

Think Global, Act Local: The Glocalization of the ASTS

ASTS Presidential Address 2013 – Kim M. Olthoff, MD

Colleagues, thank you for the privilege to be up here this morning, and allowing me to share some reflections on the ASTS. Mitch, thank you for that wonderful introduction. It is appropriate that we are in Seattle, the birthplace of Starbucks....

“Think Global, Act Local” is a phrase used to describe a lifestyle of thinking beyond one’s own surroundings and recognizing the impact of the little things one does on the world. It is a movement that urges people to carefully consider what happens in their own communities, how it affects the planet as a whole, and what they can do as individuals or groups to enact change. It began as a grassroots effort, but now has grown to involve governments, corporations, and international organizations.

In my neighborhood and city, it seems to me that everyone is getting into the act. I see it all around and it touches my life in numerous ways—Farm to Table restaurants are a big thing using only locally sourced ingredients, and they are some of my favorite Philly restaurants; Starbucks highlights their community and international initiatives, claiming their efforts are “bigger than coffee” and making me feel that every \$4.00 cup of latte I buy is truly helping the global effort; and Community Supported Agriculture—networks of individuals that pledge (and pay) to support local farmers, growers, sharing the risk and benefit of food production, and every week the participants share in the bounty of what the local farm produced.

My family has certainly embraced the idea. We removed much of our lawn to create an organic garden. My younger son, Jacob, enrolled us in a local CSA when he was considering the life of a chef and cooked for us every night with locally sourced ingredients. While he no longer has a culinary career as a goal, he continues to exercise his epicurean skills using our garden’s bountiful harvest. My older son, Lucas, is the student director at the Roberts Environmental Center, an institution focused on benchmarking the corporate sustainability reports of the world’s largest companies. Lucas’ job is focusing on the developmental steps to get to that report—collaborating with local organizations on creating their first reports and consulting with others that could use assistance refining their reporting process and end product. And our course we recycle, we use re-useable grocery bags, we compost, we shop at Whole Foods....

It seems more and more people are trying to see things from a different, more global perspective with regard to the planet’s well-being. This morning, I would like for you to reflect on the concept of “Think Global, Act Local” from a slightly *different* perspective, the transplant perspective. Transplantation has always been more global than other surgical specialties. It has an eclectic and international flair to it, part of what attracted me to it in the first place. Transplant has people from varied backgrounds and viewpoints, willing to think outside the box, beyond the status quo, not afraid to try to go where others would not or could not.

There are many “firsts” in transplantation from around the globe, and one seminal event can have huge international impact. In London, Peter Medawar introduced transplant immunology as we know it today, initiating the long-term relationship between scientists, transplant physicians, and

transplant surgeons, resulting in the first successful human kidney transplant at the Brigham in Boston by Dr. Murray.

Two surgeons, one in the UK and one in the U.S., both dreamed of doing liver transplants. Dubbed a modern Damian and Cosmas, Thomas Starzl and Roy Calne both saw this daunting procedure as a reality. The first liver transplant by Starzl, performed 50 years ago this past March in Denver, was not successful, but Starzl and Calne both worked to address problems in surgical technique and immunosuppression, and the first successful one was performed by Starzl in 1967, soon followed by Calne. They both have been rewarded by recently receiving the coveted Lasker Award.

Christian Barnard, a South African, and Norman Shumway, an American, worked together at the University of Minnesota and were fierce competitors. Both were intent upon becoming the first to do a human heart transplant. Christian Barnard won that race, performing the first heart transplant in Cape Town, South Africa, gaining notoriety and touring the world as somewhat of a celebrity. Shumway followed soon after with the first in the U.S.

The first living donor liver transplant from parent to child was performed by Raia in Brazil, followed by other successful cases in Australia, and then in the U.S. by Christoph Broelsch, from Germany, at the University of Chicago, my alma mater. The first adult to adult living donor liver transplants were performed in Japan and the first in the United States in Denver, by Igal Kam, an Israeli. And the first combined liver-intestine transplant was performed by David Grant in Toronto, Canada. More recently, but just as groundbreaking, the first hand transplant was performed in Louisville, Kentucky, in a New Zealander and the first face transplant performed in France in 2005.

So I hope you see how these illustrate the international innovation of transplantation. Surgeons from around the world were excited and fired up by these successes, traveled globally to learn from these innovators, and brought the experience and energy back locally to their home towns and native countries in order to establish programs of their own. And while these “firsts” make headlines and were broadcast around the world, it is often the subsequent progress at the local level that can make the most impact. Just like the progressive environmental “Think Global, Act Local” movement.

