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TN-CTSI TEAM

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The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA/V institution in the provision of its education and employment programs and services.

MESSAGE FROM THE VICE CHANCELLOR



Steven R. Goodman, PhD Vice Chancellor for Research

The Tennessee Clinical and Translational Science Institute (TN-CTSI) aligns well with my vision for translational and clinical research here at the University of Tennessee Health Science Center (UTHSC). I applaud the leadership of Dr. Karen Johnson and Dr. Michelle Martin in developing this statewide effort, involving all UTHSC campuses, Colleges, and UTK/UTIA to combat health disparities and improve the health of all Tennesseans (and people worldwide) through creating an environment leading to robust Clinical Trials performed by UTHSC faculty.

The TN-CTSI collaboration with all UTHSC campuses builds on the many accomplishments in clinical and translational research throughout our institution by enhancing robust workforce training programs, career development, and community engagement. The Team Science goals of TN-CTSI will expand the mission of the Collaborative Research Network (CORNET), which I developed to provide UTHSC faculty with a new platform to create research partnerships across disciplines, Colleges, Universities, and nations. TN-CTSI goals to harmonize research and training resources across campuses are in alignment with the Clinical Trials Governance Board (CTGB), that I established as a Federated model to coordinate the multiple Clinical Trials Offices across UTHSC. The TN-CTSI forms an integrated network with the CTGB and the highly successful state-wide Clinical Trials Network of Tennessee (CTN2) which currently has thirteen participating hospitals and practice plans blanketing the State. The powerful combination of the TN-CTSI, the CTGB, and CTN2 and the statewide Enterprise Data Warehouse provides UTHSC with a unique infrastructure that is a beacon for how Academic Health Centers can advance human health.

Steven R. Goodman, PhD

Vice Chancellor for Research



Karen Johnson, PhD TN-CTSI Co-Director



Michelle Martin, PhD TN-CTSI Co-Director

MESSAGE FROM THE DIRECTORS

The Tennessee Clinical and Translational Science Institute (TN-CTSI) stimulates the discovery and translation of biomedical research into clinical practice to improve population health through a diverse set of services and resources. By providing critical education and training, funding opportunities, resources, and interdisciplinary expertise, TN-CTSI helps clinical and translational researchers advance their discoveries and develop novel therapies aimed at improving health care for all.

MEET THE TEAM



Derita Bran, MSN, RN, CCRC Director of Administration



Margaret Lynn, LMSW, RDN, CCRP, CIP Director of Clinical Research



Daniel Dibaba, PhD Senior Research Specialist



Laura Meyer, MA
Program Evaluator & Research
Specialist



Ashley Evans, MS

Community Engagement Specialist and Recruitment Manager

ANNOUNCEMENTS



Charisse Madlock-Brown, PhD, MLS

UTHSC Professor Dr. Charisse Madlock-Brown Participating in National COVID Data Research Collaborative

One of UTHSC's data scientists is applying her extensive expertise in informatics to a national effort to leverage big

data in the fightagainst COVID-19.

Charisse Madlock-Brown, PhD, MLS, and faculty member in Health Informatics and Information Management at UTHSC, is a co-lead for one of the clinical domain teams of the National COVID Cohort Collaborative (N3C). The N3C is a partnership among the National Center for Data to Health (CD2H) and National Center for Advancing Translational Sciences (NCATS)-supported Clinical and Translational Science Awards (CTSA) Program hubs. It includes clinicians, informaticians and biomedical researchers from more than 60 institutions working to turn data from hundreds of thousands of medical records from coronavirus patients into treatments and predictive analytical tools that can help address the evolving pandemic.

Dr. Madlock-Brown is the co-lead for the Social Determinants of Health (SDoH) team. The team's goal is to identify questions that either validate current research or answer new questions for local policy around COVID-19, the impact of groups experiencing resource challenges, and the impact of the pandemic on inequalities.

"The N3C project has provided researchers from across the country with invaluable resources to identify the social determinants of health related to vulnerability to high COVID-19 incidence and poor outcomes," Dr. Madlock-Brown said. "As co-lead for the SDoH task team, I can facilitate the development of robust research protocols, integrate various

datasets, coordinate training on the N3C platform, collaboratively analyze COVID-19 data, and provide opportunities for investigators to share related research and propose ideas."

Dr. Madlock-Brown, who is also the Co-Director of TN-CTSI's Informatics Core, received training over the summer on the N3C data access platform and is the point of contact for UTHSC's utilization of N3C. UTHSC researchers interested in COVID and SDoH are free to join and should contact Dr. Madlock-Brown at cmadlock@uthsc.edu.

Wenjing Zhang Secures TN-CTSI Pilot Project Award for Cutting-Edge Research Using 3D Bio Printing

The TN-CTSI continues to support innovative research for improving the health of Tennesseans, most recently by awarding pilot funding to Wenjing Zhang, MD, PhD, assistant professor in the Department of Genetics, Genomics, and Informatics for her project entitled "De novo periodontal ligament regeneration using Biosynsphere technology".

Dr. Zhang is collaborating with co-PI George Huang, DDS, DSc, Professor of Bioscience Research in the College of Dentistry, on the project. Using the cutting-edge technology of Biosynphere, a bio-ink used in stem-cell derived 3D bioprinting, the team aims to create periodontal ligament-covered roots for regeneration of the periodontal ligament on avulsed teeth. The team will conduct in vitro tests, followed by testing the regeneration of PDL in animal models.

