AANS ADVANCING BEYOND THE BOUNDARIES

2011 AANS ANNUAL REPORT

PRESIDENT'S MESSAGE

Discovering What Neurosurgeons Do Best

For this Annual Report, I am delighted to share my thoughts on the many events that transpired this past year to move the AANS toward greater continental and global impact. I feel tremendously honored to have had the privilege to steer the organization toward new destinations, and to have worked with some of the best, brightest and most creative people in the world.



One of our most important assets in organized neurosurgery is the Neurosurgery Research and Education Foundation (NREF). Since its inception in 1981, the NREF has invested more \$7 million in supporting neurosurgery residents and young clinician investigators whose research projects have been peer reviewed and approved in competitive grant-review

processes. Many of these NREF award recipients have gone on to lead distinguished academic careers, and have stated how pivotal these awards from NREF have been in their successes in neurosurgery. We were very fortunate this year to see a record number of neurosurgeons give pledges to the NREF at the Cushing Circle level (> \$25,000). We also benefitted from co-sponsoring the 8th Annual Charity Softball Tournament with Columbia University in New York City's Central Park. The tournament brought together teams from 22 neurosurgery programs throughout the United States and Canada, and a portion of the proceeds from this event were given to the NREF. Special thanks are given to Dr. Riccardo (Rick) Komotar, who remains tireless in his efforts to organize the event and take it to even higher levels.

During this past year, an opportunity arose for the NREF to form a unique partnership with the Orthopedic Research and Education Foundation (OREF) in efforts to promote the conduction of clinical trials and the creation of a comprehensive database in spinal procedures. To help with this effort, neurosurgery formed a Spine Promotion and Advocacy (SPA) Task Force that worked closely with executive leaders in the OREF to develop this partnership. Special thanks must be given to Drs.' Regis Haid and Chris Shaffrey, who were the SPA Task Force leadership — and who spent countless hours of time working toward solutions to the establishment of an OREF: NREF partnership. More will be forthcoming on this potential alliance in the upcoming year. After much effort on behalf of AANS Senior Management, Neuropoint Alliance (NPA) became firmly established and supported by the AANS with the hiring of a full-time new staff member, as well as the recruitment of numerous centers across the country to enter patient data into registries for the purposes of conducting clinical trials, pay for performance programs, and opinion research. The first such effort, the National Neurosurgery Quality and Outcomes Database, or N2QOD, will focus on the most common spinal procedures in neurosurgery, and will generate practice-specific and nationwide quality and efficiency data to support claims made by CMS and Medicare. For this significant effort and advancement in neurosurgical quality assurance, I should like to thank Tony Asher and Paul McCormick—they have been instrumental in establishing the groundwork for N2QOD.

The Journal of Neurosurgery Publishing Group (JNSPG) which produces the journal of record for the AANS, *the Journal of Neurosurgery (JNS)*—was thoroughly reviewed through a Request For Proposals (RFP) process conducted by an AANS RFP Task Force. After contemplating several offers from major scientific journal publishing companies, it was decided to keep the JNS as self-published through the JNSPG. In this process, some 17 recommendations were made to the JNSPG to improve the quality of the JNSPG products, and to streamline the efficiencies of the office in Charlottesville. JNSPG is now moving forward with designs for a new and more interactive website, and will be developing new revenue streams through increased international sales, online advertisements and special topical issues.

The AANS has always taken great pride in its Member Services benefits. This year, we were able to provide all members with a new AANS certificate that uses the honorific, "Fellow of the American Association of Neurological Surgeons" or FAANS. AANS members can now proudly display the initials, FAANS, after their MD degrees, and can add the honorific to their letterhead and business communications. I should like to thank Dr. Charles Prestigiacomo from the Neurological Institute in New Jersey for making the first suggestion that the honorific, FAANS would be a great AANS member benefit.

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It is clear that the world is moving in the direction of digital, online programs. This past year, the AANS worked closely with Dr. Aaron Cohen-Gadol to produce the first-ever "AANS Operative Grand Rounds" series. Operative Grand Rounds has enabled AANS members to go online to review important topics in neurosurgery, such as minimally invasive spinal-cordtumor resection; parasagittal and parafalcine meningiomas; and microvascular decompression surgery for hemifacial spasm. These online sessions are fully annotated, and complete with video sequences and interviews with leading experts. To witness one yourself, please go to: http://www. neurosurgicalatlas.com/index.php/aans

Another major educational offering this year was the 3-Dimensional CD/DVD Rhoton project, which placed many of Dr. Al Rhoton's brilliant lectures in a 3D format and allowed them to be viewed on any computer and stored for future reference. Special thanks are given to Drs. Jon Robertson, Bill Couldwell, and of course to Al Rhoton for enabling the AANS to offer this priceless collection to our membership.

Much emphasis has been placed recently on sports concussions in our society. Working with the AANS/CNS Section on Neurotrauma and Critical Care, the AANS and the Congress of Neurological Surgeons (CNS) encouraged the writing of a "Position Statement on Traumatic Brain Injury in Sports." This was approved and released in time for the AANS Annual Meeting in Denver, during which time the Opening Reception at Invesco Stadium was used to draw attention to the growing problem of sports concussion. Finally, I should like to state emphatically how much I enjoyed working with Drs. Rusty Rodts and Chris Getch, who served as Presidents of the CNS during my year as President of the AANS. Our relations and collegiality were of the highest order throughout the year, and we have re-instituted the practice of the Joint Officers Meeting of both organizations so that we can better understand what our priorities are and should be, individually and collectively.

Research, education, excellence in clinical care, social awareness and collaborations — these are the things that neurosurgeons do best. I discovered this during my tenure as President of the AANS, and I was pleased to help move the AANS toward a higher station, just as my predecessors have.

James T. Rutka, MD, PhD, FAANS 2010-2011 AANS President



American Association of Neurological Surgeons

and the American Association of Neurosurgeons



EXECUTIVE DIRECTOR'S REPORT

2011 Annual Report to Membership

I can think of no better way to illustrate the real world results of the efficacy of AANS' focus on strategic vision than to point readers of this Annual Report to 2010-11 AANS President Dr. James Rutka's summary of the organization's achievements of the past year.



Sometimes overlooked in impressive resumes of accomplishments, particularly in organizations that "work hard to make it look easy," are how the ends do more than merely justify the means. Consistently successful results validate the means.

A review of the accomplishments highlighted in the last several years of AANS Annual Reports clearly illustrates an association unquestionably committed

to creating successful change. This is not just the all too typical organizational "change for the sake of change" which, as American author Edward Abbey memorably wrote, is the ideology of a cancer cell.

But neither is it merely creating the illusion of change, meant to camouflage remaining risk-free in the safe harbor of status quo. Too many professional membership organizations governed by consensus decision-making seek the safety of repetition rather than undertake the discovery of the untried.

More than five years ago, the AANS first realized it had achieved —in half the projected time—its vital strategic goal from 2001 of attaining robust fiscal stability through the successful funding of the Board-designated Reserve Fund.

Since that time, the expanding catalogue of your association's service offerings has been on a consistently upward trajectory, reaching into many diverse layers of innovation and technology. Not all of those were planned far in advance; one of AANS' great advantages today is the nimbleness with which it can rapidly identify and respond to its members' needs.

But even as the specialty's leader in offering the new and untried, AANS never does so without being mindful that change must be something even more fundamental than "different"; it must be meaningful.

The most enduring impact of the recent device-driven delivery of AANS Annual Scientific Meetings is that they were planned, developed, and undertaken in addition to, but not at the exclusion of, all of the additional innovative services and programs AANS is increasingly offering its members. Today's member services are a direct result of the expectations AANS members tell us they have. AANS undertakes the effort of quantifying its members' aggregate needs every twenty-four months, and the evaluations of attendees of the numerous AANS educational meetings at each learning event.

The AANS offerings you may choose from at any given moment are a direct result of needs and trends identified through your responses to surveys and other communications channels. The data is then shared with AANS leaders and committees, who in turn are tasked with transforming those needs into innovative services, which additionally are subject to ongoing evaluation and modification.

The most recent of these accomplishments, as highlighted in this Annual Report, are evidence of an association that remains consistently true to its core mission: delivering meaningful, new, and creative value for its members' benefit. Despite fluctuations in politics, economies, technologies, and the advantageous cyclical changes of AANS leaders and perspectives, this continues to be AANS' most consistent value statement.

