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.

Interim Chair Saara DeWalt joined microbiologist Dr. Vincent Richards, The Cub, undergraduate Elizabeth Lawson and graduate student Lauren O'Connell at a recent College of Science reception.

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 infection have on the various communities 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.

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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.

Image Credit: Samantha Price

Big or small: Research describes how fish get their shapes

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 associate professor of biological sciences Samantha Price knows many of the specimens all too well.

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Members of marine biologist Michael Childress' lab and Creative Inquiry teams collaborated on Something Very Fishy.

Image credit: Michael Childress

Musical theater production inspires marine conservation awareness

The warnings are dire: By 2050, the world's coral reefs could be 90% dead due to climate change and disease. A Clemson University scientist and his students are using an unconventional medium: musical theater. Michael Childress, an associate professor of biological sciences, and graduate students Kyle 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.

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More on the Department of Biological Sciences

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