The \$20,000 award was part of a TN-CTSI pilot funding opportunity designed to stimulate innovative, interdisciplinary, team-based health disparities research, with the ultimate goal of giving rise to future extramural funding.

TN-CTSI **NEWSLETTER**

ANNOUNCEMENTS



Sarah Rhoads, PhD, DNP, WHNP-BC, RNC-OB, FAAN

Dr. Sarah Rhoads Awarded Supplemental Funding for COVID-19 Related Study

Congratulations to Professor Sarah Rhoads, PhD, DNP, WHNP-BC, RNC-OB, FAAN, on the funding of a supplemental proposal titled "COVID-19 Related Enhancement Funding - Comparing Quality of Telemedicine & Standard Provider Visits with Healthcare Utilization Metrics of Older Patients with Heart Failure During Covid-19 Pandemic."

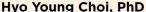
The \$162,409 award provides one year of additional funding on Dr. Rhoads' subaward with the University of Arkansas for Medical Sciences (UAMS) for the PCORI award iCOACH INNOVATIVE CARE MODEL FOR OLDER ADULTS WITH CHRONIC HEART FAILURE. Dr. Rhoads is Co-Investigator and site Principal Investigator on the supplemental award. The purpose of the study is to evaluate telehealth implementation during the COVID-19

pandemic with an emphasis on quality, satisfaction, and usability.

Dr. Rhoads will help recruit telehealth patients and providers from UAMS and West Tennessee Healthcare for a survey and qualitative interviews.

BERD Welcomes New Faculty Members







Xiaoyu Liang, PhD

The BERD Clinic is proud to welcome new faculty members, Dr. Hyo Young Choi and Dr. Xiaoyu Liang.

Dr. Hyo Young Choi's research areas include statistical genomics, machine learning, and high dimensional data analysis. She is interested in the development and application of statistical methods to reveal novel scientific findings in modern biological datasets.

Dr. Liang's research interests lie generally in statistical genetics and epigenetics regulation in psychiatric disorders. Her research focuses on developing statistical methods and computational tools for jointly analyzing multiple phenotypes, drug and alcohol addiction and its relationship with HIV infection, DNA methylation aging clocks, and single-cell RNA sequencing analysis.



Alex Mason, PhD

The BERD also welcomes Epidemiology faculty member, Dr. Alex Mason to the team as a new host of BERD clinics.

Dr. Mason's research focuses on the developmental etiology and prevention of substance misuse and co-occurring problems (e.g., conduct problems, depression) in youth. He has experience contributing

to and leading longitudinal birth cohort studies of neurocognitive and psychosocial development as well as family- and school-based randomized prevention trials.

UPCOMING EVENTS

TN-CTSI Educational Events

Research 103 will be offered in April 2021. It will be 7 Zoom sessions and will build upon the basic research training provided by Research 101 (Spring 2020) and the more advanced topics offered in the Research 102 series (Fall 2020). Topics to be included in Research 103: Using the Research Enterprise Data Warehouse database and TriNetX for Subject Recruitment and Using REDCap for Data Capture; Single IRB Approval; Diversity and Inclusion in Research; and Scientific Integrity and Preventing Research Misconduct.

A Principal Investigator Research Training series will be offered May 2021. There will be 9 Zoom sessions specifically targeted to the needs of principal investigators. Topics will include Study Design, Blinding, Confounding Events, Sample Size and Power; Developing and Following the Protocol; Planning Budgets and Contracts; and Subject Recruitment and Retention.

Watch for registration information in the UTHSC Daily Digest.

BERD Events

03/29, Dr. Omer Ozturk (Ohio State University), "Metaanalysis of quantile intervals from different studies with an application to a pulmonary tuberculosis data."

Mid-South SOCRA Chapter



SOCRA educational meetings will occur May, July, September, and November in 2021. Watch for

announcements through the UTHSC Daily Digest.

For all the latest events and full information on each, please visit the <u>TN-CTSI Events Calendar on</u> our webpage.

TN-CTSI **NEWSLETTER**

NAVIGATION CORNER

NEED HELP NAVIGATING THE NIH GRANT APPLICATION PROCESS?

We have prepared a collection of resources the helps outline the fundamentals of the NIH grant process other need to know resources.

Check them out here.

INTERESTED IN BECOMING A BETTER INVESTIGATOR?

TN-CTSI is committed to developing and maintaining a diverse multidisciplinary translational workforce capable of conducting high-impact Clinical and Translational Research (CTR). We have established CTR degree granting and training programs that provide core competencies focused on study design, conduct, analysis, dissemination, and translation of clinical research. Further, we have robust mentoring programs in addition to providing short courses, workshops, and seminars.

NEED HELP RECRUITING PARTICIPANTS FOR A STUDY?

We are dedicated to supporting recruitment and retention of research participants through a variety of mechanisms. We understand the importance of community engagement for successful recruitment and retention and relying on a multifaceted approach using novel tools and methods to reach the whole population of our catchment area.

To aid in your recruitment process, we have prepared a list of recruitment resources. Check it out here.

NEED ADDITIONAL ASSISTANCE?

The Tennessee Clinical and Translational Science Institute (TN-CTSI) offers a wealth of training and consultation opportunities to help researchers. The TN-CTSI can connect you to the expertise that will help you improve your grant scores, conduct a successful study, and increase the impact of your science.

To request assistance from the TN-CTSI, please complete the Assistance Request Form found here.

CONTACT US

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