

SCIENCE TRANSLATED: DR. LAURA JAMES OF UAMS

The Translational Research Institute at the University of Arkansas for Medical Sciences is funded by the National Institutes of Health (NIH) through a Clinical and Translational Sciences Award (CTSA). As the institute's director, Dr. Laura James is tasked with nurturing viable and valuable research opportunities across the entire state of Arkansas.

In this edition of Discovery Economics, James, a fellow with the Arkansas Research Alliance, discusses how critical research is to Arkansas, why communication is vital to the state's research community and how UAMS is leading the charge against COVID-19.

AMP: Please tell us a little bit more about the Translational Research Institute.

Dr. James: Our main focus is to improve the health of Arkansans through research. We cover a broad expanse of medical and health areas, such as developing better methods to diagnose pediatric neurologic conditions, improving falls, prevention for older adults, mental health needs in young women with cancer and reducing opioid prescribing in order to lower the risk of drug addiction. Our priority is to focus on health challenges that are common in Arkansas, and we are particularly interested in the health needs of rural Arkansans, who have reduced access to health care that are common to the state. The word "translation" refers to the process where we take research findings and try and push them through the pipeline to have an influence on people and communities.

AMP: COVID-19 has had a huge impact on the nation and Arkansas. How has



UAMS been on the frontline of the pandemic fight?

Dr. James: UAMS is engaged in COVID-19 research in a large number of ways. We are performing antibody testing across the state to understand how COVID-19 antibody levels change over time. In addition, we're working with the pharmaceutical industry on testing new drugs. We're also communicating with about 60 academic institutions through an effort called N3C, exchanging electronic health records and using the information to better understand the virus.

AMP: The FDA's National Center for Toxicological Research is a bit of a hidden research gem in Arkansas. How is your collaboration with NCTR benefiting your work?

Dr. James: Very early in the pandemic, UAMS researchers began to meet weekly with NCTR scientists to talk about research occurring on both campuses. NCTR has analytical equipment that we don't have at UAMS. Because of our relationship with NCTR, we are now planning how we would use this new equipment to develop new approaches for diagnosing COVID-19. One silver lining to COVID-19 is that it has brought to-

gether biomedical researchers in Arkansas in ways that we've not seen in a while.

AMP: Can you elaborate on how important communication is to research?

Dr. James: I think communication is huge. Researchers always need more funding for research and a skilled workforce to help with the research. Unfortunately, scientists tend to speak in terms that only other scientists tend to understand. That's why we need communicators. We need people to help us write and share our findings and their benefits in ways that can mean something in people's lives.

AMP: What's your vision for research in Arkansas?

Dr. James: I would want to make research participation routine at every health care facility in the state. The more we can make research just part of our everyday lives, the more we will improve health outcomes in Arkansas. This would mean having trained research staff available at every health care encounter who can explain to patients the importance of research and how it moves health care — and their communities — forward. I would also want to have more "immersion" type research or medical experiences for high school children. Giving kids a visual example of what they can do in the future is a powerful motivator. **A**

Discovery Economics is a monthly look at how the work of Arkansas Research Alliance scientists impacts the economy. Founded in 2016, the ARA Academy of Scholars and Fellows is a community of strategic research leaders who strive to maximize the value of discovery and progress in the state. Douglas Hutchings serves as director of the ARA Academy. Learn more at ARAlliance.org.