

THE TRIBUNE

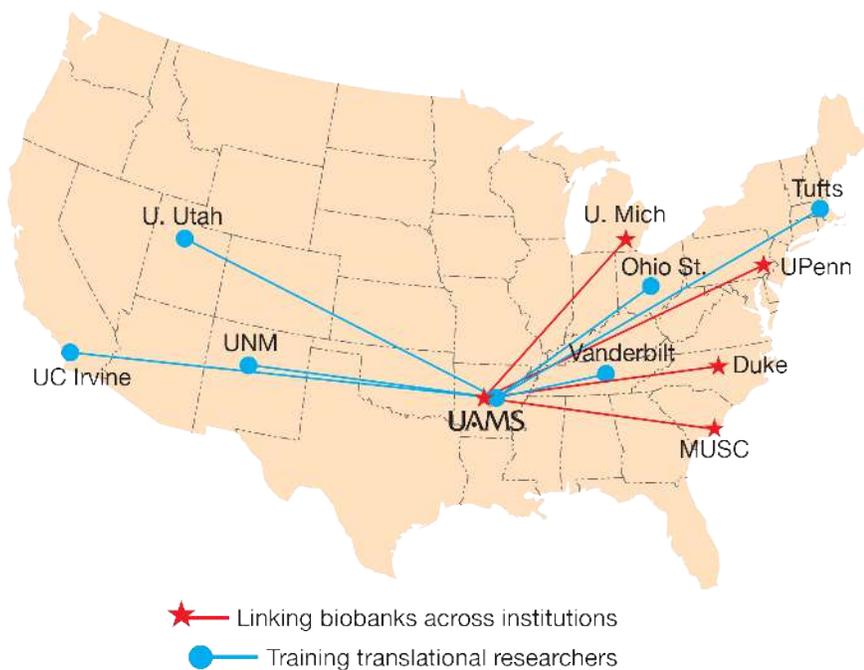
UAMS
University of Arkansas for Medical Sciences

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ACCELERATING DISCOVERIES TOWARD BETTER HEALTH

On the Map

NCATS Invites Two TRI-Supported Collaborative Proposals



When the call went out in 2015 for innovative collaboration ideas involving the Clinical and Translational Science Award (CTSA) consortium, UAMS researchers joined their CTSA colleagues to offer six proposals.

Two of those proposals are moving to the next phase; full U01 applications were recently invited by the NIH National Center for Advancing Translational Sciences (NCATS). The two are led locally by UAMS Translational Research Institute (TRI)-supported researchers Mary Aitken, M.D., M.P.H., and Mathias Brochhausen, Ph.D. “I am very proud of all the researchers who submitted proposals, and I am excited by the two selected to go forward,” said Laura James, M.D., TRI director. “This new

NCATS initiative has provided a great opportunity to showcase our expertise in translational research and our ability to work effectively in a collaborative national network.”

Linking Biobank Data



Brochhausen

Brochhausen, principal investigator for the UAMS site, views his U01 collaboration with four other CTSA institutions as an opportunity to achieve the nationally elusive dream of making biobank data from multiple institutions available to researchers across the United States.

Continued on page 2

Message from Dr. James



Dear Colleagues,
This month we are very excited to announce ARresearch.org, the new TRI-sponsored participant recruitment website. The key feature of ARresearch.org is the UAMS Research Participant Registry, where visitors can join the registry, agreeing to be contacted to learn about possible participation in studies that are enrolling research volunteers.

The launch of ARresearch.org is a critical development in our plans to help UAMS researchers achieve their participant accrual goals. Improvements in this area are a priority that extends from UAMS leadership to the NIH National Center for Advancing Translational Sciences (NCATS).

ARresearch.org uses plain language, inviting images and video testimonials to help visitors understand our research and the importance of joining our registry. As we add registrants over time, it should become a valuable resource for UAMS researchers.

ARresearch.org was created in partnership with UAMS Communications & Marketing and with guidance from the TRI Community Advisory Board and three UAMS patient advisory committees. The work was overseen by the TRI Recruitment Unit Committee, chaired by Jean McSweeney, Ph.D., R.N., who has a proven track record of recruiting Arkansans for her nationally recognized cardiovascular research. We are also extremely grateful to the UAMS Chancellor’s Circle, which provided financial support for this endeavor.

Laura James, M.D.
Director, TRI

On the Map *(continued from page 1)*

“We think now we have the right group of people to actually address the issue,” said Brochhausen, an assistant professor in the Department of Biomedical Informatics.

Other collaborating sites are Duke University, Medical University of South Carolina, University of Michigan, and University of Pennsylvania.

Biobanks include collections of biospecimens and data from electronic health records. Access to multiple sources of biobank data is expected to be a strong driver of biomarker discovery, hypothesis generation and new therapeutics. The biggest hurdle has been the lack of standard terminology among biobanks, Brochhausen said. To address the challenge, the collaborative developed an “integrative semantic framework,” with a common language for biobank data. Its proposal also integrates local informed consent procedures for donor specimens.

“For translational research, that is really significant because our proposal will allow researchers to query multiple databases from multiple sites,” Brochhausen said. “With informed

consent as part of this program, we’ll reduce delays by weeding out query results that researchers can’t use.”

Educating Translational Researchers



Aitken

Aitken is the UAMS site principal investigator collaborating with researchers at six other institutions to develop and improve upon educational curricula and tools supporting the training of translational scientists. The collaborating sites are the University of Utah, Ohio State University, Tufts University, University of California, Irvine, University of New Mexico, and Vanderbilt University.