To change and to improve are two different things. ~German Proverb

William A. Hewitt, former Chairman of John Deere and Co. said, "To be a leader, you must preserve all through life the attitude of being receptive to new ideas. The quality of leadership you give will depend upon your ability to evaluate new ideas, to separate change for the sake of change from change for the sake of men."

As you read in this Annual Report of the accomplishments AANS has realized through the dedicated efforts of members, leaders and partners, I hope you see your own role in establishing the culture of meaningful change in your association. No matter how innovative the ideas, or how precise the delivery of those ideas, without the members' receptivity to accepting new learning styles and technologies, change cannot evolve to growth. And change without consequential growth would be a renunciation of AANS' leadership in the delivery of innovation to the advancement of your specialty.

As always, thank you for your membership in AANS. Thomas A. Marshall AANS Executive Director

POSITIVELY ENHANCING NEUROSURGERY EDUCATION ON MANY FRONTS

he AANS continually strives to offer stellar continuing medical education (CME) activities that positively impact the educational experience, and enhance neurosurgeons' and allied health professionals' ability to provide the best in patient care. These courses are designed to enable members to conform to licensure requirements; AANS membership requirements; Board certification; and Maintenance of Certification. This year, the AANS offered a total of 11 directly sponsored activities as well as 28 jointly sponsored activities coordinated under a streamlined new application process, launched the exciting and innovative Master Series On-Demand/AANS Operative Grand Rounds program, and made available a variety of enduring materials.

Along with AANS' clinical topics, two courses helped expand the organization's educational reach to neurosurgeons, neurosurgical staff and midlevel practitioners in fiscal year 2011 by providing relevant information needed to remain vital in the ever changing field of neurosurgery.

From Cranial to Spine: A Comprehensive Overview of Neurosurgical Topics for the Mid-Level Practitioners was the first-ever standalone course designed solely for midlevel practitioners. Held in Las Vegas in September 2010, the course was a rousing success, with 190 registrants in addition to 12 faculty, exceeding expectations by nearly 400 percent. Expertly codirected and arranged by David J. Bissonette, PA-C; Twyila Lay, MS, ACNP; and Robert E. Wharen Jr., MD, FAANS, lectures and case studies were included on a variety of neurosurgical topics pertinent to physician assistants, nurses and allied health professionals. Among the topics were CT and MRI Interpretation; Cervical and Lumbar Spine Decompression, Instrumentation and Fusions; Hydrocephalus Update; Management of Traumatic Brain Injury; Neurocritical Care; Innovations and Management of Brain Tumors; Comprehensive Management of Aneurysms; Innovations and Management of Stroke; and Functional Neurosurgery.

The always popular *Neurosurgeon as CEO*: The Business of Neurosurgery was offered for the third time under the expert leadership of moderators James R. Bean, MD, FAANS; and James I. Ausman, MD, PhD, FAANS. Close to 100 participants enjoyed the New York City location in August 2010, making it the most well-attended series to date. The highly interactive course focused on sophisticated concepts that ensure business-management success in a rapidly changing practice environment. Strategic topics encompassed small to large private practices as well as academic settings. In addition, a health-care reform update was made available, along with discussion about hospital employment. Sunday activities included a Stark Law and anti-kickback update, plus a panel discussion on risk-taking and negotiating.



Enabling Residents to Push the Education Envelope

Continuing in the "thinking outside the box" tradition established in 2006, the AANS expanded its resident education program from five resident courses the prior year to seven offerings in fiscal year 2011. Some 173 residents from across the United States participated. Since the program's inception, 712 residents have been trained by stellar faculty, made possible through the generosity of AANS corporate supporters. Support for the ongoing activities of the Resident Mentoring Program also translated to an increase in participants, with 341 mentors and 187 residents participating.

In addition, the Education and Practice Management and Development Committees work together to spearhead a highly successful collaboration between industry, residents and organized neurosurgery. Courses held this year included:

Skull Base for Senior Residents, Aug. 5-8, 2010, Medical Education & Research Institute (MERI), Memphis, Tenn. Course Director: Jon H. Robertson, MD, FAANS. Supporters: Covidien; Medtronic Neurologic Technologies; Stryker CMF; Stryker Neuro Spine ENT; Synthes CMF; and Carl Zeiss Meditec, Inc.

Endovascular Techniques for Residents, Sept. 9-11, 2010, MERI, Memphis, Tenn. Course Director: Robert Rosenwasser, MD, FAANS, FACS. Supporters: Boston Scientific Neurovascular (now Strkyer Neurovascular); Codman, a Johnson & Johnson Company.; ev3; and MicroVention Inc.

Stereotactic Radiosurgery, Sept. 24-26, 2010, Cleveland. Course Director: Jason P. Sheehan, MD, PhD, FAANS. Supporters: Accuray Inc.; Brainlab; Elekta; Tomotherapy; and Varian Medical Systems.

Fundamentals in Spinal Surgery, Nov. 18-21, 2010, SERC Lab, Burr Ridge, Ill. Course Directors: Regis W. Haid Jr., MD, FAANS; and Christopher I. Shaffrey, MD, FAANS. Supporters: Biomet Spine; Covidien; DePuy Spine, Inc., a Johnson & Johnson Company.; Globus Medical; Medtronic; and Synthes Spine.

Neurosurgical Pain Management, Dec. 2, 2010, Medical Education Research Institute of Nevada, Henderson, Nev. Course Director: Alon Y. Mogilner, MD, PhD, FAANS. Supporters: Boston Scientific Neuromodulation Division; Medtronic; and St. Jude.

Pediatric Neurosurgery Review, Part 3, March 4-6, 2011, MERI, Memphis, Tenn. Course Director: Frederick A. Boop, MD, FAANS, FACS. Supporters: Biomet Microfixation; IMRIS; Le Bonheur Hospital; Medtronic Neurologic Technologies; PMT; Storz; Stryker; and Carl Zeiss Meditec, Inc.

Spinal Deformity, May 6-7, 2010, Vista Lab, Baltimore. Course Director: Robert F. Heary, MD, FAANS. Supporters: DePuy Spine, Inc., a Johnson & Johnson Company; Covidien; Medtronic; and Synthes Spine.



"I loved this course! I've been working in neurosurgery for five years. Not only did I learn new things, but things I already thought I knew were clarified and presented beautifully! It was such a great environment being around other mid-level neurosurgical practitioners." — Anonymous Attendee (AANS Mid-level Practitioner Course Participant)

"The information given was precious. I do appreciate the honesty and detailed explanation of issues that are usually discussed [behind] closed doors." — Chun Siang Chen, MD (Neurosurgeon as CEO Course Participant)

"The course overall was excellent! It was a great opportunity to network with fellow PAs and NPs. I had no idea what to expect and came away well-pleased. I've only been to two other AANS conferences, and this was by far the one I would attend again. The topics were relevant to my practice. The opportunity to network was awesome! I am looking forward to next year. Thanks to all of you who made this possible!" — Anonymous Attendee (AANS Mid-level Practitioner Course Participant

Altering the Visual Learning Landscape for Today's Neurosurgeons

The AANS continues to seek out new opportunities to present neurosurgeons with the latest learning tools and resources. As part of that effort, AANS introduced *The Rhoton Collection*, a unique agglomeration of three-dimensional anatomy presentations composed by Albert L. Rhoton Jr., MD, FAANS. These one-of-akind lectures, which Dr. Rhoton crafted over many years, have been meticulously recreated in a 3D format that maintains and safeguards the incredible detail of the presentations. This allows viewers to stop and closely view at any point in the presentation, and an audio track of Dr. Rhoton is synchronized for each lecture. The initial offering in the series contains four skull base topics:

- Cerebellopontine Angle and Fourth Ventricle
- Cavernous Sinus and Middle Fossa
- Far Lateral Approach and Jugular Foramen
- Navigating the Temporal Bone

Bringing Neurosurgical Anatomy into a New Dimension

Neurosurgical anatomy is perhaps the most difficult subject for neurosurgical residents to master. Physicians are indoctrinated into the intricacies of the specialty by attending lectures or witnessing a procedure being conducted in an OR. But once the doctor leaves the anatomy lab or the operating room, they again are faced with the task of learning anatomy in the traditional, two-dimensional format of textbooks.

However, with the development of 3D-television technology, Jeffrey M. Sorenson, MD, FAANS, got the idea that perhaps there was a better way to view and understand anatomy. A series of lectures was needed in a video format that would help accelerate the learning process. And what better source than the three-dimensional anatomy presentations of former AANS president Albert L. Rhoton Jr., MD, FAANS, who pioneered the use of stereoscopy in his lectures. That was the impetus behind the creation of The Rhoton Collection.