The original concept of “think global, act local,” however, was not so modern, and had little to do with the environmental health of the planet. It has been attributed to Patrick Geddes, a Scottish biologist, geographer, philanthropist, pioneering town planner, and social activist who wrote a book in 1915 called *Cities in Evolution*. He introduced the concept of “region” to architecture and planning. The character of the city had to fit into the essence of the region around it, and in his book the early idea of global thinking and local action was clearly evident: You can’t have local character without seeing it in the context of the bigger world.

Geddes was an advocate of the civic survey, which included, at a minimum, the geology, the geography, the climate, the economic life, and the social institutions of the city and region, and their inter-relationships. He did a great deal of work in India and the Middle East, and wrote a series of exhaustive town planning reports on 18 different Indian cities, making interventions considerate of local context and tradition. In 1925 he submitted a master plan for developing Tel

Aviv, adopted by the city council, and the Tel Aviv city core is actually built around “The Geddes Plan.” Geddes had a strong interest in eastern philosophy, which he believed looked more readily at “life as a whole.” He criticized the tendency of modern scientific thinking to specialization and instead saw cities as common interlocking patterns like the petals of a flower. If one gets too focused on one’s own specialty, it is like tearing off the petals of a flower, and the beauty of the flower is lost.

So what does Patrick Geddes and his philosophy of “think global, act local” have to do with an ASTS Presidential Address? I think the community of transplantation has an outlook similar to Geddes; at least it should. While we are appropriately focused on our own patients and our centers, we recognize that each part of transplantation is interconnected. Placing one organ into a recipient affects another on the waitlist; efforts to increase organ donation in one region of the country or area of the world can impact another; advances by one surgeon can teach many; a scientific discovery can change global practice. The ripple effect.

The world is rapidly shrinking due to the explosive expansion of information technology, the vast reach of the internet and social media, and the ease of international travel. Over 500 years since Columbus reported the world was round, the *New York Times* journalist, Thomas Friedman, discusses in his book, *The World is Flat*, how individuals, companies, and countries have to shift their perception of the world in order to remain competitive in a global market where historical and geographical divisions are becoming increasingly irrelevant. He talks about how he observed that we have “leveled the playing field.” Technology has made it possible for more people from all corners of the world to collaborate and work in real time, compete on equal footing, more than ever before. This is important in the world of transplantation as well, and perhaps more so. Contributions from transplant surgeons and physicians of all nationalities, ethnicity, colors, race, origin, and gender have leveled our playing field, so all can compete.

There is a term that is a play on “think global, act local” and I think describes transplantation today. “*Glocalization*.” This term first appeared in the late 1980s from Japanese economists in the *Harvard Business Review*. According to the sociologist Roland Robertson, who is credited with popularizing the term, “glocalization” describes a new outcome of local conditions toward global pressures—“the simultaneity—the co-presence—of both universalizing and particularizing tendencies.” The big picture as well as the little details.

For example, the presence of McDonalds or Starbucks worldwide is “globalization,” but the attempts to appeal to local palates are an example of “glocalization.” A global product is transformed in shape (or taste) in order to meet the needs of local consumers. Transplantation is like this—it is a universal and global product—but it continues to transform and mold to fit the needs of the local environment. One example is organ donation. Most transplant activity still occurs in North America and Europe, at least when counted by per capita, and the highest rates of deceased donation occur in those areas too. But there are many major transplant centers that are no longer just Euro- or U.S.-centric, and some of these areas do living donors at a much higher rate than we do, and are starting to initiate deceased donor programs as well.

Similar to corporations, we too need to shift our perception of the world, as Thomas Friedman suggests, and as this map depiction of the world based upon population shows. Geographic

boundaries are becoming less distinct. And perhaps that is where the greatest need is as well. In fact, while the numbers of transplants in the U.S. and Europe are quite stagnant, the greatest growth in the last 10 years has been in Asia, India, and South America. I have had the privilege to be able to travel in many areas of the world over the past few years and witness first hand “glocalization” as I search for my morning coffee and see a Starbucks, but much more relevant is seeing the growth of transplant programs in South Korea, India, Hong Kong, and Japan. In 2012, I visited India and South Korea and witnessed how they now do many more LDLTs than the U.S. or Europe, and are beginning to develop the basis for deceased donation as well. And just a month ago I visited the director of the transplant program at the Portuguese Hospital in Sao Paulo, Brazil. South America, particularly Brazil, has developed a strong infrastructure for deceased donation, with huge increases in transplantation. We must be aware of the growth in these parts of the world and open to new opportunities.

