Housekeeping

- Q & A to follow – Submit questions using Q&A area
- Slides are available at www.ruralhealthinfo.org/webinars/nih-ncats
- Technical difficulties please visit the Zoom Help Center at support.zoom.us
Featured Speakers

Kay Miller Temple, MD, Web Writer, the Rural Health Information Hub

Michael Kurilla, MD, Ph.D, Director, Division of Clinical Innovation, National Center for Advancing Translational Sciences, National Institutes of Health

Laura James, MD, Professor of Pediatrics; Associate Vice Chancellor for Clinical and Translational Research; Director, Translational Research Institute

National Center for Advancing Translational Sciences: Addressing Rural Health Disparities

NIH National Center for Advancing Translational Sciences: Involving Rural America in Research

A new diagnosis of cancer? Of a rare disease? Or a chronic medical problem with seemingly no new treatment? The National Center for Advancing Translational Sciences is supporting investigators and ensuring that their cutting-edge science gets to the people who need it. Translational science teams in Arkansas, Florida and Washington are making that happen in the rural areas of their states.

Translational Science: Research with Results that Touch Rural Populations

Translational science is a specialized research field bringing cutting-edge science to patients that need it. Making sure rural communities are also recipients of new research, the National Center for Advancing Translational Science is a federal agency that facilitates the steps and supports the investigators who want their findings to translate into better health.

www.ruralhealthinfo.org/rural-monitor/ncats-rural-research/

www.ruralhealthinfo.org/rural-monitor/translational-science/
“We advance science from one stage to another.”
## Translational Sciences’ Spectrum

<table>
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<tr>
<th>Steps in using research results</th>
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<tr>
<td>Basic research: NCATS doesn’t do basic science...but it depends on it. Researchers first discover results that might impact diagnosis or treatment of human disease.</td>
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<th>Pre-Clinical Research:</th>
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<td>Basic science research results ...recognized as results that might actually help deal with a human disease and are used to do further research</td>
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<th>Clinical Research:</th>
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<td>Use results from pre-clinical research with potential for diagnosing or treating human disease and do follow-up research to test effectiveness and safety</td>
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<th>Clinical Implementation</th>
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<td>Use the interventions/results found effective and safe in the clinical research stage for routine clinical care and often use further research to monitor</td>
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<th>Public Health Integration</th>
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<td>In this stage of translation, researchers study health outcomes at the population level to determine the effects of diseases and efforts to prevent, diagnose, and treat them. Findings help guide scientists working to assess the effects of current interventions and to develop new ones.</td>
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https://ncats.nih.gov/translation/spectrum

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## Examples of NCATS-supported Rural Research

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<tr>
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<tr>
<td>Health Research Participation, Opportunity, and Willingness Among Minority and Rural Communities of Arkansas.</td>
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<td>Translational Research Institute, University of Arkansas for Medical Sciences</td>
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<th>Developing and Launching a Research Participant Registry.</th>
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<th>Breakfast Is Brain Food? The Effect on Grade Point Average of a Rural Group Randomized Program to Promote School Breakfast*</th>
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<th>Suboptimal geographic accessibility to comprehensive HIV care in the US regional and urban--rural differences</th>
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<td>Virginia Commonwealth University</td>
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<th>HIV care provider perceptions and approaches to managing unhealthy alcohol use in primary HIV care settings: a qualitative study</th>
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<td>Vanderbilt University Medical Center</td>
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<th>Rural Adult Perspectives on Impact of Hearing Loss and Barriers to Care.</th>
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<td>University of Kentucky Physician-Mentored Student Research Fellowship</td>
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<th>Effectiveness of Ambulatory Telemedicine Care in Older Adults: A Systematic Review</th>
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<th>Physician Trust and Home Remedy Use Among Low-Income Blacks and Whites with Hypertension: Findings from the TRUST Study.</th>
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<th>Rural-urban disparities in health care costs and health service utilization following pediatric mild traumatic brain injury</th>
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NCAT mission

- The 3 "Ds"
  - *Develop science*
  - *Demonstrate science*
  - *Disseminate science*
Key Activity: Patient Involvement
Grantees: “CTSA hubs”

“Engage patients and communities in every phase of the translational process.”
CTSA Program Hubs Collaborate to Assess Community Engagement

Community engagement is a crucial feature of successful translational research. Community members are the ultimate beneficiaries of research results, and when they have a voice in the research process, outcomes are more relevant to their needs and more readily adopted. However, the effectiveness of community engagement efforts can be difficult to measure, and better evaluation methods and tools are needed.

