The Idea Economy: It’s not Brain Surgery

By Jessica Rabski, MD, and Eve C. Tsai, MD, PhD, FAANS, FRCSC

“My job is not life and death.”

These words were spoken by Meg Whitman, an American business executive and political activist who is currently the president and chief executive officer of Hewlett Packard Enterprise, at the 2017 American Association of Neurological Surgeons (AANS) Annual Scientific Meeting in Los Angeles. Such a statement exemplifies her humble nature, and in no way depreciates the well-known understanding of the power and influence her years of expertise, wisdom and insight have had on the innovation and advancement of the business field. How her previous and current medical-related business projects will inevitably improve patient experience, overall welfare and both efficacy and accuracy of medical treatment were particularly impressive to her neurosurgical audience.

As expected, this year’s meeting showcased impressive world-leading research and new innovative technology that sparked much excitement and admiration amongst the many neurosurgeons, fellows, residents and medical students who attended. Whitman assertively took center stage and captivated the audience immediately with her intriguing introduction to the Idea Economy and its unlimited potential in the advancement of medicine.

Recent revolutionary business adventures like Uber, AirBNB and Spotify were cited as examples of successful usage of the Idea Economy. Whitman emphasized that, in today’s business world, the ability to turn ideas into usable products has simplified remarkably and success is dependent on how quickly one can turn ideas into something functional. Failure of existing business modules occurs with the inability to respond and compete with new technological threats. In the business world, we have entered an age of “digital disruption” and will inevitably see its impression in the field of medicine and, eventually, with the ongoing advancement of the demanding and ever-changing field of neurosurgery.

Whitman then highlighted seven current major trends used in the Idea Economy and supplemented her explanations with short video clips emphasizing their potential influences. The seven categories included:

- Mobility
- Big data
- Internet of things
- Memory computing
- Artificial intelligence
- Virtual reality
- IT security

Even though her personal examples were intriguing and captivating, it was her final remarks that were the most impressive. She provided the audience with a list of key principles that she personally remembers to reflect upon.
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when guiding her business decisions. She offered to share them with us to help motivate and support her neurosurgical audience in their medical innovative efforts.

The first principle she stressed is that you need to have the right person, at the right time, in the right place, with the right attitude, which can be particularly challenging and frustrating to find. This being said, it is important to recognize that if it is not right, then it is not right and one cannot force or control it any further to make it work – a concept that is difficult for the neurosurgeon to abide by.

The next concept was to focus on the customer since customer service in healthcare has never been so important. She personally attested to the importance of actively listening to others while maintaining an open mind since you do not know what you do not know. Our patients provide us with unique insight and perspectives that we need to recognize to help create solutions that actually address the problems at hand.

Another important principle was that you need to disrupt yourself before someone else disrupts you. In this statement, Whitman was emphasizing the importance of trying to think of new ideas and ways of doing one’s tasks rather than remaining stagnant. Change is inevitable, whether you embrace it or choose to have it thrust upon you.

Her fourth principle stressed the importance of creating efficient cost structures to ensure sustainability of our new ideas and, more specifically, to ensure efficient use of the limited resources in healthcare. This is a crucial concept if we want our ideas to be successful and not have limited finances act as an obstacle that prevents buy-in.

Finally, she touched on the fact that one needs to have thick skin to be brave, follow through with one’s ideas and handle the pressure. This is a principle that is pressed upon surgeons from an early stage and it ultimately ensures our professional advancement and obsession with striving for surgical excellence.

Whitman’s speech not only offered a glimpse into the ever-evolving world of business but it provided insight into an intriguing challenge that physicians should be eager to tackle – how to connect the medical and business world by utilizing the Idea Economy to better our patient’s treatments, experiences and overall welfare. As physicians, we have unique insight into the technical failings of our healthcare system and are privileged to have our patients share their experiences, feelings and opinions with us. Today’s technology can help enable us to realize our ideas more efficiently and quickly, thereby allowing us to focus more on the impact of our innovations and improving their quality and efficacy. Whitman was both inspiring and informative and hopefully has sparked the curiosity of neurosurgeons to “disrupt” their ordinary ways of thinking and to create solutions to better the lives of their patients. This is an exciting and intriguing challenge, and we are grateful to Whitman for having initiated this spark.

