Neurosurgical education: the “other” competencies

The 2003 presidential address

ROBERTO C. HEROS, M.D.

Department of Neurosurgery, University of Miami, Florida

In his 2003 Presidential Address to the American Association of Neurological Surgeons, Dr. Heros discusses his personal additions to the six basic competencies for which all neurosurgical residents must be tested. The basic competencies are as follows: 1) patient care; 2) medical knowledge; 3) practice-based learning and improvement; 4) interpersonal and communication skills; 5) professionalism; and 6) system-based practice. To these, Dr. Heros proposes to add six supplemental competencies: 1) intellectual honesty, which involves frank discussions about patient complications and admissions of the physician’s frailties; 2) scholarship—the art and science of medicine, which recognizes the value of evidence-based medicine but does not discount knowledge derived from experience; 3) practicing in a hyperlegalistic society, which involves tailoring informed consent to fit individual patients’ circumstances; 4) time- and cost-efficient practices, in which the physician strives to conserve time and resources by forgoing testing that is not strictly necessary, doing only what is needed to return patients to wellness; 5) approach to patients, which entails acknowledging and respecting the dignity of all patients; and 6) pride in being a neurosurgeon, which carries a sense of elitism without arrogance.

KEY WORDS • neurosurgical education • American Association of Neurological Surgeons • basic competency • supplemental competency

M ost of my predecessors on this podium have begun their presidential address with an acknowledgment of special people and events that have shaped and helped their life and their career; I will reverse the order and leave those for the end. I will first apologize for making this more of a chat between friends and colleagues rather than a formal address with appropriate references and literary quotations. The topic of my chat will be neurosurgical education, mostly related to education of our residents. Much of what I plan to say will sound like “motherhood and apple pie” to some, but may be controversial to others; still, I will go ahead and take the risk of boring many of you and irritating many others.

Our American Council of Graduate Medical Education mandates that we train and objectively test our residents in six basic competencies: 1) patient care; 2) medical knowledge; 3) practice-based learning and improvement; 4) interpersonal and communication skills; 5) professionalism; and 6) system-based practice. In this talk, I will concentrate on other competencies that, though certainly overlapping with the mandated competencies, are easier for me to understand, although admittedly, I still find it very difficult to measure our residents’ performance in these different areas. Furthermore, I am not sure that it would be necessarily good for the residents to learn these ways, which are no more than the very personal biases of one of their mentors. I have no doubt that they will be better physicians, neurosurgeons, and human beings if they, by being exposed to the professional and ethical biases of several mentors, pick and choose, learning what they consider the best from each and eventually developing their own unique professional self.

Intellectual Honesty

Our trainees will forgive almost any of our weaknesses, but they will not respect us as mentors if they perceive us as being intellectually dishonest.

For our trainees to learn from us, it is fundamental that they perceive us as being intellectually honest. To this effect, I believe that it is important to admit, without necessarily being proud of them, our frailties and weaknesses. True, many neurosurgeons aspire to be superhuman and I have had the privilege of knowing some that have approached that condition; however, most of us are not and our trainees and younger colleagues know it and nothing is gained by trying to hide that we are human in our weaknesses.

For example, it may or may not be right to decide to treat conservatively a patient with an intracerebral hemorrhage when the resident calls us at 2:00 a.m., even when under similar circumstances we recently did operate on another patient at 2:00 p.m. after finishing an early morning case. What is not right is to try to rationalize this decision in any way other than to admit that it is rather unpleasant to have to operate at 2:00 a.m. in the morning when you have a full schedule the next day. The necessary premise here, of course, is that we really do not know in this particular instance whether conservative treatment or open surgical evacuation is preferable; if we knew, or thought we knew, then certainly we would be wrong to do other than what we believe is right and that is different than just being a bit lazy.

