$10.6 Million Federal Grant to Expand National Proteomics Resource at UAMS

LITTLE ROCK — A $10.6 million grant from the National Institutes of Health (NIH) will allow the University of Arkansas for Medical Sciences (UAMS) to greatly expand its proteomics resource. This grant will establish the IDeA National Resource for Quantitative Proteomics as the first NIH National Resource in Arkansas, which will serve biomedical researchers across the entire nation.

Proteomics is the large-scale study of proteins that can lead to the development of new therapies and screening approaches for many diseases, including cancer.

The five-year grant was awarded to Alan Tackett, Ph.D., associate director for basic science at the UAMS Winthrop P. Rockefeller Cancer Institute. Tackett serves as an administrative director of this new national resource.

Other key contributors at UAMS are Rick Edmondson, Ph.D.; Samuel Mackintosh, Ph.D.; and Stephanie Byrum, Ph.D.; as well as Michael Kinter, Ph.D., at the Oklahoma Medical Research Foundation who serves as a co-administrative director.

The national resource was initially created through the Arkansas INBRE (IDeA Network of Biomedical Research Excellence) -- an NIH program that promotes biomedical research for undergraduate students and faculty. Lawrence Cornett, Ph.D., professor in the UAMS College of Medicine Department of Physiology and Biophysics, serves as principal investigator and director of Arkansas INBRE.

“With this new funding, we will transition our proteomics resource to an NIH National Resource and expand our ability to provide highly advanced research support to scientists in underfunded areas throughout the United States,” said Tackett, who holds the Scharlau Family Endowed Chair for Cancer Research at UAMS.

Certain regions of the United States, designated as the IDeA Network, have historically received low levels of research funding from NIH. Scientists in these regions face challenges for accessing state-of-the-art proteomics resources.
The IDeA National Resource for Quantitative Proteomics at UAMS was established to address these gaps in services.

“Due to a lack of federal funding, it is often difficult for scientists in the IDeA Network to access the advanced instruments and trained personnel needed to analyze and interpret their research data. With this new funding, we will now be able to serve a diverse group of IDeA investigators for their research, which ranges from studies on model organisms to diseases such as cancer,” said Tackett, professor of biochemistry and molecular biology in the UAMS College of Medicine.

The expanded national resource will support researchers by providing highly advanced data analysis, outreach opportunities and education to scientists across the nation.

“Our goal is to increase the ability for scientists in the 23 IDeA states and Puerto Rico, as well as other NIH-supported investigators across the nation, to perform innovative research by providing unmatched access to advanced quantitative proteomics platforms and staff skilled in interpreting and analyzing complex biological data,” Tackett said.

The educational opportunities offered by the national resource include workshops that are designed to help faculty and student researchers across the nation better utilize proteomics in their research.

This federal grant will bolster the Cancer Institute’s ongoing efforts to receive National Cancer Institute Designation. To achieve designation, cancer centers undergo a highly competitive assessment process that demonstrates an outstanding depth and breadth of research in three areas: basic laboratory, patient/clinical and population-based. The designation brings with it many benefits, including expanded access to federal funding for researchers and improved access to clinical trials for patients.

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 — cancer, colon cancer surgery, heart failure, hip replacement, knee replacement and lung cancer surgery. UAMS has 2,727 students, 870 medical residents and five 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.

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