"There were times when I attended lectures by Dr. Rhoton where I wished I could dwell on one slide for 20 minutes, or rewind it to look at something again after the lecture had moved on," said Dr. Sorenson. "We needed to develop a way to get Dr. Rhoton's lectures archived so that surgeons could study on their own time, but in a high-resolution stereoscopic format. When 3D TVs came out, that was the tipping point."

At the time, Jon Robertson, MD, FAANS; and William Couldwell, MD, PhD, FAANS, were discussing with Dr. Rhoton the need for such a project, which would be sponsored by the AANS. After Dr. Rhoton agreed to participate, four initial lectures —



Cerebellopontine Angle and Fourth Ventricle; Cavernous Sinus and Middle Fossa; Far Lateral Approach and Jugular Foramen; and Navigating the Temporal Bone — were prepared.

Since Dr. Rhoton's live presentations were based upon multiple projectors and a silver screen, there were technical challenges in reformatting the lectures for 3D-television viewing. These were solved with a variety of software tools used to prepare the images to look their best on a 3D television; video-editing software; and a web-based database developed by Dr. Sorenson that also will serve as the foundation of an interactive online neuroanatomy textbook. Dr. Sorenson started with recordings of Dr. Rhoton's lectures, in which Dr. Rhoton would use a laser pointer to highlight a particular area or structure. Instead of trying to simulate a laser pointer, Dr. Sorenson created anatomical drawings over the digital photographs to highlight each structure Dr. Rhoton referred to. Because stereoscopy directs separate images to both the left and right eye, thousands of drawings were required.

"It was technical work, but it was artistic, too," said Dr. Sorenson. "We're presenting works of art in these lectures."

Another obstacle in the creative process was adding an audio element to the visual presentation. To accomplish this, Dr. Sorenson used live audio recordings from Dr. Rhoton's lectures and then synchronized that audio to the presentation. "It gives the viewer a full understanding what it is like to attend one of his lectures, which was so important," said Dr. Sorenson. "But the most daunting challenge was to live up to the high standards Dr. Rhoton sets for his own work."

The Rhoton Collection 3D videos are available not only on Bluray DVD, but via the AANS' site on iTunes U, as well — the first such 3D offerings available. "We always want to try to raise the bar for neurosurgical teaching," said Dr. Sorenson. "It is a real privilege to work with Dr. Rhoton and see how dedicated he is to education. Through patience and perseverance, he's taken years to develop these extraordinary lectures. That's why I was happy to hear him say he was pleased with the end result."

Dr. Sorenson is an Assistant Professor in the Department of Neurosurgery at the University of Tennessee, where he completed his neurosurgical residency, and is a member of the Semmes-Murphey Clinic.

Building Leadership for Today and Tomorrow

As part of its commitment to the advancement of neurosurgery, and the development and improvement of the specialty, the AANS offers three (3) Leadership Scholarships for AANS Fellows (board-certified members). AANS offers this opportunity not only to cultivate future leaders, but to encourage long-term participation in organized neurosurgery and the AANS. The recipients of these scholarships attended the 2011 *Surgeons as Leaders: From Operating Room to Boardroom* course developed by the American College of Surgeons.

After a highly competitive application process, the members selected to be the 2011 AANS Leadership Scholarship Recipients were:

- Cormac O. Maher, MD, FAANS, from the University of Michigan
- Charles J. Prestigiacomo, MD, FAANS, FACS, program director at New Jersey Medical School
- Jamie S. Ullman, MD, FAANS, from Elmhurst Hospital Center, New York

The awardees completed an application, submitted curriculum vitae highlighting their leadership accomplishments and completed an essay on how they would use their leadership skills to advance their practice as well as organized neurosurgery. "Every neurosurgeon can become a leader, both in the community and within their practice," said Charles J. Prestigiacomo, MD, FAANS, FACS. "Leaders need vision, but you need to learn how to find that vision and cultivate it. This was an incredibly fruitful opportunity to learn how to lead."

DISCOVERING NEUROSURGERY: NEW FRONTIERS

Events Propel Neurosurgeons' White Coat Message Beyond INVESCO Field

Events held in Denver on Sunday, April 10, 2011, helped advance neurosurgeons' most important white-coat message — preventing recreation- and sports-related head and spinal cord injuries. The two events tied into the theme of this year's National Neurosurgery Awareness Week: "There's Always Another Game, but You Only Have One Brain."

In an effort to protect children from bicycle-related head injuries, more than 200 Denver-area children enrolled in grades preschool-5 were invited on April 10 to the Community Kids Bike Helmet Day at INVESCO Field, which was co-sponsored by the AANS and ThinkFirst National Injury Prevention Foundation. A group of 85 ThinkFirst Chapter members from across the country,



and AANS neurosurgeons from the Public Relations Committee and Young Neurosurgeons Committees fitted the children with free, colorful bike helmets branded with sponsor logos. As a big bonus, the crowd was treated to a special appearance by Denver Broncos quarterback Tim Tebow, who spoke to them about playing it safe, followed by a question-and-answer session. His young fans were especially enthralled when he recounted his own personal experience about suffering a serious concussion on the playing field during a college game. The children were thrilled to meet Tebow and get their pictures taken with him; more importantly, Tebow instilled in his young and captivated audience the importance of wearing helmets. The Integra Foundation, the philanthropic arm of Integra LifeSciences Corporation, as well as Elekta both awarded grants to ThinkFirst in support of this injuryprevention event.

Later in the day, the celebration at INVESCO Field continued with the first-ever sports-themed AANS Opening Reception. A festive tone was set at the stadium entrance, where Miles the Mascot and a lively six-piece band greeted attendees as they arrived. Among the festivities were punt and pass activities on the field, captured on the JumboTron; behind-the-scene tours; ThinkFirst National Injury Prevention Foundation-staffed sports stations; and a wide array of classic upscale stadium cuisine and beverages. Several neurosurgeons were spotted proudly wearing "brain" bicycle helmets, which they received as a gift of \$100 or more in support of ThinkFirst.

In concert with the INVESCO Field events, the AANS/CNS Section on Neurotrauma and Critical Care issued a Position Statement on Traumatic Brain Injury in Sports that was publicized to members and the media during the meeting.

The 2011 AANS Annual Scientific Meeting at a Glance

- Scientific Meeting content delivered and accessible via the iPod touch to all attendees via download from the iTunes store
- 34 practical clinics and four International Masters practical clinics
- 18 general scientific sessions and three plenary sessions
- 174 oral abstract presentations
- Special International Symposium
- Nearly 500 electronic poster presentations
- 800 exhibit booths representing about 200 companies
- 66 educational breakfast seminars

Recognizing Leaders that Expanded the Frontiers

- Cushing Medalist A. John Popp, MD, FAANS
- Distinguished Service Award Thomas A. Marshall
- Humanitarian Award Barth A. Green, MD, FAANS, FACS



Special Lectures Reflect Neurosurgical Discoveries and Beyond

- Cushing Orator Nathaniel Philbrick, champion sailor, awardwinning scholar and bestselling author
- The Rhoton Family Lecturer Robert F. Spetzler, MD, FAANS
- The Hunt-Wilson Lecturer Richard Gilbertson, MD, PhD
- The Ronald L. Bittner Lecturer Raymond Sawaya, MD, FAANS
- The Richard C. Schneider Lecturer Jon H. Robertson, MD, FAANS
- The Theodore Kurze Lecturer Ian Suk, MD
- The Louise Eisenhardt Lecturer Kristen Iversen
- The Van Wagenen Lecturer Lars Olson, PhD

Neurosurgical Top Gun Competition

For six consecutive years, the Young Neurosurgeons Committee has offered a skills competition for residents and fellows at the AANS Annual Scientific Meeting. Under the leadership of Anand V. Germanwala, MD; and Prashant Chittiboina, MD, MPH, this year's Neurosurgical Top Gun event included stations for imageguided lumbar pedicle screw, bone scalpel, virtual thoracic vertebroplasty, brain-tumor debulking and ventriculostomy simulator. Supporters of this year's innovative competition were Anspach Companies; Aesculap Inc.; Codman & Shurtleff, Inc., a Johnson & Johnson Company; DePuy Spine, Inc., a Johnson & Johnson Company; Medtronic; Immersive Touch; National Research Council of Canada; and the University of Florida.