Sometimes the residents understand much better, and remember longer, when you tell them that the reason you do something in a particular way is because once, when you
did it differently, a patient was hurt. It is good for them to
know that you remember your complications, perhaps even
better than your triumphs. It is okay to show it when your
complications hurt you. I do not feel embarrassed to show
that I get moody at times when things don't go well, and I
don't think our residents think less of me when I postpone
a particularly difficult case because I have been deeply af-
fected by the bad outcome of yesterday's case. The impor-
tant point here is to tell them exactly why I postponed the
operation rather than making up some silly explanation
such as the sodium was a bit low."

I believe that the residents' respect for a mentor does not
decrease by hearing him say that he does not know the an-
swer to a particular problem, nor will they be disappointed
if you ask them for their opinion because you do not know
or are not sure what to do for a patient, or if you change
your mind or your plan because they had a better sugges-
tion. If they perceive that I am truly pleased when they have
challenged me and proved me wrong, by, for example,
bringing a particular article that supports their point of view,
then I feel that I have created the kind of academic environ-
ment that the residents deserve. Along the same lines, it is
important for the residents to understand that you are aware
of your own limitations and that you take them into account
in your decision-making process. For example, when op-
erating on a neurologically intact patient with a large in-
tracerebral hemorrhage, I may do only an incomplete resection. The residents may question why
I would not attempt a complete removal and remind me to
honest to give some sort of a 'biological' explanation as to
why I prefer an incomplete rather than a complete resection
in this case.

We must discuss our complications freely and honestly
and this discussion generally occurs at three levels. The first
level is informally when they occur. When I make a mistake
at surgery, for example, I like to ask the resident who is as-
sisting me if he knows why that happened. Generally, they
will try to cover up for the 'professor' and say something
like "the anatomy was abnormal," "too much scar," or "bad
luck." But I feel they will gain your respect if you chide
them for that attempt at covering up your mistake and point
out very clearly to them (almost surely they know anyhow)
that the problem was due to either carelessness, trying to
take a shortcut, or whatever mistake it is that led to the prob-
lem. The second, more formal level at which complications
must be discussed, of course, is the Complications Confer-
ence. Here the key is to create an environment where prob-
lems can be discussed collegially, with total freedom and
honesty so that we can learn not only from our mistakes but
also from those of our colleagues. It would be tragic for our
patients if we could learn only from our own mistakes and
had to repeat the mistakes of others before we learned to
avoid them. The senior neurosurgeons must set the tone
by discussing their own complications with naked honesty.
The third level to discuss complications is the anecdote. For
example, "Yes, I remember once when I did that and the pa-
tient ended up with a major problem. It is even okay to re-
peat the anecdote as new residents come along. You can be
sure that the old residents will remember and they will in-
dicate that with a friendly, though respectful wink and
more importantly, they will remember when faced with a
similar situation.

Scholarship—Science and Art

Our challenge as mentors is to instill in our trainees a
commitment to ever enhancing the scientific foundation of
our profession without becoming enslaved by the scientific
method.

I feel that when discussing a particular case, giving an
opinion, or generally teaching, it is important to make an ef-
fort to qualify the strength of our evidence. How sure can I
be of this? Is my particular statement based on scientific
evidence? How strong is that evidence? Is there basic re-
search to support it? Is it based on clinical experience; how
much experience? Is it based on something I was told by
one of my teachers? Who was the teacher?

Once, at the time that we were operating late in most pa-
tients with subarachnoid hemorrhage from an aneurysm, I
was struggling with the question of when was it safe to op-
erate on a patient who had angiographic vasospasm but was
clinically well. While visiting Dr. Charles Drake, I asked
him while he was scrubbing before a case about this issue
and his answer was 2 weeks. I did not ask him for the sci-
etific evidence behind his statement, but I did begin to op-
erate at 2 weeks in these patients and I don't recall being
sorry for it.

We are required to teach our residents to practice evi-
dence-based medicine. Should they become slaves to this
form of practice and discard as unsound any knowledge de-
rived from experience, anecdotal reports, or simply state-
ments by their teachers? Should they abandon all previous
knowledge and change their practice on the basis of the
results of the latest well-designed clinical trial, even if it
contradicts common sense and past clinical experience, or
should they use the results of that trial as one more, al-
beit very powerful tool, to help in their clinical decision
making?