Sometimes, the action of a national government, a world leader, corporations, or international celebrity that can make global change happen on a grassroots level. In Spain, the government put into place the “opt-out” system of consent for donation and a training system for transplant coordinators—they have been the world leader in deceased organ donation for over 20 years, with many countries trying to emulate the “Spanish model.” In 2010 they drafted the European organ donation directive, which transfers the Spanish model to the rest of the European Union, creating a network of coordinators across Europe who can then instruct coordinators in their own countries. To combat declining donation consent rates in Israel, The Knesset passed a new law in 2011 giving priority on the waitlist to people signing donor cards by April 1, 2012. A total of over 72,000 people signed a donor card in 2012! On a special drive that coincided with election day, 32,000 more people signed a card. By the end of 2012, a total of 718,000 had signed organ donor cards, an increase of 13 percent over the previous year. In May of 2012, social media made the foray into organ donation when Facebook Founder Mark Zuckerberg announced that you could share your organ donor status on your Facebook page. As I heard it, this came about after Sheryl Sandberg, the COO of Facebook, read an article written for a Harvard class reunion booklet by one of our ASTS members, Andy Cameron. Today, you can register to be an organ donor in 19 countries from a link on Facebook, and over a half million people worldwide have used the Facebook organ donation option. A major event can also make a difference. There is published research that there is an increase in donation rates and an increase in transplant rates in countries that host the World Transplant Games.

We all know celebrities can have a global impact, but don’t forget the local impact too. In 1996, the Coalition on Donation, chaired by Howard Nathan, recruited Michael Jordan to do a Donate Life campaign with the help of the Chicago OPO, Gift of Hope. Michael Jordan was everywhere—posters in hospitals, life size cut-outs in DMVs, and live on TV. I recently met Cynthia London, who spoke at Penn during our Kick-off for Donor Awareness Month. She went to renew her driver’s license in 1997 and saw the life size cut out of Michael Jordan as she walked into the DMV. When asked about organ donation for her license, she thought, “If organ donation is good enough for Michael Jordan, it is good enough for me,” and she proceeded to put it on her license. Later that year, she had to make that tough decision for her son Siphon to become an organ donor and she remembered that moment at the DMV and said yes. Since then she has been an avid speaker and volunteer for donation. When she shared her story with me, the message that Cynthia wanted me to share with all of you is this: Organ donation works for both the recipient and their family, but

also for the donor family—as it gives them a legacy—a legacy of hope.” There are now over 100 million people registered in the U.S. due to campaigns such as the Michael Jordan campaign.

While the efforts of famous people or organizations can reach many people, often the efforts of a few can lead great changes at home. “Thinking Global and Acting Local” might actually mean bringing global expertise home. This is familiar territory for many transplant surgeons and programs, and a very common event, causing the greatest ripple effect.

Let me give you a small recent personal example that really impacted me. Through the relationship we developed with some surgeons when we visited Delhi in 2011, a surgeon, Arun Kumar, from Kerala, India, spent three months with us this past year. He was part of an initiative of their center to build efforts of deceased donor transplantation in India. While he was with us, he went on over 40 procurements with our fellows and team. About six months later, we had the opportunity to visit southern India for a conference and saw Arun there. Just that week, they had gotten a DD offer at Trivandrum. He went on the donor procurement and was able to obtain kidneys that were successfully transplanted, and the recipients discharged soon after, with normal Cr! This is the patient with the local team and with his family. Arun now tells me that they have had six more in the last six months in Trivandrum City. In a country with few DD, this is a big accomplishment.

Many men and women have traveled long distances to follow a dream, and to learn from other people who had different culture, different language, different way of doing things. And each applied these experiences to their personal efforts at home. They were “thinking globally, acting locally.”

At home in Philly, I also see the global influence in the history of our transplant program at Penn and CHOP every day. Our surgical and medical faculty have come from all over the world—Israel, Iran, Lebanon, India, Egypt, South Africa, Turkey, even Texas (which many think is a different country as well...). Two of my closest colleagues represent the epitome of thinking globally—both educated in other countries and both now working hard to help train those outside the U.S. Among many other global initiatives, Raj Reddy does teleconferences late into the evening in his office reviewing patients with trainees across the globe, and Avi Shaked is working with the Myanmar government to improve medical education and clinical care. And, similar to many U.S. transplant training programs, we have trained clinical and research fellows from all over the world: Columbia, India, Mexico, Israel, Australia, Greece, Spain, Argentina, Turkey, the Netherlands. These interactions have made our clinical and research programs all the more rich and productive, providing us with unique collaborative opportunities and prospects. I think most, if not all, ASTS training programs have many experiences like this. If you had an opportunity to meet the graduating class of ASTS fellows this year, like I did at the Fellows Symposium, you would see that this past year we have trainees from 18 different countries that have trained at many of our 60 plus different North American programs. We also follow our fellows after they “graduate,” and we know that nearly 20 percent leave the U.S. for a transplant job in another country. I personally cannot wait to see what future changes they will make in the world of transplantation all over the globe.

