AANS President's Perspective

Shaping Neurosurgery's Future: A Global Perspective

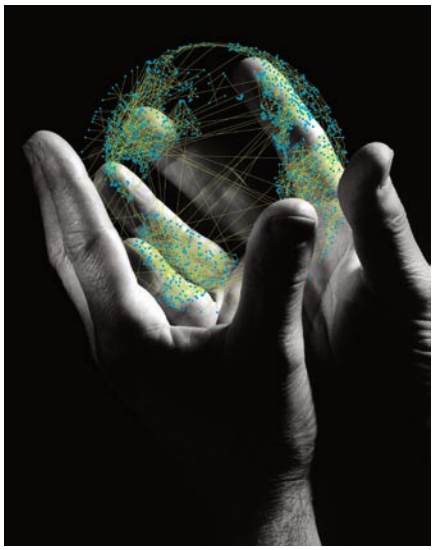
James R. Bean, MD

Over the course of the 20th century, neurosurgery grew into the highly technical, subspecialized practice that we know today. Driven first by increasing neuroanatomic knowledge and later by key technological innovations such as microsurgery, stereotactic localization, radiosurgery, digital imaging, and endovascular therapeutics, neurosurgery continues to reach ever higher levels of scientific sophistication and therapeutic effectiveness.

Contemporary neurosurgery is a microcosm of surgery in general, of medicine as a whole, and of the modern technological world at large. Discoveries in one medical specialty often and rapidly are applied in others, revolutionizing practice across specialties. For example, laparoscopy and arthroscopy found application in neurosurgery as cranial and spinal endoscopy. Nuclear magnetic resonance spectroscopy, which originated in chemistry and physics, progressed from a laboratory investigative tool to a transformative clinical imaging technique, expanding precision and detail in every anatomic region of the body. Discoveries in metallurgy and pharmaceuticals were utilized in platinum coils, titanium plates, and implantable chemotherapeutic agents used in neurosurgery. Scientific discovery needs only imagination and communication to permeate the broader medical community.

The "broader medical community" today is worldwide. Neurosurgery is a global enterprise, without technological or geographic borders. In this respect, it shares the far-ranging connectivity that drives business, markets, communication networks, scientific innovation, educational dissemination, and international diplomatic policies across the planet. No discovery in the U.S., if useful, long remains within its borders. No technical application in Europe stands isolated from international curiosity and adaptation across the continents. Clinical trials in Asia alter practice in the Americas. Scientific publications are instantly available worldwide via electronic publishing. Medical technology corporations utilize global marketing and distribution networks and profit as much or more from the world market as from the market in the country where the innovation originated. International fellows rapidly disperse scientific and technical ideas as well as practices throughout the global medical community. A scientific idea expressed in Boston inspires invention in Beijing and Bangkok. In every respect, we are connected globally: We cannot be isolated, and we do not act alone.

In recognition of this interconnectivity and with a collegial spirit, in 2009 the AANS will host the XIV World Congress of Neurological Surgery in Boston, a location accessible and attractive to neurosurgeons worldwide. From Aug. 30 to Sept. 4, this quadrennial scientific meeting of the World Federation of Neurosurgical Societies will bring together international experts of the highest caliber in neurosurgical achievement for a concentrated educational and social experience. The AANS is proud to be part of this distinguished and highly respected convocation and to facilitate increased communication, acquaintance, and understanding among neurosurgeons both in the U.S. and from the far reaches of the globe.



This symbol of the 77th AANS Annual Meeting, a globe held in the human hand, represents the incredible power of human action to guide the destiny of the entire planet.

But first, from May 2 to May 6 the AANS will present the 2009 AANS Annual Meeting in San Diego. This premier neurosurgical event will emphasize the global aspect of neurosurgery beginning with its theme, Shaping Neurosurgery's Future: A Global Perspective. The overarching theme is symbolized by a globe formed by points of light that emanate from cities on every continent, illustrating the technical advances that define the contemporary world and interconnect not just neurosurgeons and physicians worldwide, but all the diverse geographic reaches of civilization. The image portrays a unity and interdependency amid the diversity of terrestrial space, culture, language and climate. The globe is held in a human hand, which is in fact a neurosurgeon's hand from "In Their Hands," a book of photographs compiled by California neurosurgeon Javed Siddiqi. The hand symbolizes the ineluctable humanity of the neurosurgeon's craft, despite all technical complexity, and the dependence on the human agent to apply wisdom and compassion for human use and benefit to all scientific discovery and technological application. The symbolic portrayal of the hand is particularly poignant for the surgeon, a word derived from the classical Greek words *cheir* (hand) and *ergein* (work), denoting the artistic skill and master craftsman's precision necessary for neurosurgical success. And finally, the globe held in the human hand represents the incredible power of human action to guide the destiny of the entire planet, for better or for worse.

A symposium featuring notable speakers from around the world will substitute for many of the Saturday practical courses. In this one day, the symposium will concentrate international expertise and experience on topics and techniques that hold interest for all meeting attendees. International attendees will have the opportunity to hear their colleagues and display their accomplishments before a worldwide audience. North American attendees will have the chance to hear about promising techniques and devices as yet unavailable in the U.S., and to hear firsthand from neurosurgical masters of international reputation and stature.

I personally am looking forward to the 2009 AANS Annual Meeting, which will be a superlative event thanks to many of our colleagues who have taken great pains to plan an event that is of maximum benefit to you. I hope you will join us for what promises to be a scientifically enlightening and thoroughly enjoyable occasion in beautiful San Diego. NS

James R. Bean, MD, is the 2008–2009 AANS president. He is president and managing director of Neurosurgical Associates PSC in Lexington, Ky.
The author reported no conflicts for disclosure.

FOR FURTHER INFORMATION

- 2009 AANS Annual Meeting, www.aans.org/annual/2009
- XIV World Congress of Neurological Surgery, www.aans.org/wfns2009
- Crowell, R: In their hands. N Engl J Med 346:949–951, 2002