Greetings from Biological Sciences!

This semester has been a whirlwind of activity in the Department. We welcomed two new microbiology faculty: Drs. Emily Rosowski and Anna Seekatz. The Eukaryotic Pathogens Innovation Center (EPIC) celebrated its 6th birthday and continued working to understand the molecular mechanisms of some of the most devastating human diseases. We engaged with school children through a musical theater production to promote marine conservation. The department also hosted speakers from across the country who shared their knowledge and expertise on diverse topics spanning from Molecules to Ecosystems.

As we move into the homestretch before May graduation, we emphasize our appreciation of your support of all our Tigers! Come visit us in person or on Facebook to see more.

NIH grant supports research study of tooth decay in young HIV patients

Much of the research concerning the human microbiome focuses on the gut and the influence that diet and nutrition have on the microbes residing in our digestive systems. Fewer studies consider the bacteria and fungi that live in our mouths, and even fewer look specifically at how human immunodeficiency virus (HIV) infection affects the oral microbiome’s role in HIV – until now.

Vincent Richards, an assistant professor of biological sciences at Clemson University, has received a $1.85 million R-01 grant from the National Institutes of Health National Institute of Dental and Craniofacial Research to study the association between tooth decay and HIV infection in a population of children from Nigeria.

Museum-based research on fish shapes was conducted by members of Dr. Samantha Price’s lab, including (from left) graduate student Katerina Zapfe; undergraduates Carley McGlinn, Dominique Gross and Sierra Rodriguez; and postdoctoral fellow Olivier Larouche.

With more than 4 million specimens, the fish collection at the Smithsonian National Museum of Natural History in Washington, D.C., contains the largest ichthyology assemblage in the world. Stacked shelf upon shelf in the museum are jars of preserved fishes, some collected before the United States officially became a country. After several years of study, Clemson University assistant professor of biological sciences Samantha Price knows many of the specimens all too well.

Musical theater production inspires marine conservation awareness

The warnings are dire: By 2050, the world’s coral reefs could die off if society doesn’t act now to curb climate change. A Clemson University scientist and his students are taking that message to the generation that will be most affected using an unconventional medium: musical theater.

Michael Childress, an associate professor of biological sciences, and graduate students Kylie Smith and Kara Noonan have been studying for the past eight years how the changing ocean environments – including warming temperatures, hurricane disturbance and emergent diseases – impact coral health and reef fish behaviors.

More on the Department of Biological Sciences

- **DeWalt’s research on tree diversity in tropical forests featured in Science Advances**
- Chris Parkinson lab research on Mojave rattlesnake venom
- David Feliciano lab debuts TIGER mouse model for neurological ailments
- Biological sciences major presents research on a hydropower project in Haiti

Find out more about the Department of Biological Sciences.