Want More Women in STEM? Support Miss America’s Programs!

By Jamie Wells, M.D. — August 8, 2017

When people hear of Miss America or Miss USA and the like, they tend to conflate the organizations and dismiss them as “beauty pageants” and whatever that must mean. Having just judged the Miss America’s Outstanding Teen (MAOTeen) scholarship competition—Miss America’s sister program—in Orlando, Florida, I would argue to do so would be a disservice to some extraordinary, talented young women who not only are currently impacting their communities, but will no doubt reflect future leadership in society.

Momentarily, I will take you behind-the-scenes of my experience and demonstrate how this group of 13-17 year olds and the ancillary programs Miss America provides (that range in age from childhood to young adulthood) could be an opportunity for cultivating women in the biomedical sciences and STEM (science, technology, engineering and math) fields. Of the 51 contestants who competed in the national week-long event, roughly 82% selected platforms that spanned the STEM and medical spheres with 57% aspiring specifically to such careers. Given the involvement of more girls in the local and state levels as well as the varying age group activities, these numbers likely blossom.

The MAOTeen program “promotes scholastic achievement, creative accomplishment, healthy living and community involvement for America’s teens.” And, they are true to their word. The pool of candidates excelled academically which by my count exceeded 70.5% fulfilling honors or highest GPA categories. Multiple state contenders won science fair or STEM excellence awards,
highest math average, and received Presidential Awards in Excellence, Education, Service, Leadership and Fitness.

**And the Winner Is...**

MAOTeen 2017 Barnard-bound Nicole Jia [3] passed along her crown to Jessica Baeder, Miss Alabama’s Outstanding Teen [4]. As MAOTeen 2018, Jessica will become the teen goodwill ambassador for Children’s Miracle Network Hospitals [5] for which she has already been a successful fundraiser. At 17, she is a black belt in Tae Kwon Do winning countless tournaments, in innumerable honor societies, won awards in Mechanical Engineering, Debate and received a Governor’s Commendation for Community Service. Desiring to obtain her MD/PhD so she can be an orthopedic surgeon and biomedical engineering researcher, Jessica hopes to pursue projects that make prosthetics more affordable and accessible to military veterans who endure amputation.

It is hard to limit discussing her many achievements. Of particular note, she is the only teen member of the Governor’s Task Force to End Child Hunger. Given food insecurity is a major passion and she will spend the year advocating for her platform *Healthy Food For All*, she has spoken at her State Capitol, successfully encouraged legislators to pass the Healthy Food Financing Act of 2015 and developed, implemented and funded two programs *Fresh Fruit 4 Kids* and *Jessica’s Pantry*.

She is a natural leader, quietly effective, gracious, and replete with a humility and depth of character that resonates on and off stage. Jessica possesses an open and curious mind, exhibits a tremendous work ethic, focus, drive, determination and was a consistent competitor who thrived under pressure. I look forward to watching her inspire others, especially young girls, to pursue their dreams while being a positive role model.

**Pictured here with all of the judges:**

**With me:**
MAOTeen candidates...
The entire pool of candidates was accomplished, inspiring, impressive and formidable. Whether their emphasis was in the sciences or not, they all were civic-minded, influential in their communities and demanded the absolute best of themselves. It is no small feat to get to the national level. Each and every young woman was wonderfully prepared for such a grueling, multi-tier competition. They executed en mass with a professionalism, confidence, determination and drive we should champion.

The skill set they acquire throughout these endeavors allows them to speak on a moment’s notice in public, state and defend their point-of-view, function under pressure, develop and enhance their resilience, engage with leaders in corporate, academic, artistic and governmental domains, advocate for themselves, their causes and their districts, formulate and effectuate plans that fix problems amounting to true change. Raising over $50,000 for respective fundraising endeavors, starting mental and emotional health services in a school district, harnessing the power of social media for anti-bullying efforts and creating peer-to-peer education programs that alter behavior in distracted driving while partnering with national and state safety councils are quite amazing achievements no matter the age. This article does not begin to touch on how much these wonderful young women are doing to make the world better, in and out of the world of science.

No matter the career they opt to explore in the future, these young women are poised to create endless opportunities for themselves that they earned of their own making. The future is incredibly bright and the scholarships they all receive in the process will help secure that prediction.