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Aviva Abosch Leads 2017 AANS Annual Scientific Meeting

By Ellen Air, MD, PhD, FAANS

For former WINS president, Aviva Abosch, MD, PhD, FAANS, service to organized neurosurgery did not end when her term was complete. She has served on the AANS Scientific Program Committee (SPC) for the last several years, a role that began as the WINS liaison to the committee. This year, she served as Annual Meeting Chair for the 2017 AANS Annual Scientific Meeting, which was held in Los Angeles. She was kind enough to share her thoughts on this experience.

The SPC “is populated by neurosurgeons who derive from the entire breadth of neurosurgical practice, representing each of the subspecialties, academic and community-based neurosurgery,” Dr. Abosch stated. “Their passion for the field and enthusiasm for the task — which is the creation of a cutting-edge, relevant and comprehensive meeting program — is both humbling and infectious.”

The task of the SPC is a yeoman’s job indeed. As Dr. Abosch describes, “pulling together an annual meeting for some 3,000 attendees requires an exhaustive amount of planning, and the efforts of an entire team. The AANS Scientific Program Committee, working in close collaboration with the AANS meeting staff, spends a whole year — each year — planning and orchestrating this event.”

Dr. Abosch was asked to join the SPC following her service as the WINS liaison. She then went on to serve as the SPC co-chair under Regis Haid, MD, FAANS, who served as SPC chair during Robert Harbaugh’s, MD, FAANS, presidential year.

She was quick to give due credit to this year’s SPC chair, Jacques Morco, MD, FAANS. “What might not be immediately apparent from the outside is that the SPC chair truly does the majority of the ‘heavy lifting’ in terms of planning and orchestrating the Annual Scientific Meeting. As Annual Meeting chair, my role was to support and to serve as an advisor to the SPC chair and committee, and to contribute organizational memory.” She should know. Before this most recent role as Annual Meeting Chair under former AANS President Rick Boop, MD, FAANS, she served as 2016 Annual Meeting SPC Chair under former AANS President Hunt Batjer, MD, FAANS. She noted, “For AANS 2018, we will need to doff our hats to Dr. Fred Barker.”

Moving the Needle – Notable Advancements in Diversity

The first-ever WINS Retreat was held in Snowbird, Utah, July 7-9, 2017, in conjunction with the National Neurotrauma Society Meeting. Look for highlights, photos and plans for a 2018 retreat in our next newsletter.

The National Neurotrauma Society (NNS) established their first Diversity Award for the 2017 meeting. It provides for airfare, registration and lodging for trainees from an underrepresented group. The NNS continues to be a leader in the promotion of women and diversity in the field. They recently completed solicitation of applications for their 20th Women in Neurotrauma Research (WinTR) Award and for the 12th Women in Neurotrauma Research – Visiting International Scholar Award (WinTR-VISA).

Marjorie Wang, MD, MPH, is the newly-elected chair of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Disorders of the Spine and Peripheral Nerves. Dr. Wang, who is Professor of Neurosurgery, chief of the Division of Community Neurosurgery and vice chair of Clinical Operations and Quality at the Medical College of Wisconsin, is only the second woman in its 34 year history to hold this position. The next meeting of this Joint Section will take place in March 2018 and will include a WINS-sponsored symposium on the psychology of leadership.

Deborah L. Benzil, MD, FACS, FAANS, became editor of AANS Neurosurgeon. AANS Neurosurgeon is a quarterly online publication focused on socioeconomic aspects of contemporary neurosurgical practice. Dr. Benzil is the director of neurosurgery, Mount Sinai Health System at CareMount Medical, was the first president of WINS and became a member of the Society of Neurological Surgeons in 2016.

Jaclyn Janine Renfrow, MD, was awarded the Louise Eisenhardt Travel Scholarship at the 2017 AANS Annual Scientific Meeting. Her work “Tracking Career Paths of Women in Neurosurgery” provided a critical review of the distribution of women in our field and the continued dearth of women in academic leadership positions. This work has been highlighted in a number of online articles. Dr. Renfrow is a fifth year neurosurgery resident at Wake Forest School of Medicine. Co-authors on this work include former WINS presidents Aviva Abosch, MD, PhD, FAANS; and Isabelle M. Germano, MD, FAANS; and current WINS president Stacey C. Wolfe, MD, FAANS.
Jennifer Sweet, MD

There has been a great deal of effort put forth by the American Association of Neurological Surgeons (AANS) and the Congress of Neurological Surgeons (CNS) to address the opioid epidemic to the best of neurosurgery’s ability by supporting the efforts of the American Medical Association (AMA) and by modifying our clinical practices. However, it is often difficult to make a difference while still appropriately treating our patients, without the mutual support of our non-surgical colleagues, whose collective voice is often much greater than our own. For this reason, it has been a great opportunity representing neurosurgery on the AMA Opioid Task Force, lending our voice to national efforts.

