CLEMSON — Clemson University’s Eukaryotic Pathogens Innovation Center is helping to shape biomedical research on eukaryotic pathogens, the cause of devastating diseases like malaria, amoebic dysentery, sleeping sickness, Chagas disease and fungal meningitis, university officials said.

“Globalization has resulted in an increase in such infections in the U.S., and many eukaryotic pathogens are classified as bioterrorism agents or neglected tropical diseases,” said Kerry Smith, professor in the department of genetics and biochemistry and EPIC director.

“Our research is having a direct impact on global health while also creating a legacy of scientific inquiry and training the next generation of scientists.”

The bulk of the center’s funding is derived from the National Institutes of Health and National Science Foundation.

EPIC researchers have secured more than $6 million in federal funding and continuously seek out collaborative partnerships with industry and private foundations.

In the 12 months since EPIC’s inception, its researchers have gained acclaim for their ongoing research, publications, awards and events, including:

• EPIC faculty members Meredith Morris and James Morris and colleagues recently were awarded a $347,263 two-year grant from NIH to study how mechanisms parasites respond to environmental changes like those they encounter in their human hosts and the insects that transmit them. Understanding that response will allow for the development of new approaches to stop the parasites, university officials said.

• Amrita Koushik, in collaboration with EPIC faculty member Lesly Temesvari, published a portion of her doctoral thesis work on a critical parasite signaling pathway in the journal Eukaryotic Cell. Their research shed light on how the parasite Entamoeba histolytica, the third-leading cause of morbidity and mortality due to parasitic disease in humans, perceives and responds to the environment faced during infection, officials said.