The Indiana Clinical and Translational Sciences Institute: An Overview with a focus on social and structural determinants of health

Indiana CTSI Retreat at Notre Dame
March 10, 2021
Sarah Wiehe
Sharon Moe
Our Vision
We envision an Indiana that is one of the nation’s healthier states.

Our Mission
We bring together Indiana’s brightest minds to solve the state’s most pressing health challenges.
Indiana CTSI 3.0 Objectives & Outcomes

Accelerate the translation of discoveries to clinical care
Transform Clinical Research Processes
Improve Community Health Indicators in Indiana
Advance workforce development
Enhance our robust platform of informatics and data sciences
Translation is “the process of turning observations in the laboratory, clinic and community into interventions that improve the health of individuals and the public—from diagnostics and therapeutics to medical procedures and behavioral changes.”

https://catalyst.harvard.edu/pathfinder/
Sharon Moe
- Access Technology Program
- Molecular Therapeutics Program
- Technology, Innovation and Entrepreneurship Program
- Biomedical Engineering and Nanomedicine
- Regulatory Knowledge and Support Program
- Clinical Research Center
- Office of Clinical Research
- Clinical Trial Recruitment
- OnCore

Sarah Wiehe
- Biostatistics Epidemiology and Research Design
- Bioethics and Subject Advocacy Program
- Translational Informatics Program
- Community Health Partnerships
- Monon Collaborative
- Global Health Innovation Exchange
- Center for Health Innovation and Implementation Science
- All IN for Health

Education, Training and Workforce Development
- Evaluation
- Communications
- Indiana Biobank
- PDT/PRMC/Pilot Grants
Indiana CTSI social and structural determinants of health highlights

- Promoting a **diverse workforce**: pipeline training opportunities across the state
- Equitable opportunities for **engagement in clinical and translational research**: a statewide clinical trial network and recruitment optimization efforts
- **Data and informatics** work relating to social determinants
- **Pilot funds** and grant review
- **Equity, diversity, and inclusion initiative**
- **Community engagement** infrastructure
- **Addressing health equity**: The Monon Collaborative
Goal: To support students, fellows, faculty, and staff with the education and experience needed to ensure a sustained excellence in translational research.
Equitable engagement in research

- **Statewide clinical trial network:** Access to individuals statewide through seamless integration across multiple clinical sites, enabling investigators to ‘open’ studies at multiple sites with a one stop shop approach.

- **All IN for Health:** Online engagement platform for Hoosiers to promote health and research literacy and helps disseminate study findings to the public. Includes a volunteer registry of >30,000 individuals willing to be contacted for studies by email or mail, allowing for selective email by specific cohort characteristics.

- **RESEARCHJAM (Patient Engagement Core):** Human-centered design research service core that engaged stakeholders to help researchers address barriers. Assists with communication strategies for research recruitment and grant/publication figures.

- **Community Health Partnerships:** Engage community and university stakeholders (>600 statewide) in research partnership, training and pilot funding that contributes to a trusted network statewide

✓ Recruitment optimization process ongoing to better serve both researchers and the community... STAY TUNED!

CONTACT: Brenda Hudson (brlhudso@iu.edu)
Data science and informatics

- **Regenstrief Data Services**: Offers access to patient-level data from the Indiana Network for Patient Care, IU Health, and Eskenazi electronic health records for research purposes. Free feasibility requests or patient counts for grant submissions. Access to curated registries and cohorts (such as for trauma/brain injury, wound care, and COVID-19). Current data standardization efforts with mapping to the OMOP Common Data Model, allowing for improved data quality and more efficient and reproducible research processes.

- **COVID-19 data**: Regenstrief Institute serves as the honest data broker for the National COVID Cohort Collaborative (N3C) as well as the Indiana statewide COVID-19 database (CoRDaCo with expansion to incorporate social and behavioral determinants of health data elements).

- **RedCap**: A secure electronic web application for building and managing online surveys and databases (compliance with HIPAA, GDPR, and FDA requirements).

- **Forte**: An electronic system to reimburse subjects by adding money to debit cards.

- **Social Determinants of Data Workshop**: The Indiana CTSI and Regenstrief Institute plan to convene partners from across the state to address data needs relating to the social determinants of health on April 28-30. STAY TUNED for more details!

CONTACT: Anna Roberts (annarobe@Regenstrief.org)
Pilot funds and grant review

- **FUNDING**: check out our website for more info [https://indianactsi.org/researchers/services-tools/translational-research-development/open-funding-opportunities/](https://indianactsi.org/researchers/services-tools/translational-research-development/open-funding-opportunities/)
  - Trailblazer Award and Trailblazer Planning Grant coming soon!