Thanks to the generous contributions of these corporate supporters, awards were given to the Neurosurgical Top Gun and his/her institution, along with the winners of each individual station. Honors were bestowed upon the following deserving awardees:

- Overall Top Honors (the Neurosurgical Top Gun): Jason Rahal, MD (resident), Tufts Medical Center, Boston (to graduate June 2015)
- Institutional Top Honors: Tufts Medical Center
- Top Honors for the Lumbar Pedicle Screw Station: Jason Rahal, MD (resident), Tufts Medical Center (to graduate June 2015)
- Top Honors for Bone Scalpel Station: Laszlo Entz, MD (resident), Semmelweis University, Budapest
- Top Honors for the Lumbar Vertebroplasty Station: Amit Singla, MD (resident), State University of New York, Syracuse (to graduate June 2014)
- Top Honors for the Ventriculostomy Station: Jason Rahal, MD (resident), Tufts Medical Center (to graduate June 2015)
- Top Honors for the Brain Tumor Debulking: Gregory Hawryluk, MD (resident), University of Toronto, Toronto (to graduate June 2012)

iPod touch Technology Returns for Second Ovation

For the second year in a row, the AANS successfully conducted the Annual Scientific Meeting via the iPod touch. One big difference from the 2010 Annual Scientific Meeting was that members were asked to download the app from the iTunes store in advance of the meeting. The AANS also incorporated enhancements based on member feedback from 2010, including the ability to create individualized schedule items for meetings with colleagues and dinner dates as well as official AANS meetings; taking notes within the program; and a new, userfriendly rating system for electronic posters and abstracts.

iPod touch Initiative Supporters

- Amedica Corporation/US Spine
- Baxter
- Brainlab
- Carl Zeiss Meditec, Inc.
- Codman & Shurtleff, Inc., a Johnson & Johnson Company
- DePuy Spine, Inc., a Johnson & Johnson Company
- Integra LifeSciences
- Leica Microsystems
- Lumenis
- Medtronic
- Methodist University Hospital Brain and Spine Institute
- Moeller-Wedel
- NuVasive Inc.
- Quentry
- Siemens, AG
- Stryker

CELEBRATING INTERNATIONAL OUTREACH

he relationships the AANS builds through its international outreach efforts help members keep abreast of important issues affecting neurosurgery, learn about pending innovations in patient care, facilitate collaboration and bring value through membership diversity.

During the 2011 AANS Annual Scientific Meeting, the AANS celebrated the widespread influence one individual can have in advancing neurosurgery through teaching and training by presenting the Kenichiro Sugita International Symposium. In his lifetime, Dr. Sugita was arguably the most influential and innovative neurosurgeon in Japan. His devotion to teaching neurosurgical trainees, and his interests in international neurosurgery, led to the establishment of a scholarship program enabling young neurosurgeons from around the world to travel to Nagoya to learn from his complex skull base and vascular neurosurgical cases. During the symposium, neurosurgeons of international repute spoke on neurosurgical developments in their countries and described how their careers were influenced by Dr. Sugita. Later, fellows of Dr. Sugita from around the world gathered at a unique reception, honoring their former teacher.

One Sugita fellow was honored with AANS' highest international award. <u>Shigeaki Kobayashi, MD, PhD</u>, was presented with the AANS International Lifetime Recognition Award for his contributions to advancing the field of neurosurgery in Japan and around the world. Dr. Kobayashi is director of Komoro Kosei General Hospital in Nagano,



Japan. He served in leadership roles for the Japanese Congress of Neurological Surgeons, Japan Neurosurgical Society and World Federation of Neurosurgical Societies, where he is now an honorary president. Dr. Kobayashi was selected as a medical commissioner of the International Olympic Committee, which culminated in his being named chief medical officer of the 1998 Nagano Winter Olympics. Working as an associate of Dr. Sugita, Dr. Kobayashi and his surgical practice focused on aneurysms, acoustic tumors, skull base meningiomas and the innovation of surgical instruments. More recently, he has contributed to breakthroughs in the areas of neurosurgical robotics and telesurgery.

Annual Scientific Meeting attendees met Dr. Kobayashi at the AANS International Reception & Award Program, where fellowship recipients and award winners also were introduced.

The AANS International Abstract Award is given to the highest ranking international abstract submitted to the AANS Annual Scientific Meeting. This honor went to Christian Senft, PhD, for his abstract, titled Intraoperative MRI Guided vs. Conventional Microsurgical Brain Tumor Resection Results of a Prospective Randomized Trial.

The AANS International Travel Scholarship provides \$1,500 to support the attendance of a neurosurgeon from a developing country to the AANS Annual Scientific Meeting. The 2011 recipient was Atul H. Goel, MD, from Mumbai, India. His abstract was *Craniovertebral Realignment: Concept, Design and Technique.*

The 2011 recipients of the AANS International Visiting Surgeons Fellowship were Suchanda Bhattacharjee, MD, from Somajiguda, India; and Mohamed El Beltagy, MD, from Cairo. Dr. Bhattacharjee visited British Columbia Children's Hospital under the observation of Paul Steinbok, MD, FAANS; she hopes to develop a pediatric neurosurgical unit in Hyderabad, India. Dr. El Beltagy visited Children's Hospital Boston under the observation of Liliana C. Goumnerova, MD, FAANS, FACS; he focused his observational fellowship on treatments for pediatric brain tumors.

Thinking Outside the Traditional Member Benefits Box

The FAANS honorific went into effect on July 1, 2010, for members certified and practicing in North America. This change came about when voting members approved the AANS Bylaw amendment, changing the category name to Fellow of the American Association of Neurological Surgeons (FAANS). As a result of this change, members in the Resident/Fellow category are now called Candidates.



Raising Awareness by Fostering Fellowship



In the field of medicine, and especially within the realm of the neurosciences, practitioners must dedicate themselves to continuous improvement in their craft. An offshoot of this commitment to extensive education and training, years of residency, and a drive to continually learn is the close-knit connection neurosurgeons develop with

both their colleagues and their field. When an individual receives board certification and reaches that career landmark, it is an accomplishment that not only places them in the esteemed company of their peers, but also represents a level of aptitude that the greater public should recognize.

Developing a term or title that would concurrently highlight an individual's level of achievement to colleagues, as well as their neurosurgical knowledge and skill to overall society, would appear the most logical approach to achieve that goal. And that was precisely the idea Charles J. Prestigiacomo, MD, FAANS, FACS, proposed to AANS President James T. Rutka, MD, PhD, FAANS, after Dr. Prestigiacomo took over as the head of the AANS History Section, and spent time researching the tradition and history of Fellows compared to members.

"Fellowship embodies so much, from the skills needed to achieve it to the camaraderie felt by the individuals who have achieved that status," said Dr. Prestigiacomo, who added that fellowship goes back to the days of guilds, which showed like-mindedness and a commitment to the field. "The honorific of Fellow signifies you have achieved a major milestone within your field. The public at large has an understanding of that. They view that individual as someone who is at the top of their profession. That was the rationale behind the FAANS designation."

In addition, Dr. Prestigiacomo emphasized the role that fellowship status signifies in terms of leadership in the field. "Fellows are experts, masters of the discipline," he explained. "With this privilege also comes responsibility. Fellows of the AANS should be ready and willing to serve and lead in the discipline, which extends from excellent patient care and education to research and organized medicine. AANS Fellows create legacy — a legacy for neurosurgery." While the initial proposal first looked at the comparison between members and Fellows, and other organizations' criteria for fellowship were reviewed, the minimum criteria within the medical field were always similar. Provisional members moved to active members and, ultimately, to fellows. And while AANS members certainly are neurosurgical leaders, Dr. Prestigiacomo said that in attaining that FAANS status, neurosurgeons reach a new pinnacle of excellence.

"The FAANS designation truly signifies a level of accomplishment," noted Dr. Prestigiacomo. "Becoming board-certified is the brass ring and the ultimate goal. Taking and passing the oral board examination is one of the most stressful experiences of your life. It's a major rite of passage. Carrying that title means a person passed all the exams and requirements for the field. It's something the public will more easily recognize."

To help promote the use of the honorific, all AANS members who achieved the FAANS designation received a certificate identifying them as a Fellow of the AANS along with their membership dues. In addition, Dr. Prestigiacomo said that neurosurgeons need to do more to promote and showcase what FAANS means. "We need to show it's more than just something that we add to our name," he asserted. "The public won't recognize it until doctors accept it."

