INSPIRING LEADERSHIP
PEOPLE AND PROJECTS THAT ENVISION AND EMPOWER
BEST program paves way for PhDs to explore new career options

By Sherry Negrea

Wisler Charles, ’16, arrived at Cornell in 2011 to start a PhD in Immunology and Infectious Disease, hoping he would eventually become a professor. But the odds that a PhD graduate in science, engineering, or health will find a faculty teaching or research position within five years of graduating are just one in five nationally, according to the National Science Foundation. As Charles spoke to other graduate students about the prospects of landing a tenure-track position, he decided to focus on launching a startup company, though he hasn’t given up on his dream of becoming a professor. “Graduate students have control of their own destinies,” Charles said. “But most of them focus on what’s been done by our predecessors. It’s a linear way of thinking that if you do this, this, and this, it’s going to be fine. It doesn’t work that way anymore.”

What helped Charles, now serving as a BEST advisory board member, shift his goals was Cornell’s one-year-old BEST (Broadening Experiences in Scientific Training) program, which allowed him to meet four like-minded graduate students who are helping him create an immunology-based online educational game.

As one of 17 universities awarded a BEST program grant by the National Institutes of Health, Cornell has become a national leader in reframing the training of PhDs in the sciences so that they gain transferrable skills that meet employers’ needs. Including additional support from Cornell, the grant is investing $1.8 million to retrain graduate students and post-docs in STEM fields on campus for careers beyond academic teaching and research.

The impetus for the national pilot project was a 2012 NIH report that showed the number of academic positions, primarily in the biomedical field, had remained flat. “We’re training far more people than there are positions as tenure-track academics,” said Susi Varvayanis, senior director of Cornell’s BEST program. “PhDs have many other skills, and they are useful in other areas.”

The mission of Cornell’s BEST program is to “change the culture” at the university so that graduate students and post-docs are empowered to prepare for a variety of careers beyond academia, Varvayanis said. The funding supports the initiative for five years.

Since its kickoff in March 2014, the program has offered a series of workshops, mini-courses, and panel discussions in four separate tracks: science communication; science policy; industry entrepreneurship and management; and governance, risk, and compliance.

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Ashley Campbell, who received her PhD in microbiology in May 2015, came to Cornell in 2009 to train for a career in academia but wanted to explore how science communication might fit into her future plans. A year ago, she joined the BEST program and began a mentorship with Merry Buckley, PhD, education and outreach coordinator for the Baker Institute for Animal Health and the Cornell Feline Health Center.

During their mentorship, Campbell and Buckley co-wrote two articles on science-related topics for The Cornell Chronicle. Campbell now plans to work as a post-doc studying climate change at the Lawrence Livermore National Laboratory in California, but is considering other career options relating to science education and outreach.

“Most people who get a PhD have to pursue a career outside of academia, but don’t have the skill sets to do that,” she said. “I think the BEST program is important for building those skill sets they need.”