



Michael Schulder, MD, is Vice Chairman of the Department of Neurosurgery and Co-Director of the Stereotactic Radiosurgery Center at North Shore LIJ, and an Investigator at the Feinstein Institute of Medical Research. His primary interests include advanced techniques of image-guided neurosurgery, stereotactic radiosurgery (SRS), and skull base surgery. His publications have focused on neurosurgical applications of functional magnetic resonance imaging (fMRI), intraoperative MRI, and SRS. Dr. Schulder is editor of *The Handbook of Stereotactic and Functional Neurosurgery*, and serves on the Editorial Boards of *Neurosurgery* and the *Journal of Stereotactic and Functional Neurosurgery*. He is Past President of the American Society for Stereotactic and Functional Neurosurgery (ASSFN) and Secretary Treasurer of the World Society of Stereotactic and Functional Neurosurgery (WSSFN). He has also served as Chairman of the Section of History of Neurological Surgery of the American Academy of Neurological Surgeons (AANS). Dr. Schulder received his MD from Columbia University and trained in neurosurgery at the Albert Einstein College of Medicine. He then received advanced training in SRS at the Joint Center for Radiation Therapy at Harvard Medical School and the University of Florida, Gainesville.

July 2009 saw the 40th anniversary of the first human landing on the Moon, a feat of American engineering and scientific prowess that is mind-boggling, even—or especially—in retrospect. It was accomplished in under 10 years from conception to completion—less time than it takes to bring many drugs to market. For those who watched Neil Armstrong take his small step for a man on the lunar surface in 1969, commemorating this event was a pleasure indeed.

However, surely a great sadness underlies the various celebrations of the first Moon landing. It has been nearly 37 years since the last Apollo mission. Does anyone seriously believe that the US—or any other country—could repeat the success of that program? Or that if President Obama announced tomorrow a plan to land a man on the Moon and return him to Earth safely that we could do it within a decade? The involution of the NASA manned space effort represented a colossal failure of political will. Finding excuses to end the era of lunar exploration was easy. It cost too much. There were other, more pressing problems to deal with on Earth. And what were the benefits anyway—Tang and Mylar balloons? Now that in America and elsewhere the idea of Moon landings is being revived, the technological obstacles seem overwhelming, despite 40 years of advances in computers, communications, and other fields of engineering that would be required.

A similar crossroads lies before us in clinical neuroscience. Great discoveries have been made in the last several decades that have already improved quality of life and prolonged survival, or have the potential to do so in the near future. These include new medications to treat patients with epilepsy, multiple sclerosis, and Parkinson's disease (PD). Deep brain stimulation has become a standard of care for many patients with PD and other movement disorders over the last two decades, and promises to offer relief for many others with psychiatric illness. Stereotactic radiosurgery (SRS) has also evolved from an esoteric technique to one of the mainstays of contemporary neurosurgery. The most common indications for its use remain tumor control, but SRS is being investigated as a tool for functional neurosurgery as well. Intraoperative magnetic resonance imaging (MRI), science fiction in the early 1990s, is now a commercially available device. Investigators the world over are seriously examining practical treatments for Alzheimer's disease. These topics have been covered in *US Neurology*, in this and in previous issues.

We in the neuroscience community must not lose our own political will in the way that the US did regarding its space program. There are always reasons to shy away from progress: the problems we treat are often rare, many dead ends are reached before true breakthroughs are made, and new medications and 'high-tech' surgery are too expensive. Let us not succumb to these inevitable and never-ending pressures, but continue to press on in our work to improve the knowledge and treatment of so many devastating neurological illnesses. ■