

Serious About Service

TRI Embraces 'Lean' Concepts to Improve Efficiency



(L-R) TRI Director Laura James, M.D., and TRI Leadership Council members Mary Aitken, M.D., and Paula Roberson, Ph.D., discuss an exercise during Lean training.

At UAMS, translational research starts with TRI. Inherent in the term translational is TRI's duty to provide researchers efficient access to an array of research services.

Two years ago, TRI introduced TRIservices@uams.edu, an email address for researchers to send requests for UAMS' research services. This services portal system was streamlined in 2015 with the addition of a Request Services form, available on TRI's website, TRI.uams.edu. The services portal was further streamlined just this month with a new form and

increased automation.

Sparking the ideas for these new processes was TRI's participation in trainings offered by the UAMS Performance Improvement Department. A condensed version of the Introduction to Lean training was provided to the TRI Leadership Council and program managers on Feb. 29. The program teaches methods for eliminating waste and promoting efficiency by identifying bottlenecks in processes, removing non-value added steps and adjusting processes to improve flow of services.

"The TRI services portal is a

Continued on page 2

Message from Dr. James



Dear Colleagues,
We recently received the score for our Clinical and Translational Science Award (CTSA) application submitted last fall. While the score was not what we had hoped for, we are looking forward to submitting a revised application in the fall.

TRI has made tremendous progress in the last six months, and we will share these "steps forward" in our resubmission:

- Automation of TRI's Request Services portal to improve efficiency and tracking
- Launch of lecture series as part of the new Health Sciences Innovation and Entrepreneurship (HSIE) Training Program
- Training in Lean and further implementation of Lean principles to enhance research workflow
- Face-to-face and online faculty training and support for UAMS Profiles
- Enhanced collaboration with other CTSA sites
- Creation of research participant recruitment website, ARresearch.org

We also welcomed our External Advisory Council on March 13-14, which offered valuable feedback for a stronger application.

We believe that the CTSA is vital to the success of our clinical and translational research community. Continued input from UAMS researchers across multiple campuses is a critical component of our revision. We look forward to co-developing strategies to best represent the talents of our research community and to capitalize on research opportunities that improve the health of Arkansans.

Sincerely,

Laura James, M.D.
Director

Serious About Service (Continued from page 1)

great example of how TRI is applying Lean on behalf of researchers,” said Beatrice Boateng, Ph.D., who leads TRI’s Evaluation and Continuous Quality Improvement program.



Boateng

Prior to the services portal update this month, all requests went to Amy Jo Jenkins, a TRI project leader, who manually entered the requests into a database and routed it to the appropriate person to perform the service requested.

TRI utilized Lean principles to review the research services request processes and eliminated waste to improve the response time. “Now it is all automated,” Boateng said. “When a request comes in, it will automatically route to the person or service area. It frees up Amy Jo to focus on other issues.”

The training was familiar but still helpful to Department of Biomedical Informatics Chair Fred Prior, Ph.D., who brings both industry and academic backgrounds to his role. He envisions applying the principles of Lean to improve response times for research queries against UAMS’ research



Prior

information repositories.

“I would like to make that happen as an example of how to apply it in research,” he said.

The Lean training also includes aspects of change management. Laura Hutchins, M.D., who oversees TRI’s Clinical Trial Innovation Unit and serves as the liaison for the CTSA consortium’s clinical trial initiatives, referenced a key tenet of Lean – the value of teamwork and inclusiveness.



Hutchins

“Teamwork is important. Everyone’s input is valuable,” Hutchins said. “Small changes may result in large improvements in outcome.”

Boateng noted that Introduction to Lean trainings typically last a week, while the Leadership Council’s training was condensed and tailored for that group.

“I think the introduction we received was just enough to get us (TRI) thinking about what to change to make us more efficient,” she said.

Profiles Now Links UAMS to Research Institutions Across U.S.



UAMS Profiles (tri.uams.edu/profiles), the online researcher networking software, now connects UAMS to other research institutions across the United States.

Through the DIRECT2Experts network, UAMS faculty can easily find potential collaborators at other biomedical institutions. Check it out at DIRECT2Experts.org. The service is facilitated by the Research Networking Working Group of the NIH-supported Clinical and Translational Science Award (CTSA) consortium.

TRI and the Department of Biomedical Informatics are partnering to offer monthly Profiles trainings for faculty. Stay tuned for additional Profiles updates and trainings in TRI’s weekly email newsletter. For questions about UAMS Profiles, email TRIservices@uams.edu.

Dwayne Dobbins assisted participants in recent Profiles trainings, here with Melissa Heard.

TRIBUTARY

NIH Health Literacy Grant Has Roots in TRI Support

UAMS' Kristie Hadden, Ph.D., learned this month that she is receiving a four-year, \$2.9 million grant from the National Institutes of Health (NIH).

Starting in April, she will use the funds to test a diabetes education and health literacy program in patient-centered medical homes at UAMS regional centers across Arkansas.

