

N.C. A&T's Dr. Ongeru Awarded \$1.42 Million NIH Grant to Study Kidney Disease



Associate Professor Dr. Elimelda Moige Ongeru in the Department of Biology, has been awarded a \$1.42 million grant from the National Institutes of Health (NIH) National Institute of General Medicine (NIGMS) to investigate acute kidney disease initiated by ischemia/reperfusion (reduced blood flow to the kidneys and subsequent oxygen deficiency).

Acute kidney disease costs tens-of-billions of dollars to treat each year, and is associated with extremely high mortality rates because there are no effective therapies. Dr. Ongeru's work will focus on determining how meprin metalloproteases (meprins are enzymes, abundant in proximal kidney tubules) influence ischemia/reperfusion-induced kidney injury via modulation of inflammation and fibrosis.

Previous studies by Dr. Ongeru's group and other N.C. A&T investigators utilizing meprin knockout mice have shown that meprins enhance kidney damage associated with ischemia/reperfusion, however, the underlying cellular and molecular mechanisms are not fully understood. This research will advance understanding of kidney disease and the development of effective therapies.

This individual research grant was awarded under the Support of Competitive Research (SCORE) Program. SCORE is a research capacity-building program that seeks to increase the research competitiveness of faculty at under-resourced institutions with limited NIH R01 funding that have explicitly stated historical missions or historical track records focused on training and graduating students from groups nationally underrepresented in biomedical research. Past SCORE grant recipients at N.C. A&T include Dr. Robert Newman, associate professor in the Department of Biology, and Dr. Yeo Heung Yun, associate professor in the Department of Chemical, Biological and Bioengineering.