

THE TRIBUNE

APRIL-MAY 2021

Rising to the Occasion TRI Gives COVID-19 Research 'Highest Priority'



TRI's Amanda Stapleton, B.S.N., RN, and Nikhil Meena, M.D., outside a COVID-19 patient room prior to seeking the patient's consent to participate in a study.

As a critical care pulmonologist, Nikhil Meena, M.D., sees firsthand the devastating impact of COVID-19, and he has felt the frustration of having limited therapies available. As a clinician-scientist, he is determined to address the issue, recognizing the need for effective treatments well into the future.

Despite his heavy ICU patient load, Meena has been the UAMS principal investigator on five active multi-center COVID-19 clinical trials and had completed one by April 2021 – more than any other physician.

“TRI really made it possible for me to pursue each of the clinical trials,” said Meena, an associate professor in the College of Medicine Department of Internal Medicine. “Their experience, expertise and dedication have been the keys to accelerating the research startup, participant recruitment, and the many other aspects of clinical trials management.”

David Avery, TRI senior director of Clinical Operations, said TRI, along with the rest of UAMS' research enterprise, responded to COVID-19's arrival with inspirational effort.

“Everybody agreed that our highest priority was to open these COVID-19 clinical trials,” he said. “As a result, we were able to open very complex studies within weeks rather than months.”

(Continued on page 2)



Dear Colleagues,

It is hard to believe that by this time a year ago, TRI was already busy helping manage numerous COVID-19 research studies, including multiple clinical trials.

TRI's clinical research coordinators were among those who bravely hustled to the front lines to battle SARS-CoV-2. They drew and processed COVID-19-positive blood samples for one outpatient study and have continued to work with hospitalized COVID-19 clinical trial participants.

Understandably, their fear and anxiety was even higher than with so little known about the disease. In spite of the risks, they not only stepped up along with UAMS' clinician-scientists, the coordinators' efforts increased research participant enrollment 54% from May 2020 to May 2021.

I also commend our entire Clinical Trials Innovation Unit (CTIU), which has provided support for 92 COVID-19-related research projects, including data-oriented studies, laboratory and diagnostic studies, prospective observational studies, and 17 therapeutic clinical trials.

With COVID-19 research getting top priority, TRI staff, in collaboration with other UAMS departments, helped open trials in a matter of weeks rather than months.

As clinician-scientist Dr. Nikhil Meena notes in the accompanying story, our participation in the multi-center COVID-19 clinical trials is helping UAMS respond to a global health crisis in a region of the country that is underrepresented in research.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura James, M.D.", with a stylized flourish at the end.

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

Rising to the Occasion

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“UAMS clinicians really stepped up to meet the research challenge with COVID-19,” said TRI Director Laura James, M.D. “Their willingness to lead COVID-19 clinical trials research has been inspiring, many stepping up to serve as site investigators for the first time.”

Among them, Ryan Dare, M.D., is leading the Phase 3 Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV-1 IM) trial (funded by NIH and Biomedical Advanced Research and Development Authority), which is testing three drugs for use against inflammatory reaction and cytokine storm.

“Since the onset of the pandemic, TRI has supported me from protocol development to enrolling clinical trial patients,” said Dare, an assistant professor in the College of Medicine Department of Internal Medicine, Division of Infectious Diseases.

“In a broader context,” Meena said, “The superstars at TRI are helping UAMS respond to a global health crisis with clinical trials in an underrepresented part of the country.”

Growing as a Team

Starting in April 2020, TRI’s team of clinical research coordinators began to shoulder its significant part of the COVID-19 clinical trials effort. The learning curve was steep and the work was emotionally draining, but it would ultimately bring the team closer.

“We’ve grown a lot as a research team, and not just the coordinators - everybody at TRI had to rally,” said Amanda Stapleton, B.S.N., RN, one of 18 clinical research coordinators.

In April, the team was drawing and processing blood from COVID-positive patients.

“It was really scary, even with all the safety protocols, because so much about the virus was still unknown,” Stapleton said.

By May 2020, the team was running inpatient clinical trials. They had to overcome challenges consenting patients attached to ventilators, and they witnessed COVID-19 related deaths and medical teams stretched to the limit.

“We get to know the patients and their families, and we have all been heartbroken to learn of those who didn’t make it,” said Cindy Witkowski, B.S.N., RN, who oversees the team as director of Clinical Research.

In December 2020, UAMS was ranked among the top five recruiting sites for both the ACTIV-1 IM trial (Dare) and the Otilimab in Severe COVID-19 Related Disease trial, sponsored by GlaxoSmithKline (Meena, principal investigator). Otilimab is an antibody-based

therapy designed to dampen the immune dysfunction that has been associated with COVID-19.

TRI’s participant enrollment from May 2020 to May 2021 jumped 54% above the previous year. Avery noted that the increase was achieved in spite of the many obstacles, including personal/familial COVID-19-related difficulties for staff.