Should our residents be encouraged to practice neuro-
surgery by protocol? Here again, my bias is rather con-
troversial. Like every academic neurosurgeon, I strongly
encourage the development and adherence to well-designed
clinical protocols if the goal is to answer, with a relatively
good probability of success, an important or even an inter-
esting clinical question; however, I am vigorously opposed
to practicing medicine according to protocols that are not
designed with the proper scientific rigor, but rather are sim-
ply 'cookbooks' based on institutional tradition or a partic-
ular neurosurgeon's idiosyncrasies. I feel that this leads to
intellectual laziness on the part of the residents and they
ought to be encouraged to think about what is best for each
patient, considering all of that patient's particular circum-
stances. We may not know the right answer, but we ought
to encourage our residents to join us in the search for the
best answer for that particular patient rather than adhering
to a protocol to justify a course of action that may be gener-
ally good but not the best for that patient.

Practicing in a Hyperlegalistic Society

The worst consequence of the medicolegal crisis is the
deterioration of the physician–patient relationship. It is our responsibility and it is within our power to prevent this from happening.

Let me explain my choice of the term hyperlegalistic.” One of the defining principles of western democracy is the respect for law, and perhaps the greatest virtue of this country, after the generosity of its citizens, is its almost religious commitment to follow legal precepts and institutional rules. However, many of our citizens and certainly most of us gathered here realize that in more and more aspects of the workings of our society, legal interference has exceeded its reasonable limits and has become obstructive rather than facilitating. This, we know, has occurred in the case of the physician–patient relationship, which has been eroded and frequently destroyed by excessive and inappropriate legal interference.

The effect of legal interference on the physician–patient relationship, exemplified but not limited to the medical liability situation, could be the topic of a weeklong conference; however, I will make only a few specific comments reflecting my bias in terms of what I try to teach our residents and the example I strive to give them. I like to teach my residents that informed consent is a very individualized process which is extraordinarily patient-sensitive. I dislike standardized protocols of patient consent or standardized recitations of all the possible complications and catastrophes that may befall them. I talk to each patient very differently, depending on who they are and what is their clinical problem. To the patient with a subarachnoid hemorrhage contemplating aneurysm surgery, I minimize the risk of complications and always end up with a statement such as, “These things could happen, but of course, they won’t happen to you; you will really be fine. Don’t worry about it.” In the next room, the residents may hear me talking to a patient that is going to have a microvascular decompression for hemifacial spasm, which I consider a very elective procedure, and I may say something like, “You know, you could end up deaf or with a paralyzed face from this operation or you may even have a stroke; are you sure that the spasms bother you enough that you want to go ahead with surgery?” The difference, of course, is that there is nothing to be gained by dissuading the aneurysm patient from having the operation and nothing to be lost if the second patient decides to continue to live with hemifacial spasm.

I like to teach our residents to be directive in their discussions with the patients about their choices. It is okay to mention reasonable alternatives, provided that indeed they are reasonable. However, in my opinion, it is still our duty to tell the patient or the family what we think is the best option given the particular circumstances. It is also reasonable to indicate the degree of certainty that we have about that choice, but not to the extent that it will confuse the patient; individual judgment is again essential. Although many will disagree, I find it not only unnecessary but also wrong to offer the patient or the family unreasonable or bad alternatives. There is no need to discuss the possibility of surgery for a huge intracerebral hematoma in the dominant hemisphere in a deeply comatose elderly patient. It is wrong, in my humble opinion, to do such operations simply because the family wanted everything done. Likewise, I feel that it is wrong to do an operation for a patient that we do not feel is the best operation for that patient, simply because that is what the patient or the family chose, perhaps because it was less invasive or cosmetically more attractive or because of information gathered from the Internet. They may find another neurosurgeon to do so, but I feel that we are under no obligation to do anything we think is not optimal for that patient.

