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News Release
Oct. 4, 2022

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**UAMS' Marius Nagalo, Ph.D., Receives
American Association for Cancer Research Award**

LITTLE ROCK — University of Arkansas for Medical Sciences' (UAMS) Bolni Marius Nagalo, Ph.D., is the recipient of the 2022 American Association for Cancer Research (AACR) Career Development Award.

The \$300,000 award will help Nagalo expand his novel research on virotherapy to treat advanced pancreatic ductal adenocarcinoma — work he is conducting in the labs at the UAMS Winthrop P. Rockefeller Cancer Institute. He is also an assistant professor of Experimental Pathology in the UAMS College of Medicine 's Department of Pathology.

“It’s definitely one of the more significant awards in my career,” said Nagalo, who received the National Institutes of Health Mentored Research Scientist Career Development Award and Cardiff University’s Welcome Trust Funds Award in 2018 and the Mayo Clinic Kathryn H. and Roger Penske Career Development Award in 2019.

“Very few people venture into advanced pancreatic cancer research because nearly nothing is working,” he said.

Researchers have discovered that the pancreatic tumor environment is dominated by cells that suppress the immune system’s response to cancer.

“In other cancers, immunotherapy is being used successfully to harness the body’s own immune system to fight cancer. In pancreatic cancer, tumor cells are surrounded by thick tissues made up of proteins that prevent immune cells from accessing and killing cancer cells. Tumor cells can also produce proteins that turn off immune cells.”

Nagalo is testing a new form of cancer immunotherapy delivered by enzymes that can soften the dense tissue surrounding tumor cells to increase drug absorption and immune cell infiltration within the tumor.

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To do this, he will use vesicular stomatitis virus, a widely used cancer viral therapy and vaccine agent, genetically modified, to boost the pancreatic tumor environment to fight off the cancer.

According to the National Cancer Institute, pancreatic cancer accounts for 3.2% of all new cancer cases and 8.2% of all cancer deaths. Of the 62,210 new cases of pancreatic cancer in 2022, approximately 80% will die of the disease. The five-year relative survival rate is 11.5%.

“Survival rates for most cancers are improving with better screening tools and therapies coming directly from research,” said Michael Birrer, M.D., Ph.D., director of the UAMS Winthrop P. Rockefeller Cancer Institute and UAMS vice chancellor. “We have very few options for pancreatic cancer patients. It’s a rare, almost silent cancer that hasn’t received enough focus. Dr. Nagalo’s work is promising and a great cause for hope.”

Nagalo grew up in Burkina Faso, where his father was the only medical doctor in their neighborhood. Nagalo followed in his father’s scientific footsteps and earned a doctorate in molecular biology at the University of Ouagadougou JKZ in Burkina Faso, where he had the opportunity to collaborate with researchers from Cambridge University, Catholic University of Louvain in Belgium and the Mayo Clinic in Rochester, Minnesota. This experience led to a postdoctoral fellowship at the Mayo Clinic and a faculty position as assistant professor of Oncology and Molecular Medicine at the Mayo Clinic College of Medicine. He joined UAMS in 2021.

Nagalo’s research is widely published in national and international scientific journals, including *Hepatology*, *Science Advances*, *PloS One*, *Hepatology Communications*, *Bioorganic Chemistry*, *Molecular Therapy Oncolytics*, *Cancer Chemotherapy and Pharmacology*, *Biomolecular Concepts*, *BMC Medical Genetics*, *Journal of Clinical Laboratory Analysis*, *Immunotherapy*, *Biomedicines* and *Oncolytic Virotherapy*.

UAMS is the state's only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; a 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. UAMS is the only adult Level 1 trauma center in the state. UAMS has 3,047 students, 873 medical residents and fellows, and six dental residents. It is the state's largest public employer with more than 11,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children's, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on [Facebook](#), [Twitter](#), [YouTube](#) or [Instagram](#).

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