Recognizing these challenges, investigators at the University of Rochester, an NCATS Clinical and Translational Science Awards (CTSA) Program hub, launched a pilot study to develop and test a community engagement assessment process. The goal is to help academic health centers evaluate and enhance their engagement activities, which in turn will improve the translation of research results into real-world practice.

Seven other CTSA Program hubs participated in the pilot study, and all eight institutions are using the results to improve their engagement efforts. Learn more about the assessment tool.

Posted May 2019

Language Differences

NCATS Activities

Public Health Core Activities

Image Source: CDC
Grant Funding Differences for Public Health and Clinical Research
Rural Health Focus of CTSA Program

Michael G Kurilla, MD, PhD
Director, Division of Clinical Innovation, NCATS
March 2020

NCATS Mission

To catalyze the generation of innovative methods and technologies that will enhance the development, testing and implementation of diagnostics and therapeutics across a wide range of human diseases and conditions.
Division of Clinical Innovation
Clinical and Translational Science Awards (CTSA) Program

- Collaboratively facilitates and accelerates translational projects locally/regionally/nationally
- Scientific and operational innovation to improve the efficiency and effectiveness of clinical translational research
- Creates, provides, and disseminates domain-specific translational science training
- Fosters creation of an academic discipline of translational science

Mike Kurilla, M.D., Ph.D.
Director
michael.kurilla@nih.gov

CTSA Program Goal - Promote the integration of special and underserved populations in translational research across the human lifespan

Community Engagement Core

Community Health Coalition Development Program
Community Scientist Academy
WWAMI Network
Project ECHO
CTSA Program – Special Focus

Notice of Information: NCATS Clinical and Translational Science Awards (CTSA) Program's Interest in Improving Rural Health Outcomes and Eliminating Health Disparities

Notice Number: NOT-TR-19-015
Key Dates
Release Date: January 28, 2019

Rural Health Research Support Network

Informatics: Clinical Data to Health (CD2H)
Accelerating innovation in informatics to improve clinical care

- **Clinical informatics**
  - Developing EHR systems, clinical standard terminologies, clinical data warehouses and common data models

- **Bioinformatics**
  - Translating genomic, proteomic and other -omic data

- **Research Information Technology**
  - Developing enterprise platforms for electronic data capture, cohort discovery, clinical trials management and secure computing environments
“At its peak, over 15,000 people (Parkinson Disease) from all 50 states signed up to engage in our research,” “And they did it on their own terms using their own devices.” - Dr. Ray Dorsey from University of Rochester Medical Center CTSA.
Supporting a Diverse Workforce Focused on Rural Health Disparities

- University of Alabama at Birmingham (UAB) CTSA Program hub partners with the Department of Community and Rural Medicine and the Institute for Rural Health Research at the College of Community Health Sciences, University of Alabama:
  - Serves as a resource for researchers, individuals and organizations working to improve the health of rural communities
  - Dr. Mercedes Morales-Alemán, PhD, Assistant Professor, supported through a diversity supplement from the CTSA Program through UAB, conducts research on better understanding the multi-level factors that underlie health disparities in adolescent Latinas in the United States South through a community-based participatory approach.
The Road to Improving Rural Health Outcomes

Leveraging a CTSA to Address Health Challenges in Rural Populations

March 31, 2020

Laura James, MD
Associate Vice Chancellor for Clinical and Translational Research, UAMS
PI, Clinical and Translational Research Award (CTSA)*
Director, Translational Research Institute, UAMS
*supported by UL1 TR003107 from the National Center for Advancing Translational Sciences

UAMS Translational Research Institute
Background

42% of Arkansans live in rural areas compared to 15% of the US population.