I would like to be able to say that I always do what is best for the patient with complete disregard for the medicolegal consequences. Of course, I would be lying to you if I said so, but I do try to teach the residents to endeavor at all times to do just that. The fact is that it really makes little difference. The malpractice suits will come regardless of best intentions and all precautions. Ultimately, it would be nice if we could teach our residents to practice medicine as if unethical malpractice lawyers didn’t exist; and then, when they come our way and we feel we are in the right, to fight them with all we have and make their lives as difficult as they make ours. Remember that a deposition or a courtroom appearance is unquestionably intimidating to us, but when the discussion and the questions are about medicine and particularly neurosurgery, the lawyers are on our turf and we can make them feel the pressure and, yes, even enjoy a bit their embarrassment. Doctor, isn’t it true that . . . No, Mr. Smith, you obviously don’t understand the problem, but of course, you can’t be expected to know much about this because you are a lawyer and not a doctor. Let me try to help you understand it . . . . ‘We may not win that fight, but it will give us a great deal of satisfaction!’

Time- and Cost-Efficient Practice Patterns

Our resources and our time are limited and it is our responsibility to teach our trainees to conserve both and better serve our patients by doing for them only what they need and no more, constantly striving to return them to wellness.

Our time is precious and we do have a responsibility to minimize the cost of health care. To this effect, I endeavor always to teach our residents to be able to distinguish the forest from the trees, to concentrate on the patient’s problem and not be distracted by the incidentals unless they directly affect the central problem. What brought the patient to the doctor in the first place? What is really bothering the patient? The answer to this question is usually straightforward in the patient that comes to our office with headaches and an MR [magnetic resonance] image that shows a huge meningioma. It may not be so easy in the older patient that awoke with severe pain in the arm and is found to have weakness of the triceps and no myelopathy, and yet the MR image of the neck shows diffuse multilevel cervical spondylosis. Could it be that perhaps all this patient needs is a simple one-level foraminotomy? The old saying of treat the patient, not the x-ray’s never more true than in circumstances such as these, which abound in our daily practice.

I like to hold the residents responsible for every test and/or treatment they order for the patient. Did the patient with a lumbar decompression really need to have an order for daily monitoring of I/O take and output?” Did we really need to know what the chloride was on the 3rd day after a subarachnoid hemorrhage? One effective way to discourage the ordering of unnecessary tests is to ask the residents for the results. If they do not know the results, [it is] likely that the test wasn’t necessary in the first place. They can also be asked what they would have done if the results had
been abnormal. What would they do if the routine culture they ordered in the cerebrospinal fluid that they sent to the lab while inserting a shunt in a healthy patient with normal-pressure hydrocephalus grew *Staphylococcus epidermidis*? Would they ignore it? Would they remove the shunt?

An important part of my daily rounds with the residents is to make sure that we are always moving each patient along the road to wellness: Why is that catheter still in? Why does he still have an intravenous line? Why hasn’t he gotten out of bed? Why is he still in the hospital; he will feel so much better at home!" This attitude can be extended to the outpatient setting. Does the older patient that had a ruptured aneurysm satisfactorily clipped and did well really need to be seen for a routine visit every year, or worse, be told that a repeat angiotom gram is needed in 2 or 3 years? It would be difficult to convince this patient that he is well. What would be the downside of telling the patient, We are done, you are cured, this aneurysm business is past tense, on with your life? Of course, some may say, What if a new aneurysm develops? Here again, the medicolegal exposure may, but should not, interfere with the balance between the extremely low risk of developing a new aneurysm and the ill effect on most patients of perceiving that they are not really cured because another aneurysm could develop.

### Approach to Patients

We should teach, by word and example, that being a patient does not reduce one’s level of dignity and, therefore, we should relate to our patients with the same respect as we would if they were not sick.

Our patients are our reason for being what we are. No aspect of neurosurgical education is more important than learning that it is all about our patients. That is why we go through the sacrifice that it involves to become a neurosurgeon, that is why we learn what we learn, that is why we do research, and that is what gives us our high . . . and, all too often, our lows.

