

THE **TRIBUNE**

JANUARY 2021

Rapid Research

NIH Greenlights RADx COVID-19 Testing Studies by UAMS



Amy Riklon, a representative of the Marshallese community and UAMS employee, gets vaccinated for COVID-19.

UAMS researchers are using two NIH Rapid Acceleration of Diagnostics (RADx) grants to improve COVID-19 testing approaches and strategies.

Researchers at the UAMS Northwest Campus hope their grant can help prevent a repeat of last spring, when COVID-19 washed through local Marshallese and Latinx communities like a tsunami. Researchers at the UAMS College of Public Health are part of another RADx study that includes institutions from five states and focuses on individuals with a history of incarceration and low-income Latinx communities.

Northwest Arkansas was one of the worst hotspots in the U.S., with racial and ethnic disparities so glaring that the Centers for Disease Control and Prevention (CDC) came to investigate in June and July. That visit was followed in August by investigators from the NIH. The CDC reported in July that 45% of all adult cases in the two-county region of Northwest

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UAMS Research Teams Rise to COVID-19 Challenges

Dear Colleagues,

Throughout this pandemic, I have been struck by the outstanding response of research teams across UAMS.

So many of you have successfully pivoted from your non-coronavirus research, added COVID-19 studies to your clinical responsibilities, and leveraged community partnerships to address COVID-19 related

issues. TRI staff have also risen to the challenge, helping expedite startup of nearly 80 COVID-19 studies. These include 12 clinical trials, with another seven trials on the horizon.

Not only will these national, multi-site clinical trials benefit hospitalized Arkansans, they place UAMS in the top tier of clinical research programs in the U.S. The dedication of our physicians and clinical research team has produced participant enrollment numbers that bring national recognition to UAMS. For example, in December, we were the fourth highest enroller among 18 sites for the ACTIV-1 IM trial (PI - Dr. Ryan K. Dare),

an NIH-supported study of promising immune modulators. In the same month, we ranked fifth among 18 sites for a trial of otilimab (PI - Dr. Nikhil Meena).

I also want to congratulate all those who have stepped up to apply for special COVID-19 grant opportunities, such as Drs. Pearl McElfish and Nick Zaller, who both acquired NIH Rapid Acceleration of Diagnostics (RADx) Underrepresented Populations grants. Your efforts to extend COVID-19 testing to hard-to-reach Arkansans will accelerate treatment and save lives.

Sincerely,

Laura James, M.D.
Director, TRI
Associate Vice Chancellor for Clinical
and Translational Research, UAMS

Rapid Research (continued)

Arkansas were among Latinx patients and 19% were Native Hawaiian/Pacific Islander patients.

“These are disturbing numbers considering that our Latinx and Pacific Islander communities represent only 17% and 2.4% of the region’s population, respectively,” said Pearl McElfish, Ph.D., MBA, vice chancellor for the UAMS Northwest Campus and principal investigator of the NIH RADx grant awarded in December.

The one-year, \$715,920 RADx grant will support the study’s focus on increasing COVID-19 testing in Washington and Benton counties.

As part of the study, McElfish and her team will test 2,400 residents for COVID-19 at two types of drive-through testing sites:

- Federally Qualified Healthcare Centers (FQHC) throughout the region
- Housing complexes/neighborhoods.



Pearl McElfish, Ph.D., MBA

Those being tested will be invited to complete a 10-minute survey that will help researchers determine the most effective testing approaches. The effort is based on preliminary research supported by the Translational Research Institute (TRI), in which 1,092 participants said in a survey that clinics and housing complexes/neighborhoods were their top choice for testing sites.

“We will use the additional RADx-supported data to determine which testing sites are most effective in reaching specific vulnerable populations, and we’ll look at how social determinants of health influence testing behaviors and preferred testing locations,” McElfish said. “We’ll also use implementation science methods to document the things that help us implement community-based testing, as well as any barriers.”

The NIH RADx initiative is a national call for scientists and organizations to bring their innovative ideas for new COVID-19 testing approaches and strategies.

McElfish’s grant falls under the RADx Underserved Populations (RADx-UP) program, and her team will collaborate with the RADx-UP Coordinating and Data Collection Center and other RADx-UP sites.

College of Public Health Professor Nick Zaller, Ph.D., is the lead researcher on UAMS’ other RADx-UP grant. The two-year grant totals \$331,084, and is part of a \$3.7 million effort that also includes research institutions in Illinois, Indiana, Louisiana and Texas, all led by the University of Chicago. The research is also jointly supported by TRI and the UAMS Division of Research and Innovation.

“Our site in particular is focused on people who have had involvement in the criminal justice system – people who are on probation or parole,” Zaller said.