University of Arkansas Division of Agriculture. Rural Profile of Arkansas. 2017

Unique Health Characteristics of Rural Populations

- Higher rates of hypertension and obesity
- Higher rates of smoking
- Lower rates of physical activity
- Reduced access to primary care and specialty physicians
- Lower rates of insurance
- Greater distrust of physicians
- Higher rates of poverty
- Greater numbers of motor vehicle crashes
- Higher rates of opioid overdoses

Our Mission

To develop new knowledge and novel approaches that will measurably address the complex health challenges of rural and under-represented populations.
Existing Strengths

- Strong community engagement core (COPH)
- National reputation in Implementation Science
- Strong background in special populations research (COPH, Pediatrics, UAMS-NW)
- Department of Biomedical Informatics (Prior, 2016)
- Department of Statistics
- Strong cross-college interactions

Leveraging our Strengths in a state of 3 Million
Leveraging Institutional Strengths & CTSA Tools

......to support our hub partners and other NIH programs

• UAMS Biomedical Informatics and Biostatistics
• Arkansas Research Central Data Repository – AR-CDR
• ACH – Epic launch November 2017
  • TRI (CTSA) leading ACH I2B2 implementation
• Adoption of smart IRB by Idea States Pediatric Clinical Trials Network (ISPCTN); 17-site pediatric network, a component of the ECHO program
**CE Services and Programs**

- Staff the TRI Community Advisory Board (CAB)
- CE consultations
- Do’s and Don’ts of Community Engagement Workshop
- Liaison with existing community partners
- Help with starting Community Advisory Boards (CABs)
- Community Review Boards (CRBs)
- Equipment Library
- **Community Scientist Academy (CSA)**
- Community grant reviewers
- Community Partner Celebration

**UAMS Translational Research Institute**

**Expansion of Community Scientist Academy**

- Launch in 2016
- Expansion to Veterans and High School Students (Photo Voice project)

**STUDENT RESEARCH ENGAGEMENT:**
- Doctoral study on teen pregnancy
- Community review board for IDeA States Pediatric Clinical Trials Network study

- One-day CSA for community organizations **CPEARL Participants**
- Successfully disseminated to Ohio State University CTSA

**Recruitment? Retention?**

**Community Review Board**
February 2020

**UAMS Translational Research Institute**
CPEARL

Improving health literacy among monolingual Spanish patients
Conscious discipline intervention for families with high ACES scores
Peer advocates for criminal justice system navigation
Assessing and addressing priority health concerns
Educational outreach to rural African American men
Physical fitness for young adults with developmental disabilities

Integrating Special Populations: Engaging Rural and Minority Participants in Translational Research

Pearl A. McElfish, PhD
Integrating Special Populations Director, TRI
Vice Chancellor for Northwest Arkansas Region
Expansion of Research Throughout Arkansas

Current Foundation

- UAMS clinics and clinical affiliates

Regional Campuses -
UAMSHealth Batesville,
Fayetteville/Springdale,
Fort Smith, Helena,
Jonesboro, Magnolia,
Texarkana, and Pine Bluff

Family Practice
Residency Programs

Potential to Reach All of Rural Arkansas

- UAMS clinics and clinical affiliates

Regional Campuses – Family Medical Centers: Batesville, Fayetteville/Springdale, Fort Smith, Helena, Jonesboro, Magnolia and Pine Bluff

Digital Health Resources:
- High-risk pregnancy partners
- Stroke Program participating hospitals
- Trauma telemedicine (Image Repository, Hand, Burn)
In the past seven years, diabetes increased 24% from 11.2% to 13.9% of adults in Arkansas

“Comparative Effectiveness of Family DSMES and Standard DSMES among Diverse Populations”*

Participating Clinical Sites
1. UAMS South Central, Pine Bluff
2. UAMS East, Helena
3. UAMS Northwest, Fayetteville
4. UAMS Little Rock

*PCORI Contract; 1/1/2020 – 2/1/2024
Goals of Rural Research Network

- Leverage our state-wide clinical and telemedicine platform to engage special populations (Rural, Minority, Older Adults, Children)
- Create a Sustainable infrastructure with UAMS partners

Progress
1) Hired Director of Rural Research Network in December
2) PCORI – McElfish launch May 1 – 4 sites
3) PCORI – McElfish launch – 2 sites – Marshallese
4) Continue to layer research support throughout regional sites via federal funds
Questions?

Thank you!

- Contact us at ruralhealthinfo.org with any questions
- Please complete webinar survey
- Recording and transcript will be available on RHIIhub website