“It was a challenging environment at every level,” Avery said. “Our team rose to the occasion, and I’m really proud of them.”



David Avery

Since the beginning of the pandemic, TRI has provided support for **92 COVID-19-related research projects and 17 therapeutic clinical trials.**

Neurologist’s New Implementation Science Skills Help Save Newborn



Oliver Hurst owes his life to a luckily timed move from California. His mother, who was then three months pregnant with Oliver, arrived with her husband in Vilonia, Ark., in March 2020.



Kapil Arya, M.D.

At the time, UAMS’ Kapil Arya, M.D., was developing strategies as a TRI Implementation Science Scholar to establish statewide newborn screenings for spinal muscular atrophy (SMA), a rare disease that can disable a newborn within months. The skills he was learning in the program helped him quickly implement the 2019 SMA screening law, said Arya, an associate professor in the College of Medicine Department of Pediatrics, Division of Neurology.

Oliver, born in August 2020, was the first to test positive with the statewide screening in place. Twenty-seven days later, he received the single-dose \$2.1 million gene editing therapy. The early treatment countered the most severe form of SMA, which can be fatal in the first few years of life.

The Implementation Science Scholars program is led by Geoffrey Curran, Ph.D., who directs the UAMS Center for Implementation Research.

“I knew the goals we wanted to achieve with the newborn screening, and implementation science taught me how to achieve those goals,” Arya said.

Oliver’s mother, Elaine Hurst, learned later that California did not have the newborn screening.

“Moving to Arkansas saved Ollie’s life,” she said.

Rural Research Network Supporting Five-Year COVID-19 Study



Wendy Nembhard,
Ph.D., M.P.H.

A new COVID-19 research project led by UAMS' Wendy Nembhard, Ph.D., M.P.H., is receiving assistance from the UAMS Rural Research Network (RRN) to ensure participation from a broad, diverse swath of Arkansas.

The five-year \$1.3 million National Cancer Institute (NCI) study will look at the pandemic's short- and long-term impacts on Arkansans' physical, psychological and social health. The Disparities in Immune Response to SARS-CoV-2 in Arkansas (DISCOVAR) study will involve 12 blood draws and 12 phone interviews with about 600 adults ages 18 and up who tested positive for the virus from April to July 2021.

The study is focused on the racial and ethnic differences in the immune response to COVID-19 infection.

Nembhard, chair of the Epidemiology Department in the College of Public Health, contacted the Rural Research Network for help with the recurring blood draws. RRN Director Veronica Smith, MBA, based at TRI, worked with UAMS Regional Programs to secure phlebotomists at four of UAMS' eight regional campuses: UAMS Northwest (Fayetteville), UAMS West (Fort Smith), UAMS East (Helena-West Helena) and UAMS South-Central (Pine Bluff).

The RRN team is also facilitating delivery of the blood samples from each location to study collaborator Joshua Kennedy, M.D., an associate professor in the College of Medicine Department of Pediatrics. Kennedy and collaborators Karl Boehme, Ph.D., and Craig Forrest, Ph.D., both associate professors in the College of Medicine Department of Microbiology and Immunology, will lead the blood analysis.

Since the launch of the RRN in January 2020, it has helped with nine studies and another five studies are under consideration. Investigators interested in learning more about the RRN should contact Smith at VJSmith@uams.edu or submit a request through TRI's Request Services Portal at TRI.uams.edu.



Veronica Smith, MBA

TRI Study of the Month



(L-R) TRI's Renee Shaide, APRN, FNP-BC, is leading the clinical research coordination for Srilakshmi Ravula, M.D., and Srikanth Vallurupalli, M.D.

UAMS Study Leaders: Principal Investigator, Srikanth Vallurupalli M.D., Associate Professor, Department of Internal Medicine, Division of Cardiology, Director, Cardiac Noninvasive Laboratory; Co-Investigator, Srilakshmi Ravula, M.D., Assistant Professor, Department of Internal Medicine, Hospital Medicine/Nephrology.

Summary: ACTIV-4 ACUTE trial – A multicenter, adaptive, randomized controlled platform trial comparing the effectiveness of antithrombotic strategies in hospitalized adults with COVID-19.

Significance: COVID-19 can cause blood clots anywhere in the body and is a major cause of disability and death. Blood thinners hold potential for preventing blood clots, but research is needed to determine the appropriate type and dose. This study will help guide treatments around the globe.

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 National Heart, Lung, and Blood Institute.

TRIBUTES

The following UAMS researchers cited the Translational Research Institute (TRI) in publications after utilizing TRI resources or funding:

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Find the appropriate citation language at tri.uams.edu/about-tri-2/cite-tri.

The **TRIBUNE** is produced by the UAMS Translational Research Institute (TRI).
It is supported by grant ULI TRO03107 through the National Center for Advancing
Translational Sciences of the National Institutes of Health (NIH). The content is solely the
responsibility of the authors and does not necessarily represent the official views of the NIH.

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