"Being a member of AANS is an honor in itself, and every neurosurgeon has a responsibility to move the field forward," concluded Dr. Prestigiacomo. "Being a Fellow recognizes your level of accomplishment and reminds you of your commitment to the field. It helps patients understand it. The self-recognition certainly

After completing residency training in neurological surgery at the Neurological Institute of New York, Dr. Prestigiacomo completed fellowship training in Neuroendovascular Surgery at the Institute for Neurology and Neuroscience, Beth Israel, in New York City. Dr. Prestigiacomo is now Professor of Neurological Surgery, Radiology and Neurology at the New Jersey Medical School, University of Medicine and Dentistry of New Jersey, and serves as the Residency Director for Neurological Surgery.

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New Mediums Drive Member Communication

AANS Neurosurgeon continues to publish in-depth peer-reviewed articles and explore the key socioeconomic issues affecting the specialty. A decision was made in fiscal year 2011 to transition AANS Neurosurgeon into an online-only publication, enabling quick posting of breaking stories and AANS-focused updates. Cover articles in fiscal year 2011 included "Attracting Top Medical Students to Neurosurgery" and the very timely "Inside Sports-Related Head Injury — Tau Inclusion Bodies and Proteins in a Tangle." The publication of the latter nicely complemented the 79th AANS Annual Scientific Meeting and National Neurosurgery Awareness Week, with their respective sports-related injury prevention themes and events.

The AANS is committed to developing products and services that address both the clinical and practice management needs of its members. In fiscal year 2011, new offerings included:

- Bridging Global Boundaries in Neurosurgery
- Advocating for Organized Neurosurgery Protecting and Expanding its Boundaries
- Promoting the Message Neurosurgery Beyond the Page



While media and its resources were not immune to the economic downturn that continued to hit hard in 2010, AANS media campaigns still scored big in the United States and globally. ANNS-related messaging had the potential to generate 265 million media impressions in 2004; in 2010, AANS-focused messaging potentially generated some 5.5 billion media impressions, close to the world's population,

exceeding 2009 potential totals by 1.5 billion media impressions. In addition to United States media outlets, the AANS-related outreach was picked up in 23 countries around the world.

Sports-Related Injury Prevention Topics Score Winning Goal

The AANS publicized a compendium of articles on ice hockey concussions published in the November 2010 edition of Neurosurgical Focus. Among the authors were neurosurgeons Charles H. Tator, MD, PhD, MA, FAANS; Robert C. Cantu, MD, FAANS, FACS; and Michael D. Cusimano, MD, FAANS. A press conference was held in Toronto on Monday, Nov. 1, in sync with the PR distributed by the AANS that day.

This topic is so timely that several large outlets published multiple articles. The articles continued to generate coverage months later. Top media hits were Associated Press, *The New York Times*, ABC News, *Sports Illustrated*, *Los Angeles Times*, *Chicago Tribune*, *Montreal Gazette*, *The Globe and Mail*, *The Washington Post*, *Atlanta Journal-Constitution*, *San Francisco Chronicle*, The Arizona Republic, The Huffington Post, *U.S. News & World Report*, Yahoo!News. com and *Forbes*. To date, there have been 173 articles reaching a potential audience of 486 million, making this one of the most successful *Journal of Neurosurgery* media campaigns ever and possibly generating the highest media coverage ever via a single AANS press release.

The AANS celebrated National Neurosurgery Awareness Week, April 10-16, 2011, with a Public Service Announcement (PSA) by 2010-2011 AANS President James T. Rutka, MD, PhD, FAANS, leading off the week. The PSA aired 459 times on 441 radio stations in 226 cities/towns across the country and in 24 of the top 25 radio markets. A confirmed 3.4 million people tuned into this specific broadcast over the course of the week.



A Spectrum of Neurosurgical Research Propels the AANS Annual Scientific Meeting Media Message

The 11 scientific abstracts selected by the Public Relations Committee to highlight for the media generated impressive media coverage and matched the 1.15-million circulation mark set at the 2010 AANS Annual Meeting, while the number of articles doubled. Three of the 11 oral abstracts promoted to the media yielded interviews on HealthDay, which led to a combined total of 246 of the 500 articles/ broadcast pieces and, together, 651.7 million media impressions. Coverage was in health-focused media such as Medscape.com and Modern Medicine.com, as well as a wide array of major lay press, including Yahoo!News.com, Forbes, The Wall Street Journal, USAToday, U.S. News & World Report, Bloomberg Business Week, Newsday, Dallas Morning News, Health and RealAge.com. There was broadcast interest, too, with NPR and ABC 7 Chicago among the 146 radio and television stations that covered the research. Furthermore, journalists from all over the world were on board with coverage in Australia, Canada, Germany, India, Mexico, South Africa, Switzerland, Trinidad and the United Kingdom.

Using Video to Place Neurosurgical Education on a Grand Stage

The opportunity to view an operative procedure in the OR has long been one of the best ways for neurosurgeons to understand and learn new techniques. Indeed, the viewing of live procedures was one of the vital tools that neurosurgical pioneer Dr. Harvey Cushing incorporated into his teaching, inviting students and doctors to observe in person so they could take that knowledge on with them wherever they took up practice. In addition, seeing the procedure performed properly can improve the prospects of better overall surgical safety, as well as possibly reduce complications that arise during surgery and improve patient outcomes.

The AANS Operative Grand Rounds video series puts a 21st-century spin on Dr. Cushing's live operative teaching and emphasis on improving surgery — and that was exactly the premise behind the creation of the series, said Aaron A. Cohen-Gadol, MD, FAANS.

"When it comes to learning, it is hard to read about a procedure and fully understand it, grasp all of the details that are so important," noted Dr. Cohen-Gadol. "In the case of neurosurgical procedures, seeing really is believing. That's where the idea of creating a kind of online video database of these procedures came from."

Dr. Cohen-Gadol added that because expert practitioners are found around the globe, it isn't practical — or likely — that neurosurgeons could see these techniques first-hand. "I trained in four different places. Using a video format such as this allows us to really gather content from the best of the best, regardless of where they are located."

The Operative Grand Rounds series capitalizes on ever-improving video capabilities and the boundless expanse of the Internet, giving neurosurgeons easy access to video submissions from a wide range of experts. That diversity of content, which shows neurosurgical leaders performing difficult operations and who have intrinsic knowledge of evidence-based data, allows for an educational forum that is unique and engaging.

"The series focuses on having high-quality content, with the goal being the use of cases that were high-risk and technically challenging," said Dr. Cohen-Gadol. "We sought out cases that neurosurgeons might rarely do, and then had experts share those experiences with us."

But just as important was the need for the content to be webaccessible, because as Dr. Cohen-Gadol noted, "We wanted to make this as widely available as possible. A program like this benefits and



grows through that type of exposure within the specialty. These types of teaching tools that incorporate video, the Web, interactive online portals, they are only going to increase. With the AANS Operative Grand Rounds series, we are able to use all of these elements and bring the surgery, the art, to every surgeon."

New videos continue to be regularly added to the collection, which can be accessed by <u>clicking here</u>, and Dr. Cohen-Gadol added that those updates, along with the interaction and feedback from viewers, are vital to the continued success of the series. "This series really, in many ways, brings us back to the days when members would gather to watch Harvey Cushing perform a procedure. The technology used to deliver the message is different, but the message of improving patient safety and creating an environment that can advance neurosurgical techniques and practices, that is as strong as ever."

Dr. Cohen-Gadol serves as a neurosurgeon at Goodman Campbell Brain and Spine and Indiana University Department of Neurosurgery. He specializes in cerebrovascular, skull base and epilepsy surgery

ADVANCING FUTURE NEUROSURGICAL BREAKTHROUGHS

Medical Student Summer Research Fellowship

Launched in 2007, the Medical Student Summer Research Fellowship Program's goal is to expand neurosurgical curriculum to first- and second-year medical students in the United States and Canada, thereby inspiring them to choose neurosurgery when they make a decision about residency training. Those applying for the Fellowship must also and wish to spend a summer working in a neurosurgical laboratory, mentored by a neurosurgical investigator who is an AANS member and will serve as sponsor to the student. In 2012, the AANS will increase its number of \$2,500 summer fellowships from 15 to 20. Applications for the 2012 awards are due by Feb. 1, 2012. The 2011 awardees include:

Arjun Pendharkar - Stanford University **Robert Mitchell** — University of Toronto David Kurland — University of Maryland Mark Attiah - University of Pennsylvania Jason Mandell – The Pennsylvania State University Ranjith Babu — Duke University Kunal Raygor - UCSF Matthew Amarante - UMDNJ Jessica Swienckowski – Dartmouth College Ryan Alter - Beth Israel Deaconess Medical Center Al-Wala Awad - Phoenix Children's Hospital Andrew Duren — Columbia University David Paul - University of Rochester David Altshuler – University of Michigan Jacob Greenberg – Washington University School of Medicine Marko Spasic - UCLA

William Van Wagenen Fellowship

Awarded annually since 1968, the Van Wagenen Fellowship provides post-resident study in a foreign country for a period of six to 12 months. In 2008, the award stipend was increased from \$60,000 to \$120,000, with an additional \$15,000 award to the host university, lab or program for the 12-month fellowship. There were two Van Wagenen Fellowship recipients in 2011: Nicholas F. Marko, MD, who completed his residency at the Cleveland Clinic in Cleveland in June 2011; and Ben Waldau, MD, who completed his neurosurgical residency in June 2010 at Duke University in Durham, N.C., followed by an endovascular fellowship at the University of Florida in Gainesville, Fla.

