

2026 Midwest Clinical & Translational Research Meeting

APRIL 13-14, 2026 UNIVERSITY OF ILLINOIS CHICAGO



Program

Monday
April 13, 2026

Tuesday
April 14, 2026

Monday, April 13, 2026

**Meeting
Room**

7:00 am – 4:45 pm

Registration Table

SCW Lobby
(second floor)

7:30 am – 8:30 am

Breakfast

SCW Thompson
Room
(second floor)

8:00 am – 8:25 am

CSCTR Membership Meeting

SCW
Room 206
(second floor)



Jennifer Alexander-Brett, MD, PhD

President, CSCTR

Past Chair, AFMR Midwestern Region

Associate Professor of Medicine

Washington University School of Medicine in St. Louis

8:30 am – 8:40 am

Welcome and Opening Remarks

SCW Thompson
Room
(second floor)



Jennifer Alexander-Brett, MD, PhD

President, CSCTR

Past Chair, AFMR Midwestern Region

Associate Professor of Medicine

Washington University School of Medicine in St. Louis



Syed Bukhari, MD, MSc

Chair, AFMR Midwestern Section

T32 Cardiology Fellow

Department of Cardiovascular Medicine

Johns Hopkins University

MWAFMR Career Development Workshop

Moderators:



Syed Bukhari, MD, MSc

Chair, AFMR Midwestern Section

T32 Cardiology Fellow

Department of Cardiovascular Medicine

Johns Hopkins University



Alison Ha, PhD

University of Illinois Chicago

Speakers:



Zanthia Wiley, MD

Department of Medicine

Associate Professor of Medicine

Division of Infectious Diseases

Emory University School of Medicine

Navigating the New Funding Reality: Strategies for Career Development in a Shifting Landscape



Susan De Luca, MSW, PhD

Population Health Research Institute

Associate Professor of Psychiatry

The MetroHealth System

School of Medicine | Associate Professor

Case Western Reserve University

Navigating Uncertainty: A Discussion for Early & Mid-Career Biomedical Scientists

The presentation explores the rapidly evolving landscape of federal research funding for biomedical scientists amid changing policies related to diversity, equity, and inclusion. Over the past several years, DEI considerations have become more prominent in federal grant programs, influencing proposal evaluation criteria, training requirements, and institutional expectations. These shifts have begun to reshape how federal agencies frame and implement these initiatives. This session will provide biomedical researchers with a practical overview of what these changes may mean for their funding strategies and research environments.

Health Equity Session

This workshop offers an honest, hopeful conversation for early-career scientists and clinicians navigating a moment of profound uncertainty. Grounded in principles of community, shared leadership, and collective problem-solving, the session will explore how leaders show up in times of change and provide support across institutions. Through a brief opening talk and a panel of diverse leaders, this session will highlight the importance of process over perfection, invite personal stories of how individuals are finding their way, and create space for reflection in small groups. The panel will focus on building resilience, staying connected, and leading with integrity when the path forward isn't yet clear.

Moderator:



Jerry A. Krishnan, MD, PhD

Past President, CSCTR

Associate Vice Chancellor for Population Health Sciences

Professor of Medicine and Public Health

Epidemiology and Biostatistics

University of Illinois Chicago

Speakers:



Rinad S. Beidas, PhD

Chair and Ralph Seal Paffenbarger Professor of Medical Social Sciences

Northwestern University Feinberg School of Medicine



Darius Tandon, PhD

Professor and Director, Institute for Public Health and Medicine

Chief of Intervention Science in the Department of Medical Social Sciences

Northwestern University Feinberg School of Medicine



Karriem S. Watson, DHSc, MS, MPH

Chief Executive Officer

UI Health Mile Square Health Center



Selwyn Olweston Rogers, Jr., MD, MPH, FACS

Chief of Trauma and Acute Care Surgery

Surgeon and Public Health Expert

Founding director of the University of Chicago Medicine Trauma Center

University of Chicago Medicine



Elaine H. Morrato, DrPH, MPH, FISPE, CPH

Professor and Founding Dean of the Parkinson School of Health Sciences and Public Health

Loyola University Chicago

10:45 am - 11:00 am

Break

SCW Lobby
(second floor)

11:00 am - 12:00 pm

Department Chair Session

SCW Thompson
Room
(second floor)

My leadership Journey in Academic Medicine

This talk reflects on Dr. Ofotokun's leadership journey in academic medicine, highlighting the experiences, mentors, and pivotal moments that shaped his path from clinician-scientist to departmental leader. It examines how clinical care, research, and education intersect to inform leadership decisions and institutional strategy. The presentation also discusses key lessons learned about building teams, fostering scientific discovery, supporting trainees and faculty development, and navigating complex health systems. Ultimately, it emphasizes leadership as a collective effort grounded in service, collaboration, and a commitment to advancing patient care and academic excellence.

