

THE TRIBUNE

OCTOBER 2024

‘Time Well Spent’

Faculty, Students Discover Benefits of Research Expo and Orientation



Kristen Muller, Ph.D. (right), speaks with Angie Brock, CRA, assistant director of the Office of Sponsored Programs Administrative Network. (Photo by Bryan Clifton)

As a new faculty member at UAMS, Kristen Muller, Ph.D., said attending Research Expo 2024 and the New Research Faculty Orientation was a perfect way to start the year as a researcher.

“Being brand new, it’s really helpful learning all about the university, the processes, and putting faces with names,” said Muller, an assistant professor in the College of Health Professions Department of Audiology and Speech Pathology. “I’ve poked around the website a bit looking at the resources that UAMS has, but actually having it all laid out here and getting to meet the people and hear from them what they do and what’s available here is really helpful.”

Muller, who is conducting research in the autism community, said she was especially pleased to visit with the Translational Research Institute’s (TRI) Community Engagement team, as well as

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Dear Colleagues,

Among our largest and most rewarding events each year is the Research Expo, an assembly of the substantial resources available across our research enterprise. More than 40 tables and 50-plus resources and services, staffed by department leaders, served 117 attendees this year.

We were fortunate this year to co-sponsor the expo with the Division of Research and Innovation, which hosted its New Research Faculty Orientation just prior to the expo. The collaborative events included representatives from UAMS, Arkansas Children’s Research Institute and the Central Arkansas Veterans Healthcare System.

As you will read in this issue of *The TRiBune*, researchers of varying experience found great value in having face-to-face conversations with the resource providers as well as their colleagues and potential collaborators.

I want to thank **Dan Voth, Ph.D.**, vice chancellor for Research and Innovation, for co-sponsoring this joint event, and I hope that we can do it again in 2025.

I also want to congratulate **Megha Sharma, M.D.**, highlighted on page 4, for her exceptional work as a TRI Implementation Science Scholar. Dr. Sharma led a successful effort in the UAMS NICU to reduce the amount of blood taken for lab tests from premature infants, and her work has been published in the journal *Pediatrics*.

Dr. Sharma is also a TRI K12 scholar and a graduate of the TRI-supported Clinical and Translational Science Master of Science program.

Sincerely,

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

'Time Well Spent' (continued from page 1)

the UAMS Office of Sponsored Programs Administrative Network (OSPAN) and its Science Communication Group.

This year's Research Expo, which drew 117 attendees, was linked for the first time with the UAMS Research & Innovation New Research Faculty Orientation at the Reynolds Institute on Aging Building.

During the orientation, which preceded the expo, TRI Director **Laura James, M.D.**, thanked **Dan Voth, Ph.D.**, vice chancellor for Research and Innovation, for combining the two annual events.

"I like this format, and I hope you'll let us come back and do it again," she said. "This is a great way to acquaint people with all the many wonderful resources that we have here at UAMS."

Voth thanked his department leaders after they each gave brief presentations and emphasized to researchers in the audience that his division's primary purpose is to help researchers.

"Science is hard, and you're pursuing all this cool research, so we want to make it as easy on the administrative side as possible," Voth said. "That's our entire goal."

The Research Expo included more than 40 tables and more than 50 research services available at UAMS, Arkansas Children's Research Institute (ACRI) and the Central Arkansas Veterans Healthcare System.

Jasmine Stewart, M.S., a fourth-year medical student who is spending the year as part of a UAMS research team, said the expo will give her a leg up.



Jasmine Stewart, M.S., visits TRI's T32 Health Sciences Innovation and Entrepreneurship booth, staffed by Pam Kahler.

"There's a lot that I'm not familiar with, so the fact that this exists is extremely helpful," said Stewart, a research associate at the College of Medicine Center for Hearing Health Equity. "When I have writing assignments, or manuscripts to review, or data to analyze, instead of going to Google or Chat GPT to look up how to do something, now I've made contact here and I can shoot them a quick Teams message or send them an email."

Alexa Escapita, Ph.D., a postdoctoral fellow, was pleased that the Research Expo was the catalyst for meeting a potential collaborator.

