

**Dr. Peterson**

**Welcome: Grand Challenges Family Weekend Reception**

4:30-4:45 p.m. Friday, Sept. 12, 2014, Global Learning Center atrium

Good afternoon, and welcome to the Georgia Tech Grand Challenges Family Weekend. This is always one of the great weekends every year. There's so much going on and so many opportunities to learn and familiarize yourself with the campus that it's hard to know where to start. We're glad you're here. We hope you have a safe and wonderful weekend, and that you get to go home after celebrating the Yellow Jackets football team's third victory of this young season.

Your students might have already told you something about the Grand Challenges program, which right away immerses them in the innovation ethic that is a vital part of a Georgia Tech education. You can't get away from that word *innovation* at Georgia Tech. We offer many opportunities for our students to dive right in, with events such as the Convergent Innovation Competition (sponsored by GE, Cisco, Code42 and GM), InVenture, TI:GER, Capstone Design Expo, the Georgia Tech Business Plan Competition, and the Ideas to Serve (I2S) Competition.

For those of you who haven't gotten the word, Grand Challenges students are freshmen living together in one dorm, learning to work in cross-disciplinary teams, and tackling some of the wicked problems facing society. Grand Challenges is part of the Leadership Education and Development Program in Student Affairs, and it's done in partnership with our College of Engineering.

This initiative provides students with an opportunity to develop problem solving, analytical, and critical thinking skills to find solutions to real-world problems. Beyond the exploration of a problem and the discovery of a solution, Grand Challenges funds students' ideas and allows them to put in practice what they learn in the classroom. They work side-by-side with some of Georgia Tech's world-class professors and focus on the relationship between food, water, energy and healthcare.

The name “Grand Challenges” is derived from the Grand Challenges for Engineering in the 21st Century report created by the National Academy of Engineering. Some of the challenges the Academy came up are in the realm of preventing nuclear terror, providing access to clean water, and engineering better medicines. The scientists, engineers, entrepreneurs, and policymakers of the future — in other words, you — will have an opportunity to tackle these challenges. The skills and knowledge you pick up in our Grand Challenges program will give you a running start.

In the two years we’ve had Grand Challenges, more than 30 of its projects have been awarded funding. A Grand Challenges team designed and implemented a program to reduce the prevalence of childhood obesity and is currently consulting on Governor Deal’s public health initiatives with GTRI. These second-year students presented at the 2013 Southern Obesity Conference, designed an application to reduce stress that won first prize at a code-a-thon sponsored by Jawbone and the Clinton Foundation, and are planning to publish their Grand Challenges project’s research findings in the coming year.

In an effort to improve sustainability here at Georgia Tech, another Grand Challenges team started “Tech Treasure,” a program designed to reclaim and donate items typically thrown away during residence hall move-out on Georgia Tech’s Campus. This year, in collaboration with Goodwill and Georgia Tech Housing and Residence Life, Tech Treasure received more than 300 donated items from four residence halls on East Campus. The students plan to expand the program to additional areas of campus each semester.

Other Grand Challenges student projects include:

- systems to improve patient identification in hospitals;
- methods to address and decrease human trafficking in Atlanta;

- addressing foster children's needs after they age out of the foster system;
- the integration of music in the elementary school classrooms to increase test scores and graduation rates;
- and the development of new irrigation methods for specific soil and climate conditions.

Val has had some experience working with one of the Grand Challenges teams, and she'd like to tell you a little bit about that.