“Our preliminary proposal was well received,” said Aitken, co-director of TRI’s KL2 Mentored Research Career Development Scholar Award program. “The full proposal will allow more detail about the courses to be offered across the consortium.”

The proposal, which targets KL2,

TL1 and other trainees, calls for further developing the best education programs at each institution. It includes TRI-supported implementation science, regulatory science and community engagement as areas of training that UAMS could offer to other institutions.

“The idea is to provide courses lasting up to five days that trainees could travel to,” said Aitken, a professor in the Department of Pediatrics. “Telemedicine and online options are also likely.”

The collaborative’s proposal also calls for the development of preconference short courses that could be offered in conjunction with the annual Association for Clinical and Translational Sciences (ACTS) meeting each April.

Aitken is working closely with other UAMS research and education leaders on the project, including Geoffrey Curran, Ph.D., Jay Gandy, Ph.D., Laura James, M.D., Robert E. McGehee, Ph.D., Nancy Rusch, Ph.D., and Kate Stewart, M.D., M.P.H.

If approved, the collaborative projects will receive up to \$500,000 per year for five years.

TRI Announces KL2 Award Recipients



Marquis

UAMS’ Bryce Marquis, Ph.D., an assistant professor of geriatrics, and Shona Ray-Griffith, M.D., an assistant professor of psychiatry, were recently named recipients of the Translational Research Institute’s 2015 KL2 Mentored Research Career Development Awards.

Marquis’ KL2 project is testing nutritional therapies to improve respiratory efficiency for heart failure patients. He anticipates the results of his work will direct the development of a new nutritional approach that can be used alone or with exercise to improve health outcomes in heart failure patients.

Ray-Griffith’s KL2 project is the first study using repetitive transcranial magnetic stimulation (rTMS) to treat neuropathic pain in pregnant women. rTMS

uses a magnetic force to change the way nerves work in the brain. Because it is non-invasive and localized, rTMS is attractive for use in special populations, such as pregnancy, said Ray-Griffith, who has a secondary appointment in the Department of Obstetrics & Gynecology.

For each of the next two years, the KL2 awards will provide Marquis and Ray-Griffith with 75 percent of their salaries (up to \$95,000), and up to \$25,000 for research, tuition, travel expenses and education materials in support of their career development plans.

Marquis joined the UAMS College of Medicine faculty this year from the University of Central Arkansas, where he was an assistant professor of chemistry.

Ray Griffith joined the faculty in 2013 with clinical appointments in the Women’s Mental Health program and as a psychiatry consult and liaison. She was a research fellow in the Women’s Mental Health Program and also served her residency and internship with the Department of Psychiatry.



Ray-Griffith

TRIBUTARY

TRI Becomes Catalyst for Successful BioVentures Startup



UAMS' Jeffery Moran, Ph.D., is a scientist, and he's quickly becoming a successful entrepreneur. He launched a UAMS BioVentures startup, PinPoint Testing LLC, in 2014, and in less than two years has accomplished the goals in his five-year business plan.

"We're starting to see exponential growth," Moran said. "We're off to the races."

Moran said his venture stems from two key catalysts. One was a 2010 pilot award from the Translational Research Institute. Led by Laura James, M.D., (now TRI director) the pilot supported the work of seven UAMS researchers, including Moran, who developed new detection methods for synthetic drugs referred to as marijuana substitutes. As part of that effort, Moran consulted with Cayman Chemical Company in Ann Arbor, Mich., which has expertise in cannabinoids.

The knowledge and strong relationships built with Cayman Chemical during the pilot study became the foundation for PinPoint Testing's creation.

"If it wasn't for TRI, those relationships would never have happened," Moran said.

The other catalyst was a challenge from his Pharmacology and Toxicology Department chair, Nancy Rusch, Ph.D., for the department's faculty to find new sources of revenue in the face of declining federal research dollars. When Moran approached her with his idea for PinPoint Testing, she became an enthusiastic supporter.

PinPoint Testing's first product is ToxBox® and through a licensing agreement is manufactured and distributed by Cayman Chemical. Moran describes ToxBox® as a conceptual product that combines both consumables and consultation services to meet the specific needs of advanced toxicology testing laboratories. The tools provided by PinPoint Testing help toxicologists significantly decrease the time required to perform analyses on drugs of abuse and pharmaceuticals, such as morphine and synthetic cannabinoids.

"It literally sells itself," he said.

PinPoint Testing has two full-time and two part-time employees. ToxBox® is currently selling at a rate of 1,000 units per year, with customers in six states and more on the horizon. It's both exhilarating and harrowing, Moran said, because each year it becomes more difficult to sustain the level of growth.

But, "so far so good."

TRI & me



Jean McSweeney, Ph.D., R.N., Professor and Associate Dean for Research, College of Nursing; leader of TRI's participant recruitment efforts and Research Forum initiative

"As a primary research mentor in the College of Nursing, I've seen TRI fulfill an essential role helping young investigators receive guidance and funding for pilot work to help prepare them for this very competitive environment. TRI has helped researchers make connections to develop collaborative teams, instituted research forums, and established the

KL2 scholars program. Very little of this would be available without the

TRI. Additionally, TRI's launch of a new participant recruitment website, ARresearch.org, is a major asset for UAMS researchers as well as participants who want to join studies. The cadre of people who work with TRI are exceptional, and we're lucky to have the whole team"

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UAMS | Translational Research Institute



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

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Thank you for remembering to cite TRI in your publications resulting from studies that receive TRI support.