2011 Presidential Address

Christopher C. Getch, MD

Foreword by Christopher E. Wolfla, MD, 62nd President of the CNS

In January of 2012, the Congress of Neurological Surgeons suffered a tragic and unexpected loss with the untimely death of Dr Christopher C. Getch, the 61st President of the CNS. Having known and worked with Dr Getch since 2000, when we were both appointed to the CNS Executive Committee, I can personally attest to the profound sense of vision and leadership he brought to the CNS, as well as to the tremendous void his passing left in our specialty.

During the 2011 CNS Annual Meeting in Washington, DC, Dr Getch delivered a poignant and inspiring address on the state of our specialty and how the changing regulatory environment has impacted the way neurosurgeons are valued by patients and by society (Figure 1). His address touched on the unique character of a neurosurgeon and the profound sense of duty we have always felt toward our profession. He encouraged us all to protect our ability to give back to the profession through volunteerism, in spite of the changing environment around us. The following is a transcript of this earnest and insightful Presidential Address from one our specialty's most inspiring leaders—a man who worked tirelessly throughout his career on behalf of the CNS, its members, and the profession of Neurosurgery.

Ladies and gentlemen, members and special guests, welcome to the 61st Annual Meeting of the Congress of Neurological Surgeons here in the nation's capital. I'm deeply honored to have had the opportunity to serve you as the 61st president of the Congress. I hope I have represented you well.

This year has afforded me the extraordinary opportunity to work closely with so many talented and dedicated individuals across the full spectrum of our specialty, both here and abroad. It has been a humbling experience and made me proud to be a neurosurgeon. First and foremost, I would like to thank this year's Executive Committee. No one can do this job alone. Their creativity, energy and dedication in carrying out the mission of the Congress has been simply exemplary. I would like to especially acknowledge Drs Russell Lonser, Ganesh Rao and Alan Scarrow for taking ideas, concepts, topics and educational theory and transforming them into this Annual Meeting. I would also personally like to thank Drs Jim Rutka and Paul McCormick, both remarkable individuals who have served as the AANS presidents during my tenure. I would like to thank them for their personal advice, for embracing the spirit of collegiality and cooperation between our two organizations, and for often sharing a common vision for the future of our specialty. The CNS has invited the Spanish Society of Neurosurgery to be our guest society for this meeting. I must thank Miguel Manrique, president of the society, and all the members present for this partnership and for extending such remarkable hospitality to each and every one of the CNS members who participated in our joint meeting in Madrid this past May. To serve the organization has been a privilege, for which I must thank all my colleagues at

Northwestern for their recognition of the value of volunteerism and unquestioning support this year.

There are two very special people I'd like to acknowledge as responsible for my becoming involved in the Congress: Dr William Buchheit, my chairman during residency, and Dr Hunt Batjer. More than a decade ago, I sat in the audience of the Congress meeting in Boston and listened to Dr Batjer delivering his presidential address. Words are not enough to express my gratitude to both of these men for their mentorship and advice, and most importantly for encouraging me many years ago to volunteer my time to the Congress.

Finally, I must thank and acknowledge my wife, Gail, and four sons, Chris Jr., Oliver, Charles, and our newest addition to the family this year, William, for their patience and understanding. This year, Gail has given me her unwavering support even while looking after a newborn, so I was able to dedicate myself to the work of the Congress.

At the turn of the 20th century, as the industrial age was in full swing, our nation was increasingly filled with ceaselessly energetic, innovative, overwhelmingly idealistic and proud citizens. This young nation was experiencing a rapid evolution and progression in technology, industry and the arts. There was a strong desire amongst its people to acknowledge, celebrate and memorialize America's progress and unique character through literature, the arts and architecture. Beaux-Arts architecture expresses the academic, neoclassical architectural style taught in the French School of Beaux-Arts. This Parisian school heavily influenced U.S. architects at the turn of the 20th century. The American architect, Richard Morris Hunt, was the first American to attend the school and was followed by a generation of future architects. Hunt insisted that architects were professionals, whose work was as necessary to the growth and survival of society



FIGURE 1. In Memoriam, Christopher Caldwell Getch, MD, 61st President of the Congress of Neurological Surgeons.

as that of doctors and lawyers. The Beaux-Arts style embraced, what they called, an architectural parlante, or speaking architecture, referring to the concept of buildings that explain their own function or identity through design, sculpture or inscriptions. Their inscriptions are widely found today on memorials and public buildings built during that time of great national pride and reflection. In many cases, the inscriptions are selected to echo not only the purpose of the building but also, more significantly, for their enduring message and inspirational value. The words written on the Farley Post Office building designed by McKim, Mead and White in 1912 and adapted from Herodotus are well known to this audience. "Neither snow nor rain nor heat nor gloom of night stays these couriers from the swift completion of their appointed rounds."