Hadden, director of the UAMS Center for Health Literacy and an early-career investigator, said her first NIH grant has roots in TRI support that dates to 2013. Early that year she pitched the idea of inviting a "dream team" of national level health literacy researchers to UAMS as part of a seminar series.

"I said we need to be doing health literacy research at UAMS because it is so relevant to translational research," Hadden said. "As we develop and implement new interventions, if we fall short in communicating about this research and treatment options, we're not going to benefit like we should, and communities won't benefit."

After receiving her formal proposal, TRI sponsored the

seminar series featuring five prominent health literacy researchers from across the U.S. Throughout the series,

Hadden developed strong, unofficial mentoring relationships with the speakers. When the Center for Health Literacy was established in 2014, two of the speakers, Michael Wolf of Northwestern University and Terry Davis of Louisiana State University Health Sciences Center in Shreveport, agreed to become formal advisers to Hadden for one year.

Wolf and Davis, now co-investigators on Hadden's study, identified the UAMS Regional Programs' Patient-Centered Medical Homes around the state as the ideal platform for testing a diabetes education/health literacy intervention. The two also suggested that she pursue the NIH grant.

"It all started from those visits in 2013 and 2014," she said. "If the Translational Research Institute hadn't made the lecture series possible, I really don't believe I would have been able to establish those relationships this early in my research career."



Kristie Hadden, Ph.D., speaks with a student.

TRI & me

"As an investigator, I see TRI as a resource that makes it easier for me to conduct clinical trials and that provides expertise in areas such as biostatistics and implementation science. As a department chair, I am grateful that TRI can provide our faculty with research resources not available in our department. The presence of TRI as a member of the Clinical and Translational Science



Pedro Delgado, M.D., Director, UAMS Psychiatric Research Institute; Marie Wilson Howells Professor and Chair, Department of Psychiatry, College of Medicine; TRI KL2 Co-Director, TRI KL2 Mentored Research Career Development Scholar Award Program

Award (CTSA) consortium also brings national recognition and access

to funding opportunities that are only available through the CTSA network. As co-director of TRI's KL2 Scholars program with Dr. Mary Aitken, I see TRI truly enhancing career development opportunities, raising awareness of the importance of mentorship, and increasing our competitiveness as an institution."

The TRIBune is produced by the UAMS Translational Research Institute (TRI).

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.

UAMS | Translational Research Institute

Need help with
Research?
Contact
TRIservices@uams.edu

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

Atwood DN, Beenken KE, Lantz TL, Meeker DG, Lynn WB, Mills WB, Spencer HJ, Smeltzer MS. Regulatory mutations impacting antibiotic susceptibility in an established *Staphylococcus aureus* biofilm. *Antimicrob Agents Chemother.* 2016 Jan 11. pii: AAC.02750-15

Chandrika BB, Yang C, Ou Y, Feng X, Muhoza D, Holmes AF, Theus S, Deshmukh S, Haun RS, Kaushal GP. Endoplasmic reticulum stress-induced autophagy provides cytoprotection from chemical hypoxia and oxidant injury and ameliorates renal ischemia-reperfusion injury. *PLoS One.* 2015 Oct 7;10(10):e0140025. doi: 10.1371/journal.pone.0140025. eCollection 2015

Doherty TA, Baum R, Newbury RO, Yang T, Dohil R, Aquino M, Doshi A, Walford HH, Kurten RC, Broide DH, Aceves S. Group 2 innate lymphocytes (ILC2) are enriched in active eosinophilic esophagitis. *J Allergy Clin Immunol.* 2015 Sep;136(3):792-794.e3. doi: 10.1016/j.jaci.2015.05.048. Epub 2015 Jul 30

Erickson SW, Stephens OW, Chavan SS, Tian E, Epstein J, Barlogie B, Heuck CJ, Vangsted AJ. Common genetic variants in 11q13.3 and 9q22.33 are associated with molecular subgroups of multiple myeloma. *Leukemia.* 2015 Aug 26. doi: 10.1038/leu.2015.238

Fantegrossi WE, Gray BW, Bailey JM, Smith DA, Hansen M, Kristensen JL. Hallucinogen-like effects of 2-([2-(4-cyano-2,5-dimethoxyphenyl) ethylamino] methyl)phenol (25CN-NBOH), a novel N-benzylphenethylamine with 100-fold selectivity for 5-HT_{2A} receptors, in mice. *Psychopharmacology (Berl).* 2015 Mar;232(6):1039-47. doi: 10.1007/s00213-014-3739-3. Epub 2014 Sep 17.