The targeted groups often have difficulty finding employment, social services and health care – support that is most needed in a pandemic. These groups typically work in essential low-wage jobs where disease transmission is high, and they often live in multi-generational households, which leads to COVID-19 outbreaks.

UAMS will recruit 200 study participants, Zaller said, offering testing to these groups as well as their peer networks. The project will also use focus groups to help develop targeted messaging to combat misinformation related to COVID-19.

“In addition to vaccines, our ability to safely return to normal life will depend on big improvements to our testing processes,” McElfish said. “Part of that is making COVID-19 tests more available, but we also need a better understanding of the barriers to being tested, even when tests are available.”



Nick Zaller, Ph.D.

TRI Names Five Implementation Science Scholars

TRI and the UAMS Center for Implementation Research (CIR) have selected five UAMS-based and Arkansas Children’s Hospital clinical faculty as 2021 Implementation Science Scholars. CIR faculty will guide the scholars through 10 didactic sessions per year and provide oversight and mentoring for their experiential implementation science projects. The two-year program provides 20% salary support (up to NIH salary cap).

The scholars and their project titles are:



Kyle J. Kalkwarf, M.D., Assistant Professor, Acute Care Surgery Division, Department of General Surgery, College of Medicine.

“Implementation of Combined Strategies to Reduce Opioid Consumption for Acute Pain in the Surgical ICU at UAMS”



Laura Jean Hobart-Porter, D.O., Assistant Professor, Developmental Pediatrics and Physical Medicine and Rehabilitation Division (ACH), and Physical Medicine and Rehabilitation (UAMS); Department of Pediatrics, College of Medicine.

“Prevention of Sleep-Associated Mortality through Implementation of ‘Guidelines for the Care of People with Spina Bifida’”



Riley Lipschitz, M.D., Assistant Professor, Division of General Internal Medicine, Department of Internal Medicine, College of Medicine
“TelePrEP – Utilizing Technology to Prevent HIV and Improve Health Equity among Vulnerable Arkansans”



Elizabeth Riley, D.N.P., RNC-NIC, CNE, Clinical Assistant Professor, Neonatal Intensive Care Unit, UAMS College of Nursing

“Implementation of Standardized Bedside Interprofessional Rounds in Neonatal Intensive Care”



Aravindhan Veerapandiyan, M.D., Assistant Professor, Division of Pediatric Neurology, Department of Pediatrics, College of Medicine
“Implementation of Evidence Based Practice to Improve Care for Children with Headaches”

TRI, DDEI Name Mini-Grant Awardees

TRI and the UAMS Division for Diversity, Equity and Inclusion (DDEI) have announced two awardees of its inaugural mini-grant initiative for underrepresented faculty researchers.

The awardees, who will receive up to \$10,000 to support their research, and their project titles are:



Analiz Rodriguez, M.D., Ph.D.,
Assistant professor, Department of Neurosurgery, College of Medicine; “Patient Derived Melanoma Brain Metastasis Organoids for Immunotherapy.”



Tiffany Weinkopff, Ph.D.,
Assistant professor, Department of Microbiology and Immunology, College of Medicine; “Endothelial Cells Promote Immune Cell Entry into Sites of Inflammation.”

The two awardees were chosen from six applicants by a 13-member UAMS faculty review committee. Criteria for the applications included relevance to TRI and/ or DDEI mission; clear specific aims; significance and innovation of the proposed work; and potential for external funding.

TRI Study of the Month



Principal Investigator Ryan Dare, M.D. (center), meets with TRI Research Coordinator Susan Smith Dodson, MBA, B.S.N. RN, and Co-Investigator Mitchell Jenkins, M.D.

- **UAMS Principal Investigator:** Ryan K. Dare, M.D., Assistant Professor, Division of Infectious Diseases, Department of Internal Medicine, College of Medicine.
- **Summary:** Phase 3 Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV-1 IM) trial. Testing three immune modulators with strong evidence for use against inflammatory reaction and cytokine storm: infliximab, abatacept and Cenicriviroc. Evaluated as add-on therapies in combination with remdesivir and other standards of care.
- **Significance:** Overseen by NIH National Center for Advancing Translational Sciences, which designed the trial to swiftly identify effective/ineffective drugs and rapidly incorporate additional experimental agents into the trial.
- **TRI Services:** Medicare coverage analysis, study budget development, IRB submission and regulatory startup, training for study staff/investigators, oversight of enrollment startup, and research nurse coordinator services.
- **Sponsor:** NIH, Biomedical Advanced Research and Development Authority (BARDA).

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WEBSITE:
TRI.uams.edu

EMAIL:
TRI@uams.edu

TRI MAIN NUMBER:
(501) 614-2287

Editor
David Robinson
Designer
Leslie Norris
TRI Director
Laura James, M.D.