will play a prominent role.

He published several of the early papers on the design, operation, and treatment of novel Interventional MRI systems to guide conventional "open" surgical procedures, as well as research-based novel percutaneous and transcutaneous heat ablative systems. He published several of the early papers on MR thermometry to monitor, in a spatially localized manner, the effects of heat ablation on human cancer in vivo, including the only publications in the world on microwave ablation with MR thermometry for the treatment of recurrent prostate cancer.

## **Stephen Ashwal**

Dr. Stephen Ashwal is Distinguished Professor and Chief of the Division of Child Neurology in the Department of Pediatrics at Loma Linda University School of Medicine. He is a graduate of New York University School of Medicine (1966-70), and completed his residency training programs in Pediatrics (Bellevue Hospital, 70-73) and in Child Neurology (University of Minnesota, 73-76). His research activities have focused on critical care issues in child neurology related to brain death, the vegetative and minimally conscious states, bacterial meningitis, and near drowning; the role of nitric oxide in focal cerebral ischemia; development of animal models of neonatal stroke and the use of proton



spectroscopy for outcome prediction after acute CNS injuries. He has been a member of the Child Neurology Society since 1975 and served as chair of the Scientific Selection, Ethics, Archives and Practice Committee, Councilor from the West, Secretary-Treasurer of the Society, and President (2001-03). Dr. Ashwal edited The Founders of Child Neurology, published on behalf of the Society in 1990, that is a history of the field of child neurology and its major contributors. He served as co-chair (representing the CNS) on The Multi-Society Task Force on the Persistent Vegetative State. He has been active in the development of practice parameters related to child neurology and served as a member of the Quality Standard Subcommittee of the

American Academy of Neurology that is responsible for development of guidelines dealing with issues related to the evaluation of children with autism, cerebral palsy, developmental delay, headaches and status epilepticus. With Dr. Kenneth Swaiman and Dr. Donna Ferriero, he served as coeditor of one of the main textbooks in the field of child neurology, Pediatric Neurology: Principles & Practice (2006).

# **Michael Shevell**

Dr. Shevell is a pediatric neurologist at the Montreal Children's Hospital and a Professor (with Tenure) in the Departments of Neurology/Neurosurgery and Pediatrics at McGill University. He holds a subspecialty certification in neurodevelopmental disabilities. A former Chercheur Boursier Clinicien of the



FRSO he has an active research program focusing on issues related to neonatal neurology, children with or at risk for neurodevelopmental sequelae, in particular cerebral palsy, global developmental delay and developmental language impairment. He has presently over 130 publications and 40 book chapters/invited papers. He currently serves on four editorial boards (Canadian Journal of Neurological Sciences, Pediatric Neurology, Journal of Child Neurology and Seminars in Pediatric Neurology). He was the lead author on the American Academy of Neurology/Child Neurology Society Practice Parameter on global developmental delay. He is currently Director of the Quebec Cerebral Palsy Registry. A former President of

Canadian Association of Child Neurology he presently serves on the Executive Board of the International Child Neurology Association and has been Chair of the Ethics Committee of the Child Neurology Society for the past decade. He was Chairman of the recent Xth World Congress of the International Child Neurology Association held in Montreal in June 2006.

## Andres M. Lozano

Dr. Lozano obtained his MD degree from the University of Ottawa and his PhD in Neurobiology from McGill University. He was appointed to the neurosurgical faculty at the University of Toronto in 1991 and became full Professor in 1999. He is currently Professor and RR Tasker Chair in Functional Neurosurgery and holds a Canada Research Chair in Neuroscience at the University of Toronto.

Dr Lozano's research is focused on understanding the cellular pathogenesis and developing novel treatments, including surgical therapies for neurological and psychiatric disorders such as Parkinson's disease, dystonia and depression. His work has appeared in over 250 peer-reviewed publications and he has been invited lecturer or visiting professor throughout the world. He serves on the board and executive of several international organizations and is currently President of the World Society for Stereotactic and Functional Neurosurgery, and Chairman of the Stereotactic and Functional Neurosurgery Section of the World Federation of Neurosurgical Societies. He serves the



international editorial board of ten journals and has received a number of awards including the Gold Medal of the Royal College of Physicians and Surgeons of Canada and the Penfield Award.

# **Michael Bliss**

Michael Bliss held the elite title of University Professor when he retired in 2006 after a long career at the University of Toronto. Formally University Professor Emeritus, he is an independent scholar and writer, based in Toronto and Prince Edward Island. He specializes in the history of medicine and the



pecializes in the history of medicine and the history of Canada. His twelve books (including A Canadian Millionaire, The Discovery of Insulin, Banting, Northern Enterprise, Plague, Right Honourable Men, William Osler, A Life in Medicine, and Harvey Cushing: A Life in Surgery) have received numerous honours, including all the major prizes awarded by the Canadian Historical Association, two City of Toronto Book Awards, two Jason Hannah Medals for medical history from the Royal Society of Canada, the Welch Medal of the American Association for the History of Medicine, and the National Business Book Award.

Professor Bliss was appointed a Member of the Order of Canada in 1999, and elected a Fellow of the Royal Society of Canada in

1984. The Royal Society awarded him its Tyrrell Medal in 1988 "for outstanding work in the history of Canada". At the time of his retirement, Maclean's, Canada's national newsmagazine, referred to him as "perhaps Canada's greatest living historian."

Michael Bliss was born in 1941, married in 1963, and has three children. He has been awarded Honorary Doctor of Letters degrees from McGill University and McMaster University and is an Honorary Fellow of the Royal College of Physicians and Surgeons of Canada. Charles Haw is an assistant professor in the Department of Surgery, Division of Neurosurgery, University of British Columbia. He completed his medical school and residency training at the University of British Columbia. Subsequently, he travelled to Toronto where he had two and a half years training in interventional neuroradiology. Currently he performs fairly general neurosurgery with a heavy concentration in the surgical and endovascular management of vascular disorders. While he enjoys treating dural fistulas, which will be the topic of his lecture, he realizes that life does not start and end in a shunting zone.





# **Educational Objectives for the 2007 Congress:**

By the end of the Congress the participants will be able to:

- Discuss the advances in the diagnosis and management of acute and chronic neurological diseases
- Review new treatment options for neurosurgical illnesses
- Explore advances in neurobiology
- Assess the consequences of neurological injury in the newborn