Dr. Marko will travel to the United Kingdom to study with Professor Raymond Goldstein at the University of Cambridge, Department of Applied Mathematics and Theoretical Physics (DAMTP); in addition, he will be mentored by Professor Simon Tavare at the UK Cancer Research Institute (CRI) and DAMTP. Dr. Waldau will travel to Germany to study with Professor Gerd Kempermann at the University of Dresden (Center for Regenerative Therapies). The fellowships commenced on July 1, 2011, and will be completed within the 12-month period of the grant.

Van Wagenen Road Show

The Van Wagenen Road Show, brainchild of 2003 Van Wagenen Fellow Odette A. Harris, MD, MPH, FAANS, is leading the efforts to further increase awareness of and interest in the Van Wagenen Fellowship. This outreach program commenced at the beginning of the 2010 academic year. The goal of the initiative is to have direct contact and exposure with the resident staff to discuss the fellowship, share firsthand experiences, and discuss the career rewards and benefits generated by this truly unique Fellowship.

Dr. Harris has coordinated the traveling "road show" with other past Van Wagenen Fellows by using cross-referenced lists of past Fellows, academic neurosurgery programs and Department Chairs, and has established 10-15 institutions and awardees to visit each year in order to promote the Fellowship. A budget for this project was established and approved by the Van Wagenen Fellowship Committee and the Rochester Area Community Foundation prior to commencement of the program.

Under Dr. Harris' plan, the country is divided up into four national regions. To include those beyond the U.S. border, an international region also exists. Former Van Wagenen Fellows will be asked to volunteer as speakers and visit various institutions each year until all residency programs are covered across a three-year period. Past Fellows have been matched with appropriate institutions in

close proximity to where they reside and or may be traveling as a visiting professor. Program Directors initially were contacted by e-mail, followed by a personal phone call from Dr. Harris. Past Fellows have begun contacting Program Directors to schedule their visits. The past Fellows believe that direct interaction with today's best and brightest is an essential factor in exposing current residents to the benefits of the Van Wagenen Fellowship. This will allow a deeper understanding of the awards available and the opportunities they afford.



POST-RESIDENCY CLINICAL FELLOWSHIP PROGRAM MOVES RESEARCH ENDEAVORS BEYOND THE HORIZON

xpanding beyond its traditional research grants and young clinician awards has enabled the Neurosurgery Research and Education Foundation (NREF) to support neurosurgical education in another meaningful way, and has allowed partner companies to continue to support high-quality education and training in a transparent and independent manner. In fiscal year 2011, the NREF expanded its ability to support important education through several new partnerships.

The NREF entered into agreements with DePuy Spine, Inc., a Johnson & Johnson Company; Medtronic; Zimmer Spine, Inc.; and Lanx, Inc. in fiscal year 2011 to provide funding to the NREF in support of the post-residency fellowship program with a focus on spine. They also reached agreement in fiscal year 2011 with Codman & Shurtleff, Inc., a Johnson & Johnson Company, in support of two programs — the first focuses on areas including general neurosurgery, pediatric neurosurgery, neurosurgical oncology, peripheral nerves, neurocritical care, stereotactic/functional neurosurgery and other cerebrovascular-related areas; the second is devoted to endovascular neurosurgery.

The NREF is responsible for all aspects of the fellowship grant program, including review and approval of grant applications. The NREF bestows grants based upon established fellowship

2011-2012 DePuy Spine, Inc.; Medtronic; Zimmer Spine, Inc.; and Lanx, Inc. Spine Fellowship Funding Recipients

- Cleveland Clinic
- Johns Hopkins University
- Medical College of Wisconsin
- Northwestern University
- Rush University
- Stanford University
- University of California at Los Angeles
- University of California at San Francisco
- University of Miami
- University of Michigan
- University of Utah
- University of Virginia, Charlottesville
- University of Washington

program criteria and the needs of the requesting hospital and/or academic institution. The NREF Educational Grants Committee (EGC), established in 2009, is comprised of neurosurgeons that do not receive financial or other support from the medicaldevice industry, who review and approve fellowship grant applications in an independent, unbiased manner. Individuals serving on the EGC are volunteers and do not receive compensation from the NREF for their efforts. Corporate supporters of this program have no role in the selection of fellows or training institutions that receive funding.



2011-2012 Codman & Shurtleff, Inc. General Neurosurgery Fellowship Funding Recipients

- Sloan-Kettering Institute for Cancer Research (neurosurgical oncology)
- University of Toronto (stereotactic/functional)
- University of Utah (pediatrics)

2011-2012 Codman & Shurtleff, Inc. Endovascular Neurosurgery Fellowship Funding Recipients

- Methodist Healthcare Foundation, Semmes-Murphey
- University of Texas Southwestern Medical Center
- Cedars-Sinai Medical Center
- University of Florida

Teaming up To Benefit Research

Twenty-four teams of neurosurgeons from top medical institutions competed June 4, 2011, in New York City's Central Park at the 8th Annual Neurosurgery Charity Softball Tournament. Supported by AANS and hosted by Columbia University, the event benefited brain tumor research through the NREF and the Pediatric Brain Tumor Research Fund at Columbia University.

This year's competing Departments of Neurosurgery included Alabama, Albert Einstein, Barrow Neurological Institute, Colorado, Columbia, Cornell/Memorial Sloan-Kettering, Dartmouth, Duke, Emory, Florida, Harvard, Hopkins, Miami, Mount Sinai, Northwestern, NYU, Penn, Penn State, Pittsburgh, Jefferson, Toronto and Utah. The playoff field included Cornell/MSK and Columbia from the New York division; Alabama and Emory from the South division, Barrow and Pittsburgh from the West division, and Penn and Harvard from the East division. The Final Four teams were Emory, Alabama, BNI and Penn, with the BNI claiming its second consecutive championship by beating Alabama in the finals. Adib Abla, MD, of the BNI was named the tournament's Most Valuable Player.

For the eighth consecutive year, the Steinbrenner family and the New York Yankees sponsored the tournament. In addition, Mayor Michael Bloomberg declared the date "Neurosurgery Charity Softball Tournament Day" in the city of New York.

The post-tournament reception was again held at the Bryant Park Grill and sponsored by Brainlab. Other sponsors for the tournament include Aloka, Alpha Omega, Baxter Biosurgery, Globus Medical, Integra Foundation, Medtronic, Synthes Anspach, Synthes CMF, Thieme and Zimmer Spine. Sponsorship for this year's event was strong, with nearly \$57,000 in research funds raised. Visit <u>www.neurocharitysoftball.org/sponsors</u> to view all of this year's supporters and links to their websites.

Hitting a Home Run for Brain-Tumor Research



When Ricardo J. Komotar, MD, set up a few friendly games between four New York City neurosurgical programs while interning at Columbia University Medical Center's Department of Neurological Surgery in 2004, he didn't foresee it morphing into a tournament that attracts dozens of teams of physicians from around the country, is sponsored by the New York Yankees and has had the date of the games declared "Neurosurgery Charity Softball Tournament Day" by New York Mayor Michael R. Bloomberg. But the Neurosurgery Charity Softball Tournament, which on June 4, 2011, featured 24 teams from as far away as Arizona and Colorado, has become a revered event among participants — and also has evolved into a tremendous fundraising vehicle in the effort to fight brain tumors and promote brain-tumor research awareness. Over the tournament's eight-year existence, more than \$350,000 has been raised for the Neurosurgery Research and Education Foundation of the AANS and the Columbia University Pediatric Brain Tumor Research Fund - the latter of which Dr. Komotar founded while at Columbia.