Being a patient, and particularly being in the hospital, does not downgrade our dignity and should give nobody, least of all physicians, the right to treat us with less respect than if we were healthy. I insist that our residents address our patients exactly as they would if they met them at their job or at the store instead of in the hospital. Under those circumstances, they would likely address this particular patient as Mrs. Jones rather than Mary, honey, or grandma.

When entering a patient’s room, the only conversation is with the patient or the patient’s family; all discussions about the patient should take place outside the patient’s room. I also insist on having the patient covered before we enter the room, and I even discourage the family from bringing the adult patient a teddy bear or putting on the cartoons on the television for the patient that is used to listening to the news or reading the *New Yorker*. Incidentally, I do not mind if my residents see me be firm (hopefully never unkind) to my patients and exercise my role as the physician in charge of their getting better—it is sometimes necessary toward that end.

I encourage the residents to reinforce positive gains rather than reinforce the patient’s deficits. There is no point in asking the hemiplegic patient to raise his paralyzed arm in the air; he will let us know soon enough if he ever can. Instead, we can rejoice with the patient in the fact that he is beginning to move his leg a little bit. I ask my residents to emphasize short-term goals. There is no point in talking to the recent spinal cord–injured patient about whether he will ever be able to walk; rather we should concentrate on that important next step of being able to take out the breathing tube or moving to a regular floor from the ICU [intensive care unit].

Patients come to us because they respect us for our knowledge and they want our opinion. They do not want a fuzzy answer. Generally, they don’t want us to present them with a bunch of statistics and have them make their own choice. This is frequently perceived as safe from the medicolegal point of view; it may or may not be so, but generally it is a disservice to the patient. Patients are not computers into whom we can enter a bunch of data for them to compute their own answer. They come to us because they want us to put our cumulative knowledge and experience at their service to help them make the best choice. Clearly, many, though by no means all, patients want to reserve the ultimate right to make the choice; however, it is just as clear that the great majority of patients expect us to recommend to them in a clear and unambiguous manner what that best choice would be. That is why so frequently, when we appear to be ambiguous and circuitous in our recommendation, they cut to the heart of the issue by asking us “Okay . . . but what would you do if it were your wife or your mother?”

### Being a Neurosurgeon

As neurosurgical mentors, we should instill in our trainees the same pride and sense of elitism that has made us so satisfied with our career choice. This they can have without arrogance, and they should also understand that this pride is not an entitlement, but rather is earned through hard work and sacrifice.

In spite of the many challenges facing our profession today, I firmly believe that there is still nothing comparable to being a neurosurgeon. I try to instill this special pride and elitist conviction in our residents and young colleagues. They, among all their peers, are the Green Berets, the SEALs, the Special Forces in medicine. This elitism should not translate into arrogance and does not need to be worn externally on our sleeves, but it must be felt in the heart. We are different, and generally we are better, and we certainly are special. This status we have gained not through birthright, good fortune, even good grades or good opportunities. We have gained it through determination, hard work, and bulldog tenacity.

The relation with other neurosurgeons, particularly with neurosurgeons practicing in a community setting, can be problematic for neurosurgical residents and academic faculty who have never left the ivory tower. There is a tendency to think that if a patient had an operation by another neurosurgeon and is not doing well, it is because the operation wasn’t done right. That may be true, but it can be dangerous routinely to make this presumption, and patients frequently suffer from this attitude. In many cases, this is the etiology of the failed-back syndrome in the patient with several lumbar operations. Frequently, the assumption is that the patient still has back pain because the last operation was not done
well. We will reoperate and do it right this time. It is safer to teach our residents that the other neurosurgeon is likely to have done the right thing, unless proven otherwise. They will be correct in this assumption much more frequently than not. I also insist that the residents never indicate through word, action, or even facial expression that the other neurosurgeon did anything wrong. Again, this problem is endemic to academic centers, and I am convinced that in the majority of instances the perception that something wrong was done is incorrect or misconstrued. I suspect that this problem contributes to the genesis of many malpractice suits, and whenever I see this behavior in any of our residents or younger faculty I try to place them in the other neurosurgeon’s shoes, a situation that they find uncomfortable frequently.