Importantly, these architectural inscriptions often represent a rich literary and historical archive. When considered broadly, it can be said that they embody and memorialize the essence of a unique American character, feelings, ideals and identity. They reflect the diversity of issues facing our nation at that time: freedom, justice, war, history, education and commerce. They are drawn from significant written and spoken words that have resonated throughout Western history. It is through a few of these inscriptions that my comments this morning are framed. With some, I have a personal connection. Others, not. But when viewed in the context of our profession, I feel that they each carry enduring messages for all members of our specialty regarding questions that we face daily about individual value, truth, integrity, duty, knowledge and unity. Together, these important elements lend the neurosurgeon that which is most central and important to us, our personal and professional identity. I would like to touch on these elements in more depth in the context of our profession as it stands today.

Presbyterian Hospital in New York has above its entrance way, carved nearly a century ago, the words, "For of the most High cometh healing." These words are drawn from the King James Bible, Ecclesiastics, Chapter 38, of which the first three lines read, "Honor a physician with the honor due unto him for the uses which he may have of him, for the Lord hath created him. For the most High cometh

healing and he shall receive honor of the king. The skill of the physician shall lift up his head and in sight of great men he shall be in admiration." These words placed at the entrance to this majestic building made clear its purpose and the value of those who fulfilled its mission. When physicians walk through the arch doorway of the hospital on their way to morning rounds, they had merely to look above the door and briefly reflect on what was written there in stone to reaffirm their place in society and their value to their patients.

The rise of architectural modernism in the 1940s brought with it a movement away from architectural parlante as it existed at the turn of the century. Inscriptions were no longer employed during building and design. As a result, what can most often be found at the entrance to the hospitals today is the name of the hospital and perhaps the name of the major benefactor who supported its construction. Similar to this shift in the focus of architectural design, so was how physicians are viewed and valued by patients, hospitals and societies also changed. Medicine has become a business, one in which administrators and hospital vice presidents, rather than physicians function as the structural core and set our value. We, as a specialty, as yet have not lost sight of our importance to patients and society. We can still see clearly the impact we have on the lives of our individual patients and their families every day. But our value beyond individual patient care is sometimes hard to see even from within our specialty and frequently more difficult to quantify. There are many ways to understand and to measure value. Professor F.X. Hughes of the Kellogg School of Management, in a proposal to a CNS Executive Committee several years ago wrote that, "The process of assessing the value of the Neurosurgery Society requires an indirect approach to measuring." There is value, for example, in simply knowing that there are members of our society well trained, available and on call to deal with neurosurgical issues should the need arise. So-called societal peace of mind. There is value derived from the benefits of technological progress within the specialty. The value of time spent on research today that is not guaranteed in the future to enhance patient care is and always will be difficult to quantify. Collectively, these are often the traditional areas in which we search for our self-worth. What has changed more recently and more significantly for all of us is the way we are directed to measure value in ourselves from outside the traditional confines of medicine. The impetus for this change in perspective has occurred from outside the specialty, from business, from government with a message carried forward by the media. It seems no longer to be a given that we, as specialists, are interested or are capable of providing effective and efficient healthcare. Simply put, to be valued, we must provide a concrete and quantifiable value. Somehow for the long-term benefit of our profession and for each of us, we must work to bring our view of value into closer alignment with the view of value articulated by those outside our specialty.

Each of us has the responsibility to act as spokesperson for what we, as a specialty, bring to the table. But in the process, we must also make a conscious effort to become more efficient and cost effective, and to appreciate the value of our actions for society and the financial impact on the individuals we care for. It starts in training - by educating the next generation about resource utilization and about developing mechanisms to provide a meaningful analysis of outcomes. Many in hospital-based practice have been or will be exposed to a DRG-based hospital analysis of an individual practice as compared to your peers. It can be an eye-opening experience and, at the same time, useful if accepted in the proper frame of mind. Specialty driven efforts directed at practice guidelines and evidence-based treatment algorithms can provide the larger framework within which efficient and cost effective healthcare can be delivered. Further, we must embrace efforts to analyze and quantify the cost of defensive medicine as it relates to the bigger issue of liability reform and its impact on the overall cost of healthcare. When all these things are considered in aggregate, they will likely begin to address the misperceptions surrounding our social value as a profession. We must not, in the process, let the current climate negatively impact our medical responsibilities to our patients. It is clear that the time to change and adapt has arrived, but it should be on our terms, keeping in mind that much of the criticism of today is written on paper, but that our true value is carved in stone.