So my message to you is this: We need to increase the “glocalization” of the ASTS and the transplant community in general. We do not know who the next person we help train or touch in some unique way will be the next surgeon or physician to make a difference on the other side of the world or the opposite side of the equator. And we may not always know how they will alter their practice based upon local custom and values, just like Starbucks. We also don't know how a visit to a new and growing country or program will affect our own practice here at home. The diverse backgrounds and cultures involved in our field can provide unique insights and fresh interpretations of the huge moral and ethical questions that transplantation faces. We must be open to not just hear them, but to listen.

This is where I would like to see the future direction of the ASTS go. Yes, it is the *American Society of Transplant Surgeons*, but I believe we need to go beyond that title. We are focusing on doing what is right at home, but also broadening our vision and evolving to learn and share more with our global partners, changing our perceptions—we *are* “glocalizing.” The ASTS has already started down this path.

This past fall we had a strategic planning meeting for our ASTS fellowship programs and developed a five-year strategic plan to improve our transplant training here at home in the U.S.—raise the bar for programs, improve educational content, and ensure high quality consistency between programs. We will assess milestones for fellows, empower program directors, and create benchmarks. We are working on implementing programs to get medical students and residents interested in a career in transplant surgery early on, and continue to build and enhance the ASTS Academic Universe. I am excited by this plan, as I believe the training of the next generation of transplant surgeons, no matter where they are from or where they end up, is one of the most important things that we do.

We were recently on the Hill lobbying for local efforts, in senators’ and congressmen’s offices, as have our AST colleagues. I was just in Brazil, where national healthcare providers recognize that they should provide life-long immunosuppression—and after years of fighting for it, we still don't have that guarantee in the U.S. And in collaboration with the AST and the Transplant Roundtable, we are continuing to fight for increased funding for the DoT and transplant initiatives.

We have also learned from the efforts of surgeons like Elmi Mueller in South Africa that it is possible to increase the donor pool using HIV+ organs in HIV+ recipients, and via efforts spearheaded by ASTS members such as Dorry Segev and collaboration with our AST partners, there is now the HOPE Act sponsored by Barbara Boxer that hopefully will pass.

And we have started working on a Global Partnership initiative to increase our international collaborations. The ASTS wants to share our vision of surgical training of transplant fellows. We wish to expand our global reach, not just by increasing international members, but also with a new Global Training Partners Pilot Program—we hope to identify international programs with fellowships that meet the high ASTS standards of training and wish to partner with a North American program. These programs may have teleconferences, share research initiatives, participate in ASTS events, and facilitate clinical exchange programs to enhance experience in certain areas. Not just to learn surgical techniques, but to also experience how things may be done differently—anywhere from organ donation initiatives, transplant center infrastructure, business

practices, and how to do more with less. We should and must go beyond our comfort zone to continue to make advances in transplantation.

I certainly have been forced to go beyond mine this past year as President, but it has made me a better physician and surgeon, and opened my eyes to so many more opportunities and possibilities. My discomfort has been lessened by the partnership and friendship of the AST President, Roz Mannon—either together or in parallel, we’ve written letters to and visited the FDA, the CDC, HRSA, CMS, ACOT, congressmen and senators, pharmas and insurance companies, and even hung out on South Beach. Thank you, Roz for a great year, and keeping me laughing.

And my work has been significantly eased and organized by the guidance of the ASTS Executive Director, Kim Gifford, and her stalwart staff, as well as the amazing council and committee chairs. Thank you for making the ASTS what it is. I am so grateful for the support of my friends and colleagues at Penn and CHOP—who truly supported and encouraged me, never saw me, and always managed to cover our busy transplant service. And I am of course deeply grateful for the encouragement and support of my family (who never saw me as well).

As Mitch passed the gavel to me last year, I didn’t know what was coming. Now, I know. As I pass the baton to Alan today, I will also pass on to him the over 2,000 ASTS members from all areas of transplant who are involved in our amazing global and local transplant experience. Some of these members will “Think Global, Act Local,” staying close to home, and will have the opportunity to touch the lives of those who live far away and wish to bring transplantation to their community, and others will “Think Local, Act Global,” traveling beyond these borders to share the knowledge learned at home, and bringing new and fresh ideas from distant programs back to our own communities.

The ASTS will be 40 years old next year, and there is much to celebrate and much to look forward to. As the world of transplant changes, the ASTS will be challenged to evolve with it, but challenge is good—it makes you be at your best. Happy Birthday a little early ASTS; your best years are yet to come.

I am grateful for this incredible year. Thank you for the honor of serving as your President.

