Mitchell L. Henry, MD, Presidential Address

We are rarely afforded the opportunity to speak with an open invitation to say what you want. Since I am allowed to choose, I wish to first take the opportunity to say a few thank yous. I would like to thank Larry Carey for teaching how to be a surgeon. I would like to thank Ron Ferguson who taught me how to think like a transplant surgeon and ask the question why. Next I would like to acknowledge the transplant team at Ohio State and thank them for the hard work they do on a daily basis to make the program go. In particular, I'd like to thank my partners for their commitment, especially this year when I asked for coverage on many occasions – Ron Pelletier, Amer Rajab, Ginny Bumgardner, Elizabeth Davies, Mahdi Elkhammas, and Ken Andreoni. Special thanks to my family, who for a long, long time have put up with the craziness of transplant surgery – Luke and Erin – Marge – And to my parents, who I am lucky to have in attendance today, Ruth and Herb Henry.

I wish to provide three examples in my life where keeping score has been particularly important, and the competitive challenge that comes with it. First is the space program, followed by athletics, and lastly transplantation.

I vividly remember climbing out of bed very early in the morning as a young boy, finding a comfortable position in front of the TV, a black and white one at that, and watching Walter Cronkite and his colleagues preparing for the launches of the Mercury spacecraft—always framed by the pre-dawn views of the Redstone and Atlas launch vehicles, with powerful spotlights allowing detailed pictures, and the eerie venting of various gases, all contributing to the mystery of the hour (and in some cases hours and hours). The worst word to come across the screen was HOLD, and the clock at the bottom of the screen showing T minus X and holding. Eventually, the count would resume and finally the words, "We have liftoff." There was nothing more exhilarating than the thunderous sound, huge gaseous flame, and the rocket pushing skyward with the tiny capsule at the top. This all began as the Russians humiliated the United States with the launch of the first satellite, Sputnik, and soon following in 1961 with their first manned flight. The Americans, having lost the competition to be first, then launched a suborbital flight with Alan Shepherd on May 5, 1961. The race was on! The first U.S. orbital flight was a memorable one with John Glenn (an Ohio boy) in Friendship 7 on February 20, 1962, and after nearly 5 hours of orbiting the earth, parachuted the capsule to a safe landing in the Atlantic. In September 1962, President John F. Kennedy boldly announced that he had set a goal to land on the moon before the end of the decade:

"We choose to go to the moon. We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win…."

The space race culminated in a moon landing on July 20, 1969, and the world watched as Neil Armstrong (another proud Ohioan) climbed down the steps of the lunar lander and spoke those unforgettable words. From Mercury to Gemini to Apollo to the Space Shuttle programs, the competitive U.S. spirit designed, developed, and implemented technologies that, while aimed at space flight, have touched every one of us. So long as we are keeping score, let me outline a few of the outgrowths of these activities: satellite technologies, including weather satellites, communication satellites, and GPS satellites are probably at the top of the accomplishments. However, many more come to mind; some are right in our own backyard, including medical imaging, personal computing and handheld electronic devices, robotics and laparoscopic devices, and the artificial heart. Other notables include astronomical discoveries, aircraft safety, cordless tools, space age lubricants and batteries, pressure-relieving mattresses, lightweight super-strength materials, microwave technology, smoke detectors, and on and on. A *USA Today* listing of the Top 25 scientific breakthroughs noted that nine are directly derived from space technology.

As an aside, there is a cute story about an American engineer at an international conference bragging about the invention of the roller ball ink pen so that American astronauts could write in zero gravity. The Russian in the room noted that he was aware of the invention but the Russians had approached it in a different manner – the pencil.

There was an in-depth study that was published about the 2004 economy that demonstrated that $98 billion of economic activity, $25 billion in earnings, and 550,000 jobs were generated as a result of commercial space transportation. None of these numbers takes into account the immeasurable national pride that has been engendered by the space program. The competitive spirit that started with the goal to put a man in space has generated so much. Don't be fooled into thinking that no one was keeping score, and I know each one of those individuals wanted to win!

Sports have always been very important to me. I used to spend countless hours throwing a baseball with brothers and cousins, pounding a basketball and taking that last second shot for the mythical win, and talking Nebraska football with anyone who would listen. Nebraska is a small state of about 1.6 million people. On football Saturdays, the Nebraska stadium became the third largest "city" in the state. The competitive spirit of this program was (and is) a great source of pride to its people. The expectations were exceedingly high, and a year with even 2 or 3 losses was felt to be a disappointment to many. I guarantee you they were keeping score. I watched Bob Devaney and subsequently Tom Osborne take many unheralded recruits, as well as those walk-ons (not deemed to be scholarship worthy), and mold them into championship teams. These

coaches took the talent they had and molded and coached and taught these kids how to get everything out of them by making a team—the sum was clearly greater than the individual parts. I am absolutely convinced that their leadership coaching and leadership produced remarkable results that others could not have accomplished. The pride and desire for winning in this small community is a great example of how high expectations and desire can lead to positive results.