In the words of Socrates, "The unexamined life is not worth living." Early in my educational journey before neurosurgery, I was exposed to a similar motto that has stuck with me from my adolescence, "Dare to be true." For current students, faculty and graduates of Milton, this shared motto not only states a core value but also describes the culture of their academic community. That a vital and effective community is built on the integrity, self-confidence, honesty of the individuals in that community, on shared respect and open exchange of ideas between those individuals, and on the creation of an environment that fosters an atmosphere of intellectual freedom and encourages individual initiative. The vitality of this community depends upon the assumption that these core values are shared by its members. Unfortunately, we're not practicing medicine on the campus of a New England prep school, but rather in an environment in which there is a steadily increasing criticism that calls into question the personal and professional integrity and honesty of physicians. These criticisms, which have been widely circulated in print and emanate frequently from this very city, center around physician-industry relationships and the validity of medical research or patient treatment recommendations because of the presence of financially linked bias. Mark Twain once said, "A lie can travel half way around the world, while the truth is putting on its shoes." It's imperative for the survival and future of our specialty that this single issue is dealt with immediately, effectively and to the only acceptable outcome to us and the public. That in the final analysis, our patient care, our research, our journals and publications, and our educational processes are unimpeachable and reach the highest standards of academic and professional integrity. Only with complete trust in the individuals who constitute this specialty can the public believe in the value of our care and the value of our scientific contributions now and in the future.

It is written in the Princeton University Rights, Rules and Responsibilities Handbook that, "The ability of the university to achieve its purposes depends on the quality and integrity of the work that its faculty, staff and students perform. Academic freedom can flourish only in a community of scholars, which recognizes that intellectual integrity, with its accompanying rights and responsibilities lies at the heart of its mission. Observing basic honesty in one's work, words, ideas and actions is the principle to which all members of the community are required to subscribe." We must individually embrace personally, professionally and as a specialty the measures that are necessary to attain this vital objective. Adapted from Aristotle's ethics, W.D. Ross has written that, "There are specific, innate duties that constitute our integrity as individuals. These duties include fidelity, reparation, justice, beneficences, self-improvement, non-malfeasance and gratitude." From a recognition, understanding and acceptance of these duties flow principles of behavior that can translate into the highest levels of integrity. As a specialty, we have accepted the rules of engagement imposed upon us from our universities and industry partners. We have initiated measures ourselves in our meetings, our journals and our organizational governance and structure. But as potentially rapid, sweeping and effective as these measures may be in restoring public trust in our specialty, they must be carefully balanced with the potentially negative impact on the individual's desire and ability to undertake research in conjunction with our industry partners. Collaboration with industry is essential to the advancement and future of our field and of patient care. We have an obligation now to create, going forward a healthy environment for innovation, for the best and brightest of the specialty and for our patients in need.

When I'm in Washington, I always visit Arlington National Cemetery. I do this for a personal reason. My step-father, Robert Greeley is buried there. He had a long and distinguished career in the U.S. Navy, retiring as a Commander. It was always his wish to be laid to rest in this place of honor, our country's most sacred shrine. I usually walk down from the entrance gates to the far south corner of the cemetery in the shadow of the Pentagon along Patton Drive where his gravestone is placed, identical to the ones that surround it. Walking back along drives named for McClellan, Roosevelt, Wilson, and Farragut brings me past a sight in Arlington that has also given me reason to pause: the Confederate Monument.

World renowned sculptor, Moses Ezekiel, a highly decorated veteran of the Confederate Army, completed the Confederate Monument in 1914. Standing atop the 32-foot monument is the figure of a woman, representing the South. Her head is crowned with olive leaves, a symbol of peace. And her left hand extends a laurel wreath towards the south, an acknowledgement of the sacrifice of her fallen sons. Her right hand holds a pruning hook, resting on a plowshare. Inscribed at her feet are the words, "And they shall beat their swords into plowshares and their spears into pruning hooks." But it's the words on the north side of the monument, which I wish to share with you. Although they were written to honor

Confederate soldiers, they contain a message for all of us. The inscription attributed to Reverend Randolph Harrison McKim, a Confederate chaplain, who served as pastor of the Epiphany Church in Washington for 32 years, reads, "Not for fame or reward, not for place or for rank, not lured by ambition or goaded by necessity, but in simple obedience to duty as they understood it. These men suffered all, sacrificed all, dared all and died."