"The growth and success of this tournament is a direct result of the collaboration between the AANS/NREF and Columbia University, as well as a tribute to the dedication and commitment of each participating team to supporting neuro-oncology research," said Dr. Komotar. "It also highlights how people want to give back to their profession and support something that benefits everyone."

Dr. Komotar looks to promote that sense of fellowship and giving as tournament organizer, working with colleagues to raise funds that

help the NREF accomplish its mission. NREF funds well-conceived clinical and outcomes research projects that are patient-oriented, and address necessary improvements in patient care and quality of life: The 2011 event has already raised some \$57,000.

"When the opportunity arose for the AANS to support the 2011 Annual Neurosurgery Charity Softball Tournament in Central Park, I jumped at it, as I knew this would be a great event for a great cause," noted AANS President James T. Rutka, MD, PhD, FAANS. "All players on the teams who participated were delighted to know that some of the proceeds were going directly to support the NREF and its mission to fund neurosurgical research."

Not only does Dr. Komotar actively coordinate tournament activities and serve as a liaison to promote the event, but as the program evolved into a charity event, he sought out new ways to champion the cause of brain-tumor research to larger audiences. A friend's recommendation to contact the New York Yankees about sponsoring the tournament led to hours on the phone with the team's front-office personnel. Eventually, Dr. Komotar's persistence paid off when then-Yankee owner George Steinbrenner concurred that sponsoring the tournament — and supporting its cause — was a good idea.

"The New York Yankees' involvement really added validity to the charity," said Dr. Komotar, who noted that the team supports the event both monetarily and via in-kind mention. "To put the name of arguably the most well-known sports franchise in the world with our event, it really lends credence to what we are doing and raises awareness with other potential supporters."



Dr. Komotar now serves as Assistant Professor, Department of Neurological Surgery, at the University of Miami (FL) School of Medicine after having completing his neurosurgical residency at Columbia University Medical Center and fellowship in surgical neuro-oncology at Memorial Sloan-Kettering Cancer Center.

INNOVATIVE NEUROSURGICAL RESEARCH ADVANCES PATIENT CARE

he Neurosurgery Research and Education Foundation (NREF) was established in 1981 in response to the alarming decline in federal, state and private funding for medical research. The mission of the NREF is to provide a private, non-governmental source of funding for research training in the neurosciences.

Since awarding its first grant in 1983, the NREF has bestowed much sought-after research grant support to 167 worthy applicants. The majority of the residents and young clinicians/researchers who have received NREF grants continue their work in the same areas, contributing significantly to the field of neurosurgery in their professional careers.

In fiscal year 2011, there were 98 first-time individual donors, generating \$12,888 in support. The dues and online appeals generated 386 donors and total giving of \$67,793. Overall, there were 634 donors in fiscal year 2011, including members, corporations, groups/hospital practices and the general public, for \$1,770,450 in total support.

NREF Research Fellowship Award (\$40,000 for One Year)

Sameer Sheth, MD, PhD, Massachusetts General Hospital (cosponsored by the American Academy of Neurological Surgery [AAcNS]), *Intraoperative Functional Brain Mapping with Optical Polarization Imaging*

Stephen Monteith, MD, University of Virginia (cosponsored by the Cerebrovascular Section), *MRI Guided Focused Ultrasound Sono-Thrombolysis for the Evacuation of Intracerebral Hemorrhage* — A Safety and Feasibility Study

Nirav Patel, MD, University of Wisconsin, Madison (cosponsored by Codman, a Johnson & Johnson Company), *Investigating an Epigenetic Intervention to Promote CNS Regeneration through the Folate Pathway*

D. Ryan Ormond, MD, New York Medical College (cosponsored by Medtronic), *Enhanced Recovery after Spinal Cord Injury Utilizing Engineered Stem Cells and Naturally-Occurring Anti-Inflammatory Compounds*

Deshdeepak Sahni, MD, Baylor College of Medicine (cosponsored by Medtronic), *Carbon Nanomaterials as a Scaffold for Axonal Growth and Alignment Following Spinal Cord Injury*

Jon Willie, MD, Washington University in St. Louis (cosponsored by Porex Surgical), Orexin Neuropeptide Dynamics in Experimental Traumatic Brain Injury: A Key Mediator of Arousal and Therapeutic Target

Christoph Hofstetter, MD, Weill Cornell Medical College (cosponsored by the Section on Tumors), *Role of Novel Protein Phosphatase Isoform in Human Glioblastoma Multiforme*

Ning Lin, MD, Children's Hospital Boston/Brigham & Women's Hospital, *Apoptosis and Cerebral Vasospasm Following Subarachnoid Hemorrhage: Functional Interaction Between Endothelial Cells and Neurons*

NREF Young Clinician Investigator Award (\$40,000 for One Year)

Allen Waziri, MD, University of Colorado, Denver (cosponsored by Biomet MicroFixation), *Exploration of the Role of Hypoxia-Associated Adenosine Production in the Suppression of Anti-Tumor Cellular Immunity in Glioblastoma Multiforme*

Hongyan Jenny Zou, MD, Mount Sinai School of Medicine (cosponsored by Codman & Shurtleff, Inc., a Johnson & Johnson Company; and DePuy Spine, Inc., a Johnson & Johnson Company), *Intrathecal Delivery of AAV-Virus Targeting the BMP Pathway to Promote Axonal Regeneration*

Michael Steinmetz, MD, Cleveland Clinic (cosponsored by the Spine Section), *Restoration of Urinary Function Following Acute Spinal Cord Injury*

Teaming up To Benefit Research

This program is a cumulative, lifetime and planned/deferred giving society for neurosurgeons who support the NREF. The goals of the NREF Cushing Circle include increasing NREF giving (annual, major and planned gifts), creating an organizational identity and building camaraderie among philanthropists who consistently support the NREF. Contributors who have made significant financial commitments to the NREF and neurosurgical research are eligible to receive benefits, including special invitations to AANS Annual Scientific Meeting VIP events, advance notification on new products, services and educational offerings, and more. Criteria for individual membership include:

- Historical giving total of at least \$20,000
- Historical giving total of at least \$10,000, with a pledge of at least \$10,000 within the next five years (at a minimum rate of \$2,000 per year)
- Historical giving total of at least \$10,000, with a memorandum of understanding for a willed bequest of at least \$50,000.

The generosity of these individuals has enabled the NREF to ensure the future of the neurosurgical specialty by assisting the NREF accomplish its mission of providing a private, non-governmental source of funding for research training in the neurosciences.

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Cushing Circle of Donors

In fiscal year 2011, the NREF Cushing Circle of Giving Society added 11 new members, reaching a total of 32 at year's end. The current list includes:

Merwyn Bagan, MD, MPH, FAANS, FACS & Mrs. Carol Bagan Timir Banerjee, MD, FAANS, FACS Charles L. Branch Jr., MD, FAANS* Mrs. E. Laurie Bittner Hans C. Coester, MD, FAANS, FACS John G. Golfinos, MD* Michael W. Groff, MD, FAANS* Dr. and Mrs. Robert G. Grossman Dr. and Mrs. Robert L. Grubb Jr. Dr. and Mrs. John Guarnaschelli Regis W. Haid Jr., MD, FAANS* Robert E. Harbaugh, MD, FAANS, FACS* Griffith R. Harsh IV, MD, FAANS & Ms. Margaret C. Whitman Dr. and Mrs. Robert Levinthal Paul C. McCormick, MD, MPH, FAANS, FACS* Praveen V. Mummaneni, MD, FAANS* Dr. and Mrs. Herbert Oestreich Dr. and Mrs. Russel H. Patterson Jr. Bruce E. Pollock, MD, FAANS* Donald O. Quest, MD, FAANS Dr. and Mrs. Robert A. Ratcheson Dr. and Mrs. Albert L. Rhoton Jr. Gail L. Rosseau, MD, FAANS Dr. and Mrs. Richard L. Rovit James T. Rutka, MD, PhD, FAANS, FACS* Dr. and Mrs. John F. Schuhmacher Edward L. Seljeskog, MD, PhD, FAANS Dr. and Mrs. Warren R. Selman Christopher I. Shaffrey, MD, FAANS* Ms. Virginia Van Sant Reeves Clarence B. Watridge, MD, FAANS, FACS* Seth Weingarten, MD, FAANS

Five (5) New AANS Pinnacle Partners

- NuVasive, Inc.
- Penumbra, Inc.
- Philips Healthcare
- Siemens Medical Systems
- Zimmer Spine

Nineteen (19) Existing AANS Pinnacle Partners

- Biomet Spine
- Brainlab
- Carl Zeiss Meditec, Inc.
- Codman & Shurtleff, Inc., a Johnson & Johnson Company
- Covidien
- DePuy Spine, Inc., a Johnson & Johnson Company
- Elekta
- ev3
- Globus Medical
- Integra LifeSciences
- Medtronic
- MicroVention Inc.
- Monteris Medical
- Spine Wave, Inc.
- Stryker Neurovascular (formerly Boston Scientific Neurovascular)
- Stryker Spine
- Synthes Anspach (formerly Anspach Companies)
- Synthes Spine
- Varian Medical Systems

Corporate/Leadership Council

The Corporate/Leadership Council's mission to provide a forum for discussion and collaboration between the AANS and its corporate partners on issues related to neurosurgical education, research, advocacy, and patient care is steady and remains a cornerstone of the meetings.