Having said this, everybody in this room knows that there are a few bad apples in our midst. Some of you know that I feel strongly that it is our obligation to expose, disown, and professionally punish these individuals. I feel that we could do much better than we are doing in this respect; however, this is a complicated topic, outside of the scope of this talk, and I will say no more about it.

Finally, I feel strongly that nobody can impose work ethics or even work hours on neurosurgeons or neurological residents. We as program directors will do our best to live within the newly mandated work hour limits for our residents, but they will find a way around it and will work in the hospital or at home, whatever hours are required to be as good as they can be. They chose to become neurosurgeons with full knowledge of the long and arduous road ahead, and they are willing to travel it. That is the only way that later on they can enjoy the fruits and the very special privileges of being a neurosurgeon without feeling that, in some way, they have stolen that privilege. That privilege—its enjoyment and its rewards—will come to some degree from external recompense, but much more importantly, it will come from the internal pride of knowing who we are, how we became what we are, and what we can do for our patients.

In Appreciation

As stated in the beginning, I will end this chat with some thanks and acknowledgments. First, I want to thank the AANS [American Association of Neurological Surgeons] executive committee, the board of directors, and, in particular, our wonderful staff in Chicago led by our most capable Executive Director, Tom Marshall. They have made my job as your president very easy and pleasurable, and they serve you day in and day out with unfailing dedication and commitment.

Of course, I also want to thank my family, starting with Debbie, my wife and lover, my best friend, my teacher, and in so many ways the real voice of my conscience (Fig. 1). My parents through infinite love, tolerance, much patience, and frequent pain set the compass for my life (Fig. 2). My children Elsie and Rob (Fig. 3) have regaled me with unfaltering love and have filled me with infinite pride; they both have chosen medical careers in spite of the time I stole from them to give to medicine. My youngest son, Carlos, at the age of 9 years has already fulfilled the dream I never could of being quarterback of his football team and a basketball star (Fig. 4); he is the most important reason I have

FIG. 1. Photograph of Debbie, my wife, taken for a magazine human interest story celebrating her humanity as a physician and her kindness as a neurooncologist in caring for her patients with brain tumors.

FIG. 2. Photograph of my parents frolicking on Varadero Beach in Cuba, the way I like to remember them.
for never growing old, which is getting increasingly harder to avoid. Solomon, my grandson, is the latest addition to the family, and even though he is just beginning to talk, he has already made it clear that he wants to become a neurosurgeon when he grows up.

Needless to say, I want to thank my professional mentors, and there are too many to mention. Bob Ojemann set for all of his residents an example that was impossible to emulate; he comes closest to the superhuman physician that I was referring to earlier in my talk. C. Miller Fisher bears much responsibility for my love of cerebrovascular disease and my passion for teaching. Bill Sweet hired me as a resident in spite of his best instincts. Peter Jannetta gave me my first neurosurgical job and taught me that there was nothing wrong with wearing your heart on your sleeve as a physician. Nick Zervas called me back to Mass General and gave me the opportunity to develop my academic career and to grow as a cerebrovascular surgeon.

I want especially to acknowledge Steve Papadopoulos and Mark Hadley who, as presidents of the CNS [Congress of Neurological Surgeons] during my tenure, have helped our organizations work smoothly together when necessary in the best interests of neurosurgery, always with a level of cordiality and mutual respect worthy of our profession.

I also very especially want to thank Nancy O’Heir, my administrative assistant who is so efficient and intuitive that when I forget what I was thinking about, she is able to read my mind and remind me. She and the rest of my dedicated office staff and nurses make my life very easy and are constantly striving to keep me out of trouble.

At Miami, it has been a special pleasure to work with Barth Green, a great humanitarian who works harder and can juggle more balls in the air than anybody I know. My partner in cerebrovascular and skull base surgery, Jacques Morcos, was once my resident, but now can do everything better than I can and teaches me something every day. They and the rest of the faculty in Miami have picked up the slack to allow me to do my job as president of this organization during this last year.