"It was nice to meet a fellow postdoc who does research in kind of the same field, so we connected and we're going to reach out for collaboration," said Escapita, who is in the College of Medicine Department of Obstetrics and Gynecology.

Lisa Brents, Ph.D., underscored the value of the expo for all researchers, including those who are more seasoned.

"Even for investigators like me who are not new to UAMS, the expo is a great way to get a refresher on many of the infrastructural resources UAMS offers to support and enrich research," said Brents, an assistant professor in the College of Medicine Department of Pharmacology and Toxicology. "It's also a great opportunity to learn about changes and to interact in person with colleagues I haven't seen in a while."



Ripa Jamal, Ph.D.

Ripa Jamal, Ph.D., said she was amazed by the many resources and services offered at the expo.

"It was indeed a wonderful cross-platform for greeting and meeting with resourceful researchers and opportunities," said Jamal, a postdoctoral fellow in the Section of Pediatric Nephrology in the College of Medicine Department of Pediatrics. "This platform gave us a chance to meet collaborators with the same interests. What stood out most for me was how involved I felt with everyone who attended. It was time well spent."

Jamal also won a UAMS-branded cutting board during the door prize drawings, which she said was a "nice touch."

"Sometimes small tokens like that can serve as a pleasant reminder of the positive experiences and connections made at such events. I am looking forward to attending similar events in the near future."

New Faculty Leaders Join TRI Leadership Team



Jason Farrar, M.D.

TRI recently welcomed three UAMS faculty members to its leadership team, with **Jason E. Farrar, M.D.**, **Melody Greer, Ph.D.**, and **Tuhin Virmani, M.D., Ph.D.**, providing oversight of key programs and serving on the TRI Leadership Council.

Farrar is co-director and a multiple principal investigator of the K12 Mentored Research Career Development Award Program, joining co-directors/MPIs **John Arthur, M.D., Ph.D.**, and **Mario Schootman, Ph.D.** Farrar is an associate professor of pediatric hematology/oncology and director of the Arkansas Children's Research Institute Genomic Core Laboratory. He is also co-director of the Arkansas Children's Hospital Leukemia and Lymphoma Program.



Melody Greer, Ph.D.

Greer is co-director of the T32 Health Sciences Innovation and Entrepreneurship (HSIE) Training Program for postdoctoral fellows, joining co-director/principal investigator **John Imig, Ph.D.** Greer is an assistant professor in the College of Medicine Department of Biomedical Informatics and a graduate of the HSIE program.

Virmani is co-director of Translational Workforce Development, joining Schootman. Virmani will also lead new initiatives in clinical trials education through the Clinical Trials Learning Collaborative, scheduled to launch in 2025. He is an associate professor in the College of Medicine Departments of Neurology and Biomedical Informatics. He is also vice chair for Education and chief of the Neurodegenerative Disorders Division in the Department of Neurology. In addition, he is director of the Mission MSA Center of Excellence, the Huntington's Disease Society of America's Center of Excellence, and co-director of CurePSP Center of Care.

TRI Director **Laura James, M.D.**, said she is excited to have them on the team.

"Each of these faculty leaders brings unique experience and expertise to TRI," she said. "They are each committed to helping our programs thrive, and I am thrilled that they are here."



Tuhin Virmani, M.D., Ph.D.

A Rich Resource for Researchers: ARresearch Nears 11,000 Volunteers

A registry of potential research volunteers developed by TRI and available for free to UAMS-affiliated researchers now has over 10,800 diverse registrants from across Arkansas.

"We reached 10,000 registrants in June and today we're approaching 11,000 to give UAMS investigators a rich and growing recruitment resource," said TRI Director **Laura James, M.D.**

The registry at **ARresearch.org** was established in 2016 to help address the critical need for research study volunteers and has supported 45 studies.

Problems enrolling research participants can result in costly delays, termination of studies and compromised findings. Nearly 80% of all clinical trials nationally fail to meet their enrollment deadline, and 55% of trials are stopped due to enrollment failures.

