

News Lines

Dr. Sobh Goes to Washington

School of Engineering Dean Tarek Sobh on his White House appearance and how engineering can help solve the world's most vexing problems

By Leslie Geary



“Engineering,” insists Dr. Tarek Sobh, “is about helping people.”

As UB’s engineer-in-chief (he’s dean of the School of Engineering and vice president for research and graduate studies), Sobh is uniquely qualified to make that assessment. Among his other endeavors, Sobh draws together engineering colleagues, researchers, post-doc fellows, entrepreneurs, businesses, medical experts, and other interested parties so they can work together to develop multifaceted, STEM-related solutions to advance major issues like sustainable development, medicine, scientific research, and cyber-security.

That’s caught the attention of policy makers. In March, Sobh was among a select group of engineering deans invited to the White House by the National Academy of Engineers (NAE). How, deans were asked, can engineering be used to solve what the NAE has dubbed the Grand Challenges of Engineering?

Sobh had plenty to share. In fact, he noted, UB is “perfectly poised” and “already doing” the kinds of things needed to solve some of the world’s most vexing problems.

When he returned from Washington, *Knightlines* caught up with him to find out more.

You’ve said UB is “perfectly poised to meet the Grand Challenges.” How so?

In many cases, the Grand Challenges that have been identified are the very interdisciplinary problems that we excel in. At UB, for example, we have the Wireless Mobile and Communications Laboratory that’s dedicated to cyber-security. The University of Bridgeport has partners with Face Checks, the new venture at CTech IncUBator, our on-campus business incubator that specializes in biometric cyber-security applications.

Another example would be within area of energy and sustainability, which is one of the existing Grand Challenges. And within that area, we already have a Renewable Energy Research Lab that works with Fuel-Cell Energy company on many exciting environmental projects.

Within the area of scientific discovery would be the research centers that we have in the area of Robotics, Intelligence Sensing and Control (RISC) and biomedical engineering and nanotechnology, in which great advances are being discovered on a continuous basis.

What was the most inspiring or thought-provoking part of your White House visit?

There were three things that really stuck with me. The first was one of the questions I asked during one of the meetings along the lines of, “How could the White House help us meet the Grand Challenges project?” We were told, “If you tell us who to call and ask for what you need, we will do it for you.” That was one valuable outcome, being able to have an advocate and colleague in the White House to ask for help.