- **Project Development Teams** (PDT) – “one-stop shop” funding assistance
  - Present early concept idea, aims page, full grant proposals or grant reviews for feedback
  - Goal: increase likelihood of successful application for extramural funding
  - Membership: well-funded scientists with diverse scientific backgrounds, clinical research coordinator, biostatistician, regulatory support, bioethics
  - **NEW Social and Structural Determinants of Health PDT here at Notre Dame**

- **NEW Think Tank Teams** – “one-stop shop” for drug/device development
  - Present prelim data for potential therapeutic (drug, biologic etc.) OR prototype for device
  - Goal: SBIR/STTR application, spin-off, commercialization
  - Membership: individuals with experience in drug/device development, entrepreneurs; regulatory expertise, business plan expertise, representative from commercialization office from investigators institution

CONTACT: Lane Coffee (rlcoffee@iu.edu) and Julie Driscol (judrisco@iu.edu)
Equity, diversity, and inclusion initiative

Goals: To convene a task force with cross-campus representation in order to identify short- and long-term goals for the Indiana CTSI to address issues of equity, diversity, and inclusion in the research community statewide

- **Look inward:** Diversity and inclusion in our leadership, advisory boards, and funded trainees and pilot awardees
- **Pipeline investments:** Offer opportunities across the trainee pipeline
- **Connecting researchers** in health equity and racial justice issues across the state and providing consultation to others
- **Integration across the Indiana CTSI infrastructure:** With leadership, education and workforce development, recruitment optimization, community engagement, and the Social and Structural Determinants of Health Project Development Team

✓ Plan to incorporate long-term goals into the Indiana CTSI 4.0 application

CONTACT: Brownsyne Tucker Edmonds (btuckere@iu.edu) & Sylk Sotto (ssotto@iu.edu)
Community Health Partnerships

Network
Share grant announcements and newsletters, and host central and regional networking events with 600+ members across the state

Local Coalition Development + Purdue Extension Collaboration
Connections IN Health (statewide coalitions)

Training/Services
For researchers and community stakeholders in best practices for community-engaged research

Consultation
Community mentors
Student internships
Research Jam (patient engagement core)

Seed Funding
For researchers and community stakeholders in best practices for community-engaged research

Trailblazer Award
Trailblazer Planning Grant

HEALTH IMPACT + BEST PRACTICES

CONTACT: Gina Claxton (gclaxton@iu.edu)
Indiana CTSI’s commitment to impact

Indiana CTSI has built out infrastructure for community engagement (round 1) and integrated it across the other translational infrastructure (round 2), with a commitment to apply this infrastructure to impact health (round 3).

**MONON**: a focus of this effort on health equity

**COLLABORATIVE**: an effort with many, many partners

Impact Hub selection and engagement

Neighborhoods with high social vulnerability and poor health outcomes

Marion County’s Ninety-nine Self-defined Neighborhoods

Methodology

Social Determinants of Health
- Economic Stability
- Neighborhood & Physical Environment
- Household Structure
- Community & Social Context
- Healthcare System

Health Outcomes
- Mortality Rate
- Life expectancy
- Socioeconomic status
- Education
- Income
- Community engagement
- Healthcare access

Health Index

Social Vulnerability Index

Good to Go
Stable
Vulnerable

Less
More
0.5
1.0
1.5
2.0
Not Good Enough

Health Vulnerability
Social Vulnerability

NEAR SOUTHEAST
POP. 24793

EASTGATE
POP. 7262

CHRISTIAN PARK
POP. 8667

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**The Monon Collaborative**

**SDOH Collaboration Network**
A community-based working group focused on advancing coordination and collaboration of social services and resources to achieve better economic, educational, and health outcomes for vulnerable populations.

**Community Impact Hubs**
A platform that brings together community and translational researchers to listen, understand, and identify pressing health and social determinant challenges in the community and then leverages a wide array of data to design and deliver solutions and interventions that lead to better economic, educational, and health outcomes.

**Expertise as a Service**
Opportunities to engage Indiana’s nationally-recognized thought leaders and researchers to engage with the community through established partnerships between the Indiana CTSI and a diverse array of non-academic organizations (from state-level government to grassroots community organizations to healthcare entities).

**Contact:** Emily Hardwick (ejhardwi@iu.edu)
Indiana CTSI and Indiana FSSA share a vision and are combining their strengths to reach evidence-based solutions with help from nationally-recognized thought leaders.

**Current Projects**

- COVID-19 Evidence-Based Rapid Response Team
- Indiana Community Connect – community-based organization engagement
- Elderly caregiver Survey
- Department of Mental Health and Addiction data evaluation
- SNAP and food desert data mapping

**Wellbeing Informed by Science and Evidence in Indiana**

A partnership between the Indiana Clinical and Translational Sciences Institute and the Indiana Family and Social Services Administration

CONTACT: Emily Hardwick (ejhardwi@iu.edu)
Connections IN Health: statewide health coalitions

• Indiana CTSI, IDOH, and IUSCCC partnership: supports stakeholders, organizations, advocates, and residents as they come together to improve health and address chronic diseases by connecting stakeholders with evidence-based practices, identifying funding sources, and implementing and disseminating best practices

• Engage in 10 counties for focused partnership and collaborative work to improve health
  ▪ Balancing urban/rural
  ▪ Strategic alliances with healthcare and governmental partners
  ▪ Focused on health equity and overall life expectancy for 4 chronic health conditions

CONTACT: Karen Hinshaw (kdhinsha@iu.edu)
Questions?

CONTACT: Sharon Moe (some@iu.edu) & Sarah Wiehe (swiehe@iu.edu)