Healthcare dominated…

Healthcare dominated the interests and career aspirations of this year’s contestants. Many hope to become physicians with several desiring to be cardio thoracic surgeons, neurosurgeons or orthopedic surgeons. Pediatric oncology, radiology, general practice and reconstructive as well as facial plastic surgery rounded out the field. Veterinary medicine, clinical psychology, nursing and doctorate degrees in neuroscience, physical, speech and occupational therapy were popular. Forensic science, aerospace engineering and applied mathematics as well as electrical, environmental, civil and other engineering were a heavy interest.

Platforms reflected the same level of enthusiasm for the biomedical sciences and STEM fields. They included developing programs and support for: veterans suffering from post-traumatic stress disorder (PTSD), distracted driving, ALS, multiple sclerosis, raising awareness on organ donation and actively registering the public, the isolation and mental well-being of the elderly, adoption and foster care, heart health, melanoma and skin protection, childhood trauma, concussions, suicide prevention, anxiety in teens, CPR training, fulfilling dreams of children with life-changing illnesses, Type 1 Diabetes, promoting STEAM/STEM (“A” is for arts) and breaking stereotypes of girls, Alzheimer’s and Dementia and so on.

They hold leadership positions in a multitude of subjects, tutor in math, perform computer coding, train service animals, volunteer with the elderly and services that aid homeless children. The litany is extensive.

Starting in 2014, the Miss America Organization (MAO) began pushing forth STEM education initiatives with the U.S. Department of Education. This should certainly be extended to the
MAOTeen segment and the additional populations within the organization.

As I was leaving for the airport at the conclusion of the week, I encountered Miss Massachusetts Jillian Zucco. All of the Miss America contestants are present at the MAOTeen competition to support their teen counterparts and participate in their own orientation. She is a telemetry nurse and thinks getting her Doctor of Nurse Practice is in her future (pictured with me).
The peer-to-peer engagement of the spectrum of ages is a terrific way to spread good messages and create a tight network that generates an alumni involvement. Whether it be careers destined
for law, education, medicine, musical theater or journalism, the participants of these programs cast a wide net of relationships and friendships that can serve to help personally and professionally along the way.

The judges...

Since MAOTeen extends far beyond the chosen subject matter of this article, the judges’ panel reflected a well-rounded expertise (see release here). Pictured below for the various preliminary and final nights, please find Dr. Debbye Turner Bell (Miss America 1990, former CBS Correspondent, former lead anchor for global Arise News, veterinarian); Benjamin Brecher (Operatic and concert tenor who has sung 15 roles with the New York Opera and is Professor of Voice at University of California at Santa Barbara); Sinead Norenius (Successful entrepreneur & digital marketing expert in the beauty industry, currently a partner at The Pienza Collective); Julie Stadler (Board Member of Monroe Carell Jr.’s Children’s Hospital at Vanderbilt, creator of the Dance Network); Professor Hilary Levey Friedman (Sociologist at Brown University).

The judges with MAOTeen 2017 Nicole Jia With Miss America Savvy Shields
Preliminary & Final Nights With Some Fun Mixed In...
In Summary…

I am honored that my two judging experiences to date were for a world robotics competition and MAOTeen. My week in Orlando was not only memorable, but also invigorating. If given the opportunity, then I would do it again.

Though I never competed in these types of endeavors as a child, I did compete in math, debate, sports and so forth. Looking through the lens of my own career trajectory of engaging with the public throughout all media forms, making impassioned pleas to raise funds or be a patient advocate, for instance, I learned on the job and with trial and error.

Any one of these young women already could be tasked for things well beyond their years. It would be a privilege to mentor them and I would be first in line.

Though MAOTeen is a scholarship and achievement-based competition whose criteria differs from the Miss USA type programs, being supportive of women and girls means encouraging them to pursue their dreams not ours.

NOTES:

More fun pictures with the judges, the judge's chairman Alyson Michaels Sulpizio, member of the judge's committee and MAOTeen Board Member Mary Bocchicchio, President & COO of the Miss America Organization [12] (MAO) Josh Randle, Chairman of the MAO Board of Directors Lynn Hackerman Weidner, VP of Marketing & Development MAOTeen Steve Frocchi and Executive Chairman/CEO of MAO Sam Haskell.