I could not finish without thanking my residents and fellows at Miami, who together with the wonderful residents from Pittsburgh, Mass General, and Minnesota are truly my greatest source of professional pride and the inspiration for this talk.

Finally, and I left this part for the end of my speech for fear of choking, I want to thank this great country. I particularly want to thank and recognize the dedicated men and women of our armed forces who, together with our partners in the coalition, have won a magnificent victory, putting their lives on the line to minimize civilian casualties in Iraq.

This is an international meeting with an international theme and there are many of you from many countries from around the world. I am sure you all feel as strongly about your country as I do about mine; however, at the expense of sounding chauvinistic, I do want to tell you that this is a wonderful and incredibly generous country. I feel that I am particularly qualified to make this statement as an immigrant who has experienced unbelievable hospitality and kindness from this country and from so many of its individual citizens.

I grew up in a country where the dream of most workers was to be employed by an American company because their salaries and benefits were better and because they were treated more generously. At that time, that country, Cuba, was ranked among the top three countries in all of Latin America by every international measure of prosperity. Fidel Castro came to power and gradually turned the country toward communism, mostly to liberate it from the influence of the oppressive American imperialism. Forty-four years later, as the only totalitarian regime in the Western hemisphere, Cuba ranks with Haiti and a couple of Central...
American countries at the bottom by the same international indices of prosperity. When as a 17-year-old anticommunist hothead my parents felt that my life was in danger in Cuba, they sent me to this country, and a year later it was this country that provided me the opportunity and the means to go back to Cuba to fight communism. We failed at the Bay of Pigs simply because we were not up to the task, though many still insist on blaming this country for that failure. It was this country that paid the ransom to get my colleagues and me out of Cuba after nearly 2 years in prison.

Shortly after arriving in this country, I moved to Memphis, Tennessee, where some Cubans had already settled and were experiencing the legendary Southern hospitality. There, I called the manager of the insurance company that had the biggest advertisement in the yellow pages, and after a brief chat he gave me a job. A year later, I received a scholarship to play football at Rhodes College, then called Southwestern at Memphis. I did not measure up to expectations in football and yet they maintained my scholarship. After meeting my premedical requirements in a year and a half and without graduating, I got into medical school at Tennessee through a simple telephone call from the dean at Southwestern to the dean of the medical school. When I was failing biochemistry during my first year in medical school, I knocked on the door of the professor who was known to be the meanest teacher in the school and I asked him for help. He gave me free private tutoring after school and I ended up with a B in his course. Throughout the rest of medical school, I obtained similar help from several other professors who, in addition, offered me a variety of easy jobs such as being a prosector in pathology, curator of the neuropathology museum, and a variety of assistantships that allowed me sufficient financial support and enough study time to be able to graduate first in my class. I then applied to the surgical internship at Mass General and they accepted me, probably because when they asked me why I wanted to go there I told them that I really did not know anything about that hospital, but their surgical internship had been ranked first in the country in a Ladies’ Home Journal survey.

Today, I stand here as your president, the greatest honor I have ever had. Could any immigrant have had so much help and so many opportunities in any other country? God bless you and thank you, from the bottom of my heart, for the privilege of allowing me to lead this wonderful organization during the last year.

Acknowledgments

Parts of the substance of this talk were alluded to in an informal address as the honored guest at the Young Neurosurgeons luncheon during the American Association of Neurological Surgeons Annual Meeting, in Toronto, Ontario, Canada, in April 2001.

Some of the thoughts expressed in this talk were inspired by Dr. C. Miller Fisher’s address to the residents as the honored guest of the CNS during the CNS Annual Meeting in 1983.

Manuscript received May 30, 2003.

Address reprint requests to: Roberto C. Heros, M.D., Department of Neurological Surgery, University of Miami School of Medicine, 1501 Northwest Ninth Avenue, Florida 33136. email: Rheros@med.miami.edu.