A sense of duty and commitment to the practice of neurosurgery runs strong and deep within the talented men and women drawn into our specialty. There have been countless individuals over the years who have given freely of themselves to their patients, to research and to the general betterment of the specialty above and beyond the basic practice of neurosurgery. We collectively owe them and the future generation of volunteers a debt of gratitude. Volunteerism is part of our culture, continued participation and shared responsibility is critical to the future of our specialty, but is threatened by the evolving economics of medicine. We now practice in a world where once important activities are increasingly measured only in terms of RVUs. As the current movement of physicians becoming hospital employees gains momentum, the autonomy needed to spend one's time on non-clinical activities will diminish and the pressure to produce clinically will increase. This issue is not whether to enfold a practice into a hospital system or begin a career as a hospital employee. That is purely an individual decision. Rather, as a field, we must ask our young constituents to protect their ability to give back to the specialty, to teach, to participate in joint section activities, to volunteer their time to state societies, the Washington Committee or the CSNS. These activities must be valued by all as much as a craniotomy or spinal fusion. It is vital to the future of our specialty that our hospital and practice plans understand clearly, without ambiguity, the importance of the volunteerism that has been a cornerstone of our culture.

We are all now familiar with the impact of the 80-hour workweek on resident education in terms of clinical experience and caseload. What is less clear is the effect of the current training environment to the development, expression, of sense of duty, commitment to excellence and individual initiative. In our quest to be compliant with work hours, have training priorities been inadvertently reordered away from the core values that have served our specialty so well in the past? For older generations of trainees, the message was clear. Lieutenant Colonel Andrew Summers Rowan, born in Gatt Mills, West Virginia in 1857, was awarded the Distinguished Service Cross for his service in the Spanish American War, and was laid to rest in Arlington National Cemetery. His story is told in A Message to Garcia was used on rounds as an exemplary example of competence, self-reliance and initiative in carrying out one's duties. For today's generation, it's the same concept seen with much more frequency and might be recognized more clearly in mainstream Western culture through the slogan, "Just do it." For those in training today, the mission and message embodied in these words is the same. But what has changed are the perimeters for successfully completing the job. The answer is not to roll back work hour restrictions, but rather within existing limitations to enable our residents to grow with the core values of our profession. As William Osler said, "The best preparation for tomorrow is to do today's work superbly well." In addition to a solid grounding, we, as faculty, need to work to recognize, encourage and develop in our residents a strong sense of duty and commitment, self-motivation and self-reliance, where individual initiative is valued and rewarded.

In a discussion on knowledge, the Library of Congress, here in Washington, is a good place to begin. The Library was established in 1800 as a legislative resource for the newly created Congress. It evolved over the 19th century into an American institution, reflecting American cultural nationalism. Walking down the east mosaic corridors, one is flanked by 6 lunettes created by John Alexander White that depict the evolution of the book. In the vaulted ceiling above are ten trophies, each with a symbol representing one of the arts and sciences. In the dome lobby at the end of the corridor, at the head of the staircase are the words, "Knowledge is Power." The saying, "Knowledge is Power," has been attributed to Sir Francis Bacon, who recorded it in his Meditationes Sacrae written in 1597. The recognition that with knowledge one's professional ability, potential, value and reputation will increase however has been present for more than a millennia across many cultures. The concept that knowledge leads to power appears in the Book of Shahnameh, or Book of Kings, written by the Persian poet Firdawsi around 1000 A.D. Where in it, he states, "One who has wisdom is powerful." Similarly, in the Hebrew Book of Proverbs, 24.5 is written, "A wise man is strong. A man of knowledge increaseth strength." A fundamental goal in a neurosurgical career has been to accumulate the knowledge and skills necessary to consummate one's professional responsibilities. Over the years, residency training and post-residency education have evolved methodically to allow trainees to successfully meet this fundamental goal. Yet, recently, in the process of training residents, educational experts, both within neurosurgery and from other specialties, have come to question the methodology of that training and the context of a public that has increasing expectations for the safety and quality of the healthcare they receive. This interest and concern has resulted in a potential paradigm shift in the modeling of resident education away from a traditional timebased curriculum to one based on the trainee reaching specialty defined, clinical competencies in each training domain defined as a milestone. This model builds upon the ACGME outcomes project introduced in the 1990s, which required residents to master six general competencies. It has been increasingly recognized that the acquisition and application of knowledge is not only a dynamic process but also very individualized. It is now assumed that the rate of assimilation and application of knowledge and skills into practice for any individual is variable, and that although trainees may reach their milestones at different rates, it is the outcome that really matters.