The AANS Corporate/Leadership Council convened its annual meeting-of-the-minds in July 2010 in Chicago. Eleven of the 19 Pinnacle Partner companies at the time participated in this day-long gathering. Joined by many members of AANS' Board of Directors and Development Committee leadership, the group spent the day discussing topics of mutual interest, including new developments in the field of neurosurgery, advocacy, health-care reform, outcomes research, education for residents and attending surgeons as well as the changing face of the specialty outside of the United States.

The meeting again generated a number of action items for the Council to focus on, including expanded annual meeting educational offerings in the areas of MIS and visualization; developing better communication between the Pinnacle Partners and AANS/CNS Washington Committee; and possible support of neurosurgeons residing outside the United States who would come here to study specific spine surgery techniques, then return to their home countries to be credentialed or certified.

ADVANCING NEURORESEARCH

Donor Support 2010-2011

The Executive Council of the Neurosurgery Research and Education Foundation (NREF) gratefully acknowledges the more than 630 individuals, groups, medical practices, corporations and members who benevolently supported the NREF from July 1, 2010, through June 30, 2011.

*Denotes NREF Cushing Circle of Giving Member

Summa Cum Laude - \$5,000 and above

Hans C. Coester, MD, FAANS, FACS* Michael W. Groff, MD, FAANS* Griffith R. Harsh IV, MD, FAANS* Paul C. McCormick, MD, MPH, FAANS, FACS* James T. Rutka, MD, PhD, FAANS, FACS* Christopher I. Shaffrey, MD, FAANS*

Magna Cum Laude - \$2,500 to \$4,999

Charles L. Branch, Jr., MD, FAANS* Robert L. Martuza, MD, FAANS Praveen V. Mummaneni, MD, FAANS* Bruce E. Pollock, MD, FAANS* Troy M. Tippett, MD, FAANS Joseph C. Watson, MD, FAANS

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2011 FINANCIAL SUMMARY

The sound fiscal policy of the AANS and its leadership was again demonstrated in fiscal year 2011, as the organization recognized a profit of \$2,564,127. This marks the ninth time during the last decade that AANS has finished the fiscal year with a positive gain. More importantly, the outstanding guidance provided by leadership and management has built a strong, stable backbone that will allow the organization to dedicate more resources toward the betterment of membership and neurosurgery in the coming years.



This report reflects the combined financial statements of the American Association of Neurological Surgeons and the American Association of Neurosurgeons covering the period of July 1, 2010, through June 30, 2011.

REVENUE

Net operating revenue again showed growth and improvement for AANS in fiscal year 2011, realizing a \$707,800 improvement over 2010 figures. All net revenue centers with the exception of Products and Services surpassed the totals of their respective areas from the previous year. And while challenging stock market conditions remained omnipresent in 2010, the overall correction in the market allowed AANS to realize an investmentearnings increase of \$437,200 over last year.

- The Journal of Neurosurgery Publishing Group saw its net revenue eclipse the \$1 million mark in 2011. The \$1,038,300 generated by JNS equated to a 55 percent increase over the \$668,900 in revenue produced in 2010 — and a \$714,400 jump from JNS' net revenue of \$323,900 in 2009.
- The 2011 AANS Annual Scientific Meeting witnessed a \$200,300 improvement in net revenue, despite a decrease in overall gross revenue. A combination of excellent planning, as well as lower costs associated with use of the iPod touch and the exhibit program, helped the organization realize these gains.
- Education and practice management workshops saw gross revenues jump by \$500,500 in 2011, bolstered in strong part by sizeable gains in both coding and reimbursement courses, as well as resident courses. These two areas improved by \$169,100 and \$222,500, respectively.

The pie chart (page 26) indicates the various income sources. These sources remained relatively consistent with fiscal year 2010, with the largest changes occurring within the Annual Scientific Meeting and Professional Development areas at 2.8 and 2.9 percent, respectively.

EXPENSES

Overall gross expenses held steady in 2011, with AANS realizing a \$63,800 reduction in comparison to 2010 figures. Efficient, cost-effective financial management was judiciously employed by AANS leadership and staff, in conjunction with astute and strong reasoning supplied by the AANS Finance Committee.

- The 2011 AANS Annual Scientific Meeting in Denver continued to push the technology envelope with the integration of the Annual Meeting app and iPod touch. However even as more innovative "paperless" ideas were introduced via this format, AANS was able to reduce expenses around the event by some \$624,000. In addition to reduced expenses for iPod touch devices, significant savings were realized on food and beverage needs, practical clinics and logistical coordination.
- The Journal of Neurosurgery Publishing Group again posted an amazing number of articles both in print and online, and also put the finishing touches on an entirely updated website with improved search functionality. But even with the number of submissions and the changes that were made, JNS also was able to reduce its expenses by \$184,000 in 2011.
- Collaborative efforts and programs with other like-minded organizations are critical in AANS' efforts to carry out its mission, promote change, and establish new opportunities for scientific partnership and creativity. In 2011, AANS teamed with other groups on a wide range of committees and projects, yet still saw gross expenses associated with Joint Programs and Committees decrease nearly \$30,000.

All year-end financial statements of the AANS are reviewed by outside auditors. Any material differences between a published financial statement and the auditors' report are communicated to AANS members in AANS Neurosurgeon. Copies of the most recent audit are available to members by writing to: AANS Accounting Department, 5550 Meadowbrook Drive, Rolling Meadows, IL 60008-3852.

STATEMENT OF FINANCIAL POSITION 6/30/2011

ASSETS 2010-2011

TOTAL ASSETS	\$21,436,598
Other Assets	
Property and Equipment, net	
Other Current Assets	
Cash and Investments	

LIABILITIES AND EQUITY

2,303,022
\$6,465,419
\$14,971,179
¢21 /24 E09

INCOME STATEMENT

Revenue	
Operating Revenue	
Operating Expenses	
NET OPERATING INCOME (LOSS)	\$1,167,508
Non-Operating Activities	
NET INCOME (LOSS)	\$2.564.128



FY2011 SOURCES OF REVENUE

- Annual Meeting—30.2%
- Journal of Neurosurgery—28.8%
- Dues—14.9%
- Professional Development—12.4%
- Products & Services—2.9%
- Contract Services—3.6%
- Joint Programs—3.9%
- Other-3.3%

AANS Mission Statement

The American Association of Neurological Surgeons (AANS) is the organization that speaks for all of neurosurgery. The AANS is dedicated to advancing the specialty of neurological surgery in order to promote the highest quality of patient care.

AANS VISION STATEMENT

- The American Association of Neurological Surgeons will ensure that neurosurgeons are recognized as the preeminent providers of quality care to patients with surgical disorders that affect the nervous system.
- The American Association of Neurological Surgeons will work to expand the scope of neurosurgical care as new technologies and treatments of neurological disorders become available.
- The American Association of Neurological Surgeons will be the organization speaking for neurosurgery through its

communications and interactions with the public, media, government, medical communities, and third party payers.

- The American Association of Neurological Surgeons will be its members' principal resource for professional interaction, practice information and education.
- The American Association of Neurological Surgeons will promote and support appropriate clinical and basic science to expand the scope of neurosurgical practice.

2010-2011 LEADERSHIP

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Deputy Executive Director Ronald W. Engelbreit, CPA

Associate Executive Director— Member Services Kathleen T. Craig

Associate Executive Director— Education & Meetings Joni L. Shulman, MPH

Departments

Accounting Development Education Governance Information Services Journal of Neurosurgery Marketing Meeting Services Member and Public Outreach Member Services Washington Office

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