Although we are a small subspecialty, we are on the frontlines in the treatment of patients with chronic back pain, which is among the leading causes of disability in the U.S., as well as patients with neuropathic pain and headache conditions. In addition, as surgeons, we are tasked with the burden of limiting postoperative opioid use, while still adequately managing patients’ pain. Moreover, we have a unique role in treating both the peripheral and central nervous systems, and we have a detailed understanding of neuroanatomy implicated in the pathophysiology of various pain syndromes. This gives us a distinct perspective; one that can be used as part of the solution in this nation-wide opioid epidemic.

Listed below are some of the numerous contributions of the AANS and CNS in this endeavor. This summary represents the work of many neurosurgeons across the country.

1. Teaching & Education: Safe Prescribing
   a. Safe prescribing has been added to resident curriculum nationally.
      i. This includes promoting the importance of multi-modal/polyanalgesic therapy for all patients preoperatively, intraoperatively and postoperatively.
   b. Seminars are provided at national meetings for CME credit. Online webinars, as well as resources for practicing physicians, are on our websites.
   c. Endorsement and advertisement of the Task Force’s recommendations, such as safe storage/disposal of opioids and co-prescribing naloxone if indicated, has been done within our societies.
   d. These above practices are important. Legislators and the AMA should be aware of efforts already undertaken by physicians, including surgeons, to help be a part of the solution.

2. Surgical Alternatives: Treatment of Chronic Pain
   a. As long as treating physicians and patients are open-minded to surgical alternatives and familiar with the evidence, then we can make a difference in reducing the use of opioids in the treatment of chronic pain, both malignant and non-malignant.
      i. Spinal cord stimulation, dorsal root ganglion stimulation, peripheral nerve stimulation, intrathecal drug delivery and ablative procedures are all potential avenues for patients suffering from chronic pain of various etiologies; neurosurgeons familiarization with these techniques and their indications is essential.
   b. The AANS/CNS recently reviewed and submitted corrections to the American College of Occupational and Environmental Medicine (ACOEM) Practice Guidelines: Opioids External Review, refuting the report of Level 1 evidence against intrathecal pain pumps for non-malignant pain.
      i. It is important to know that there is evidence, including the Polyanalgesic Consensus Conference (PACC), supporting the role of intrathecal pain therapies and spinal column stimulation for the treatment of chronic pain, both of which have been shown to reduce the use of systemic opioids.
      ii. Patients with malignant and non-malignant chronic pain can benefit from these surgical interventions.
      iii. There is evidence that these therapies are effective for patients who are on high-dose opioids and those who are opioid naïve, but do not tolerate the side-effects of narcotic therapy.
   iv. Neurosurgery is also in the process of constructing guidelines for ablative procedures for the treatment of cancer pain syndromes, also shown to be effective in the reduction of opioid use.

3. Voicing our Concerns: Advocating for Surgeons
   a. At times, it is also necessary to address key concerns held by neurosurgeons to remain focused in our mission and formulate achievable goals moving forward. This includes the following:
      i. The inability to adequately treat patients postoperatively with acute pain, due to the
seven day restrictions on prescriptions for patients who undergo larger surgeries.

ii. The inability to adequately treat patients with chronic pain, due to opioid prescribing limitations.

iii. The focus by legislators on opioid prescriptions rather than the emphasis on pain relief, quality of life and return to daily activities, including work.

iv. The inability to spend time caring for patients in clinics due to increasing burdens placed on physicians with often burdensome PDMP software.

v. The seeming lack of focus on pharmacies to share the burden and allow partial filling for prescriptions.

vi. The paucity in treatment facilities available for patients who need to be managed for addictions.

b. Each of these concerns has been discussed in multi-disciplinary forums, and we are actively working to find solutions to these challenges and others.

Thank you for the opportunity to represent your voice. We will continue to work to have our views reflected in the AMA task force recommendations.

AANS/CNS Section on Women in Neurosurgery

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