When I was growing up playing sports, I always tried to play with the older kids. I do believe in the concept that one plays up or down to its competition. I had some talents, but clearly I wasn't the most gifted (and I am sure those who know me with readily agree!) . I would go to the gym to be around those who were better than me, and I learned a lot from that. Frequently it meant that a faster one would run past me or a taller one one might smack the ball back in my face, but in the long run, this was beneficial. Now that I'm older, and a lot slower, I play games with less contact but try to maintain similar intensity. I hate to lose to these guys that I see each weekend. Ben Hogan said it right—"I play with friends often, but there are never friendly games." Tiger Woods was quoted as saying, "If you come in second, you're just the first loser." As Ricky Bobby said in *Talladega Nights*, "If you're not first, you're last!" Maybe I'm not quite that bad, but I do know these guys keep score every time! I do like what Michael Jordan remembers. He said, "I've missed more than 9,000 shots in my career. I've lost almost 300 games. Twenty-six times I have been trusted to take the game-winning shot and missed. I've failed over and over again in my life, and that is why I succeed."

That brings me to transplantation. My introduction to the world of organized transplantation was the ASTS meeting at the Drake Hotel in Chicago in 1985. This was an intimate setting where the giants of transplantation walked. I will never forget being invited by Ron Ferguson to the gathering of these gods in the evening following the first day of the meeting in the foyer (bar really). Like a good fellow, I had read the papers in the few transplant journals available at the time and had written a couple of papers and chapters with the obligate multitude of appropriate references. It was amazing as the names on those papers came to life in front of me. I hesitate to mention names as I will leave some important people out, but there was Najarian, Salvatierra, MacDonald, Belzer, Starzyl, Terasaki, Kahan, Diethelm, Groth, Sollinger, Sutherland and on and on. Now I know that one might recognize that transplant surgeons have a competitive nature, but this was an entire gaggle of competitors sitting in one room. I guarantee you that they were keeping score and did want to win. Whether it was center volume, patient or graft survival, incidence of rejection, a new technical innovation, or a unique immunosuppressant or combination, the conviction of data or opinion was quite evident. It instilled in me an envious drive to be like these people. It was indelibly marked in my brain.

I don't wish to depersonalize the outcomes of individual patients, but transplantation was one of a very few specialties that accounted for the outcomes of these specific variables, reported them in the literature, and compared them to other centers' outcomes. This drove each program to

improve those outcomes and the outcomes of their patients. That was a long time ago, yet we still strive to perform at expected levels, even though many of the variables have changed. We have gone out of our way to have the collective transplant world in the U.S. collect thousands and thousands of pieces of data to analyze in the name of quality improvement—at least that was the intent originally. Think about it—we keep these scores every day. Not only do we know our own program-specific performance, thanks to mandates from the federal government and our partners at the SRTR and OPTN, we report these results in public vehicles. On top of that, we identify those that perform to the arbitrary expectations of these entities, and even those that don't. If your program has been identified as having anything less than this optimal arbitrary outcome, even by a percentage or two, you are defined as a second-class citizen.

The commercial payers are keeping score too. Some even apply their expectations, based on the imperfect SRTR pronouncements, in order to stay in their "preferred" networks. Our hospital administrators know exactly how long the patients are in the house, what the pharmacy bill is, what the percentage of patients that we readmit postoperatively are, and yes, even what the volume of transplants on a daily basis is compared to their expected budgets.

I don't have to tell you, all of these people are keeping score, and at some level, we need to meet their expectations. My concern is that this may, in fact, affect patient access to transplantation, as older and sicker patients may be left behind in the name of optimal outcomes. As a result of our past successes, our patient population continues to be more complex, and we need to apply all our efforts at continuing the successes in these patients.

We tend to be somewhat of a victim of our past success. I have always been taught that transplantation is all about cutting edge and pushing the envelope. We do this <u>not</u> because we can, but because we know that with transplantation we can prolong their survival and improve their quality of life beyond that provided with alternative therapies, and in many instances with less financial resources. Yet when one must maintain specific arbitrary outcomes it not only can limit patient access to these life saving procedures, but stifle innovation and clinical research. I think we are being told to be very careful about pushing the envelope or you may put your program towards regulatory scrutiny, or lose patient referral base from commercial payers. Clearly we have to balance the ability to optimize the utilization of the scarce resource without significantly affecting patient access to our life-saving therapies.

This is the challenge. We have to continue to strive for realistic goals, sophisticated risk stratification, and statistical methods to evaluate <u>both sides</u> of the transplant equation, donor organ quality and recipient outcomes. We need to be transparent with our processes and outcomes, as we continue to be the leaders in the medical environment in reporting and applying process improvement to optimize outcomes.

Transplant surgeons have been bred to win. At each step along the trail to independent practice, more demands are made of these individuals. As they meet the demands, they proceed to the next level. After 4 years of medical school, 5-8 years of surgery residency, and 2 years of fellowship, they know what competition and winning is. Because transplant surgeons are used to winning, I would submit to you they hate losing more than they like winning. From the moment the skin incision is made, there is a unique pledge made to that patient. The surgical assault is a powerful commitment on the surgeons' part to make that patient better. In my mind, there is a significant difference between simply treating the natural course of a disease and assaulting the patient with our interventions, transiently making them sicker so they may become better. There is no greater exhilaration than that following a successful procedure, and no lower moment than that following a failed one.

Your Society remains strong. We are pledged to fostering and advancing the practice and science of transplantation for the benefit of patients and society, and representing our members' needs.

I think I've heard every presidential address since my first meeting in 1985, and each have talked about the privilege and honor to serve the Society. However, until this past year, it seemed to me that it was something that I was expected to say. After working through this last year, I can tell you with great humility that I now understand those words, and it truly has been an honor and privilege.