The ARresearch registry includes racially and geographically diverse volunteers from every Arkansas county to help researchers meet their study enrollment targets and produce high-quality findings. Notably, the diversity of registrants exceeds the state's population demographics for Blacks, Asians, Native Americans and Pacific Islanders.

Volunteers can join the registry at **ARresearch.org**, where the brief registration form allows them to choose from a list of health interest areas so they can be matched with studies in those areas.

All UAMS-affiliated investigators are encouraged to use the ARresearch registry to aid recruitment.

Please contact **Pam Christie, PChristie@uams.edu**, for assistance accessing the registry.



TRI's Pam Christie (left) poses with a new ARresearch registrant who signed up at a recent community event.

TRI-Supported Researcher Megha Sharma, M.D., Published in *Journal Pediatrics*

A successful effort at UAMS to reduce the amount of blood taken for lab tests from premature infants has been published in the journal *Pediatrics*.

The project was led by **Megha Sharma, M.D.**, a neonatologist and associate professor in the College of Medicine Department of Pediatrics. Her work was conducted in the UAMS Neonatal Intensive Care Unit (NICU) over two years as part of TRI's Implementation Science Scholars Program. Her paper, "Reducing Iatrogenic Blood Losses in Premature Infants," was published in September.

Research has shown that blood loss from repetitive lab testing is a significant contributor to anemia in very low birth weight infants (less than 3.3 pounds). The blood lost from lab tests in the first few weeks of life often equals or exceeds the amount of an infant's total blood volume, which is only 2-3 ounces. It can lead to a range of poor health outcomes.

A key implementation strategy was revising automated patient care instructions in the electronic health record known as order sets that are used by NICU doctors. Other implementation tactics included requiring documentation of the amount of blood drawn from each infant.

The project involved 354 infants and resulted in an 18.5% reduction in lab tests in the first three postnatal weeks, a 17% decrease in blood taken, and a \$290,328 reduction in lab charges.

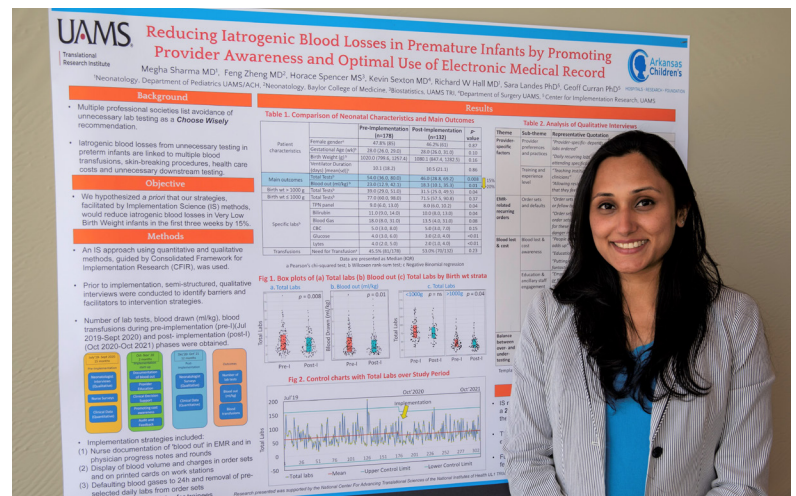
In addition to her excitement about these results, Sharma said the implementation science project demonstrated how improvements can be made in other areas of a hospital.

"This work is generalizable," she said. "Our methods can be adopted to reduce other unnecessary and wasteful practices, especially in an ICU setting."

Sharma credits the Implementation Science Scholars Program, led by **Geoffrey Curran, Ph.D.**, for making her project possible.

"I had identified a need for de-adopting a nonevidence-based practice, which is always a challenge. The Implementation Science program gave me a scientific and systematic way to approach it," she said.

Sharma said the knowledge gained in the Implementation Science program, which began in 2020, has informed her work as a student in the Clinical and Translational Science Master of Science program, supported by TRI, and as a current scholar in the institute's K12 Mentored Research Career Development Program.



Megha Sharma, M.D., poses with a poster about her work.