NIH Grant Supporting UAMS Study of Drugs to Improve Long-term Kidney Transplant Outcomes

LITTLE ROCK — A National Institutes of Health (NIH) grant will allow UAMS researcher Nirmala Parajuli, DVM, Ph.D., to study a novel way to improve the long-term outcomes of patients who receive kidneys from deceased donors.

Parajuli, an assistant professor in the College of Medicine Department of Pharmacology and Toxicology, will use the five-year $2.46 million grant to study a drug therapy that could reduce damage to donated kidneys during cold storage.

Transplants from deceased donors account for about 70% of all kidney transplants, and long-term outcomes are generally poor.

“There are about 100,000 patients waiting for kidney transplants, and many of them will die while they are waiting,” Parajuli said. “My goal is to reduce the kidney injury caused by cold storage and increase the pool of healthy kidneys available to the people who need them.”

In her preclinical research, she is testing drugs mixed in the solution used to store kidneys from rats and donated human kidneys that were rejected for transplantation. The drugs, Parajuli hopes, will block the molecular pathways that play a role in kidney injury during storage, which ultimately will increase long-term kidney survival.

As a UAMS Research Academy Scholar, Parajuli received training and other support to develop her grant submission. The academy is supported by the UAMS Translational Research Institute, the UAMS Division of Research and Innovation, and the Winthrop P. Rockefeller Cancer Institute.

The Translational Research Institute is supported by a Clinical and Translational Science Award from the NIH National Center for Advancing Translational Sciences.

UAMS is the state’s only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a
statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS’ clinical enterprise including its hospital, regional clinics and clinics it operates or staffs in cooperation with other providers. UAMS is the only adult Level 1 trauma center in the state. U.S. News & World Report named UAMS Medical Center the state’s Best Hospital; ranked its ear, nose and throat program among the top 50 nationwide; and named six areas as high performing — COPD, colon cancer surgery, heart failure, hip replacement, knee replacement and lung cancer surgery. UAMS has 2,876 students, 898 medical residents and four dental residents. It is the state’s largest public employer with more than 10,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children’s Hospital, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on Facebook, Twitter, YouTube or Instagram.

Like us, we’re social: