



**Tamina Johnson**



**Mandek Richardson**



**Debosturi Dutta**

### **ChBME Students Receive Graduate School Fellowships**

Debosturi Dutta, Mandek Richardson, and Tamina Johnson, doctoral students in the Department of Chemical and Biomedical Engineering have been awarded fellowships by the USF Graduate School for the 2013-2014 academic year.

Debosturi, a doctoral candidate in Chemical Engineering, received the Dissertation Completion Fellowship. The award will provide a stipend of \$15,000, full tuition/fees, and health insurance for one academic year. Debosturi's research interests include computational catalysis with applications to chiral-selective growth of single-walled carbon nanotubes (SWCNT) and InAs nanowires, design of enzyme inspired catalysts, plasmonics and biosensing. He uses computational tools based on theory such as density functional theory (DFT), finite-difference time-domain (FDTD) methods, Monte Carlo (MC) and molecular dynamics (MD) simulations. His faculty advisor is Venkat Bhethanabotla, professor and chair in the Department of Chemical and Biomedical Engineering.

Mandek, a doctoral candidate in Biomedical Engineering, will receive the Genshaft Family Doctoral Fellowship. The award includes a stipend of \$10,000 and tuition waivers. He is designing a surface acoustic wave (SAW) sensing platform to detect cancer biomarkers for use in point-of-care testing (POCT). The advantage of POCT is that relatively immediate feedback can be given on site which allows for faster and cheaper diagnosis, and increased testing of underserved populations. Mandek's faculty advisor is Venkat Bhethanabotla, professor and chair in the Department of Chemical and Biomedical Engineering.

Tamina, an Engineering Science doctoral student, will receive a Graduate Student Success (GSS) Fellowship. The fellowship will provide a \$12,000 stipend and tuition waivers. Her research is studying novel therapies for traumatic brain injuries (TBI) and spinal cord injuries, a signature USF research initiative. She is investigating recombinant functional biomaterials for neuronal regeneration and treatment of neurodegenerative diseases. Tamina's advisor is Piyush Koria, assistant professor in the Department of Chemical and Biomedical Engineering.

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### **-USF-**

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