Neurosurgery has traditionally been a late adopter of change but similar to the recent introduction of the Boot Camp for PGY1 residents, the educational leaders in our specialty have recognized the current need and future value of evolving the training format. Senior Society and the ABNS and RSC are now, as a first step, creating a matrix for neurosurgery residents. As a specialty, we should collectively embrace this evolution in training. Perhaps the bigger challenge before us, as a specialty, is in what comes after we complete our training. Education is less structured. The time available to acquire knowledge is limited, and our professional focus changes. We strive to live and learn in the context of a real world defined by the rapid introduction of new technology and new techniques. In the 21st century, we can expect ourselves or be expected by others to accelerate the pace with which we incorporate advances in the information and technology into our clinical practices. As it appears now, there are likely to be several learning cycles that occur during our professional lifespan. So how should we approach this going forward? Psychologist Carl Rogers once stated the goal of modern education very well, "The only man who is educated is the man who has learned how to adapt and change. The man who has realized that no knowledge is secure, and that the only process of seeking knowledge gives us a basis for security ... The goal of education, if we are to survive, is a facilitation of change and continuous learning." To start then, we have to accept the idea that in our careers, we will not learn all that there is to know in our field. In a modern education paradigm, a surgeon does not achieve expert status, but continues to strive toward that endpoint throughout his career. The process by which we acquire knowledge then becomes the central focus, the adoption of the process of maintenance of certification, the development of educational products, such as SANS Lifelong Learning, and investment in outcome entities, such as NPA, are the first early steps in recognizing the need and creation of a continuous structured lifelong learning process. The challenge ahead of us, as a specialty, is to refine educational strategies, germinated in the development of projects, such as the matrix, and expand and incorporate existing educational products and individual practice data into a career-long educational model. It should be comprehensive and outcomes-driven, including lessons learned not only in residency and fellowship, but from a lifetime of practice.

In 1822, James Madison, the principle architect of the Constitution, wrote, "Knowledge will forever govern ignorance. And a people who mean to be their own governor must arm themselves with the power which knowledge gives." The total cumulative of knowledge and skills acquired during our professional lives and the process by which each of us progresses professionally from an early learner toward an expert in our fields lies not only at the core of our success and power as individuals, but will ultimately ground the reputation of and respect for our specialty as a profession.

In closing, I would like to discuss the theme of the 61st Annual Meeting of the Congress of Neurological Surgeons, E Pluribus Unum, The Specialty of Neurosurgery, and how the Latin motto chosen by the founding fathers to symbolize the birth of our nation applies to the specialty of neurosurgery and to us, as individuals. In Colonial America, this Latin phrase would have been well known to literate Americans. On the recommendation of Dr Franklin, Mr Adams and Mr Jefferson, E Pluribus Unum was incorporated into the Great Seal to reflect not only the unification of the original 13 colonies but also represent the creation of a new nation, joined despite all differences in a common cause—Out of Many, One. The theme was specifically chosen for this meeting because it encapsulates the diversity of our profession and the broad interest of our specialty, and reflects on the cumulative influence that teachers, colleagues, patients and experience have on forging our identities as individual neurosurgeons. Harvey Cushing acknowledged very early on at the birth point of neurosurgery the nature of the specialty and the character of its surgeons. "While ours is perhaps the most arduous and responsible of the main surgical specialties, we can have the satisfaction of knowing that only men of a certain type will venture to make it their life work and that, so far at least, both in this country and abroad, its devotees have not only shown the kind of sympathetic and encouraging interest in one another's activities that bind men closely together, but have at the same time held the respect of the profession as a whole. May this continue for all time to come." Since the writing of these words, our field has been utterly changed by the advances of science and technology, by sub-specialization and by the growth of neurosurgery throughout the world. It would be easy for neurosurgeons and, as a consequence, the specialty at large to diverge, to breakup, for us to become spine surgeons or endovascular neurosurgeons. By doing so, we would lose the essence of what makes us who we are, the core of values that we share that define us as neurosurgeons. Going forward rather than slowly identifying ourselves by our sub-specialty interests, wouldn't we be better served to be defined first as neurosurgeons by our core values, by honesty and integrity, by our sense of duty and commitment, and by our knowledge and wisdom? Wouldn't we be better served yet even more to have our actions viewed more broadly as reflected in the words written by Alfred Lord Tennyson, "To strive, to seek, to find and not to yield"? These measures of character and identity have stood the test of time. They have been memorialized in inscriptions and mottos carved in stone, written in plain sight for all to see. It's left up to us, individually and as a field, then if we choose to read these words to understand their message in the context of our lives and to apply them in the end to the benefit of ourselves, our patients and our specialty. Thank you.