Felix HC, Adams B, Cornell CE, Fausett JK, Krukowski RA, Love SJ, Prewitt TE, West DS Barriers and facilitators to

senior centers participating in translational research. *Res Aging.* 2014 Jan;36(1):22-39. doi: 10.1177/0164027512466874. Epub 2012 Nov 20

Goodson WH III, Lowe L, Carpenter DO, Gilbertson M, Manaf Ali A, Lopez de Cerain Salsamendi A, Lasfar A, Carnero A, Azqueta A, Amedei A, Charles AK, Collins AR, Ward A, Salzberg AC, Colacci A, Olsen AK, Berg A, Barclay BJ, Zhou BP, Blanco-Aparicio C, Baglolle CJ, Dong C, Mondello C, Hsu CW, Naus CC, Yedjou C, Curran CS, Laird DW, Koch DC, Carlin DJ, Felsher DW, Roy D, Brown DG, Ratovitski E, Ryan EP, Corsini E, Rojas E, Moon EY, Laconi E, Marongiu F, Al-Mulla F, Chiaradonna F, Darroudi F, Martin FL, Van Schooten FJ, Goldberg GS, Wagemaker G, Nangami GN, Calaf GM, Williams G, Wolf GT, Koppen G, Brunborg G, Lyerly HK, Krishnan H, Ab Hamid H, Yasaei H, Sone H, Kondoh H, Salem HK, Hsu HY, Park HH, Koturbash I, Miousse IR, Scovassi AI, Klaunig JE, Vondráček J, Raju J, Roman J, Wise JP Sr, Whitfield JR, Woodrick J, Christopher JA, Ochieng J, Martinez-Leal JF, Weisz J, Kravchenko J, Sun J, Prudhomme KR, Narayanan KB, Cohen-Solal KA, Moorwood K, Gonzalez L, Soucek L, Jian L, D'Abronzio LS, Lin LT, Li L, Gulliver L, McCawley LJ, Memeo L, Vermeulen L, Leyns L, Zhang L, Valverde M, Khatami M, Romano MF, Chapellier M, Williams MA, Wade M, Manjili MH, Lleonart ME, Xia M, Gonzalez MJ, Karamouzis MV, Kirsch-Volders M, Vaccari M, Kuemmerle NB, Singh N, Cruickshanks N, Kleinstreuer N, van Larebeke N, Ahmed N, Ogunkua O, Krishnakumar PK, Vadgama P, Marignani PA, Ghosh PM, Ostrosky-Wegman P, Thompson PA, Dent P, Heneberg P, Darbre P, Sing Leung P, Nangia-Makker P, Cheng QS, Robey RB, Al-Temaimi R, Roy R, Andrade-Vieira R, Sinha RK, Mehta R, Vento R, Di Fiore R, Ponce-Cusi R, Dornetshuber-Fleiss R, Nahta R, Castellino RC, Palorini R, Abd Hamid

R, Langie SA, Eltom SE, Brooks SA, Ryeom S, Wise SS, Bay SN, Harris SA, Papagerakis S, Romano S, Pavanello S, Eriksson S, Forte S, Casey SC, Luanpitpong S, Lee TJ, Otsuki T, Chen T, Massfelder T, Sanderson T, Guarnieri T, Hultman T, Dormoy V, Odero-Marah V, Sabbiseti V, Maguer-Satta V, Rathmell WK, Engström W, Decker WK, Bisson WH, Rojanasakul Y, Luqmani Y, Chen Z, Hu Z. Assessing the carcinogenic potential of low-dose exposures to chemical mixtures in the environment: the challenge ahead. *Carcinogenesis.* 2015 Jun;36 Suppl 1:S254-96. doi: 10.1093/carcin/bgv039.

Hambuchen MD, Carroll FI, Rüedi-Bettschen D, Hendrickson HP, Hennings LJ, Blough BE, Brieady LE, Pidarthi RR, Owens SM. Combining active immunization with monoclonal antibody therapy to facilitate early initiation of a long-acting anti-methamphetamine antibody response. *J Med Chem.* Jun 11;58(11):4665-77. doi: 10.1021/acs.jmedchem.5b00220. Epub 2015 May 22

Howell MD, Bailey LA, Cozart MA, Gannon BM, Gottschall PE. Hippocampal administration of chondroitinase ABC increases plaque-adjacent synaptic marker and diminishes amyloid burden in aged APP^{swE/PS1dE9} mice. *Acta Neuropathol Commun.* 2015 Sep 4;3(1):54. doi: 10.1186/s40478-015-0233-z.

Janganati V, Ponder J, Jordan CT, Borrelli MJ, Penthala NR, Crooks PA. Dimers of melampomagnolide B exhibit potent anticancer activity against hematological and solid tumor cells. *J Med Chem.* 2015 Nov 16.

Juratli MA, Siegel ER, Nedosekin DA, Sarimollaoglu M, Jamshidi-Parsian A, Cai C, Menyaev YA, Suen JY, Galanzha EI, Zharov VP. In vivo long-term monitoring of circulating tumor cells fluctuation during medical interventions. *PLoS One.* 2015 Sep 14;10(9):e0137613. doi: 10.1371/journal.pone.0137613. eCollection 2015.