Moderator:



Jerry A. Krishnan, MD, PhD

Past President, CSCTR

Associate Vice Chancellor for Population Health Sciences

Professor of Medicine and Public Health

Epidemiology and Biostatistics

University of Illinois Chicago

Speaker:



Igho Ofotokun, MD, MSc, FIDSA

Chair, Department of Medicine and Physician-in-Chief

University Hospitals

Case Western Reserve University

12:00 pm - 1:00 pm

Lunch

SCW Thompson
Room
(second floor)

1:00 pm - 3:30 pm

Set up posters for Monday, April 13, 4:30 pm presentation

Nursing Event
Center
(third floor)

1:00 pm - 1:30 pm

New Investigator Session

SCW Thompson
Room
(second floor)

Moderator:



Mark E. Schweitzer, MD, FACR, FRCP, FISMRM, FACCR

Editor in Chief, Journal of Investigative Medicine

Vice President for Health Affairs

Special Associate to the President

Provost for Public Health Planning

Wayne State University School of Medicine

**Introduction of new *Journal of Investigative Medicine* editor
Mark Schweitzer, MD**

Outstanding Young Investigator

Presenter:



Ryan A. Coute, DO

*Assistant Professor of Emergency Medicine
University of Alabama at Birmingham*

Automated External Defibrillator Availability, Accessibility, and Usability in High Risk Out-of-hospital Cardiac Arrest Neighborhoods of Birmingham, Alabama

This presentation will report findings from a descriptive observational analysis evaluating automated external defibrillator availability, accessibility, and usability in neighborhoods at highest risk for out-of-hospital cardiac arrest in Birmingham, Alabama.

1:30 pm - 3:00 pm

Dissemination and Implementation Science Session

Accelerating the Research-to-Practice Pipeline: Introduction to Hybrid Effectiveness-Implementation Trials

This session, led by a panel of implementation scientists, will provide an introduction to the concept of hybrid effectiveness-implementation trials as a means of accelerating the research-to-practice pipeline. Dennis Li, PhD, will first provide a rationale and overview of hybrid trial methodology. Next, Tara Mehta, PhD, Sarah Helseth, PhD, and Sara Becker, PhD, will present a series of three case examples demonstrating the three primary types of hybrid trials. The panel will conclude with pragmatic tips and resources for investigators seeking to employ this design in their work, followed by ample time for audience questions.

SCW Thompson
Room
(second floor)

Speakers:



Dennis H. Li, PhD, MPH

*Assistant Professor
Psychiatry and Behavioral Sciences
Medical Social Sciences
Northwestern Medicine*



Tara G. Mehta, PhD

*Associate Professor of Clinical Psychology in Psychiatry
Institute for Juvenile Research
Department of Psychiatry
University of Illinois at Chicago*



Sarah A. Helseth, PhD

*Assistant Professor
Northwestern University Feinberg School of Medicine*



Sara J. Becker, PhD

*Alice Hamilton, Professor of Psychiatry
Inaugural Director of the Center for Dissemination and Implementation
Northwestern University Feinberg School of Medicine*

3:00 pm – 3:15 pm

Break

SCW Lobby
(second floor)

***Concurrent Sessions:**

*3:15 pm – 4:15 pm

Annual Max Miller Lecture in Diabetes Research

SCW Room 206
(second floor)

Molecular Basis for Fuel Selection

Organisms continually seek optimal fuel and adjust their need in response to environmental and internal changes. For example, under conditions of limited food availability or fasting, cells shift from using glucose to burning fat, while preserving glucose for the brain, a process known as fuel switching. This process is essential for survival and long-term metabolic health. Similarly, during chronic cold adaptation, brown adipose tissue (BAT) switches their fuel from glucose to fatty acids to maintain body temperature. In pathological conditions such as heart failure, the heart shifts its metabolism from fatty acid oxidation to glucose metabolism, highlighting the versatility of fuel utilization. How does each tissue decide what fuel to use? Dr. Kajimura will discuss his recent studies, indicating that mitochondria play a key role in fuel selection to meet cell-type-specific needs.

Moderator:



Terry G. Unterman, MD

*Past President, CSTR
Professor of Medicine, Physiology, and Biophysics
University of Illinois Chicago*

Speaker:



Shingo Kajimura, PhD

*Professor of Medicine
Harvard Medical School
Beth Israel Deaconess Medical Center
Division of Endocrinology, Diabetes & Metabolism*

*3:15 pm – 4:15 pm

SCW Thompson
Room
(second floor)

Inflammation, Immunity, and Transplant

From Bench to Borderless Bedside: Stem Cell Transplantation and Immunity in a Global Context

Blood and Marrow Transplantation, or hematopoietic stem cell transplantation, is commonly utilized to cure multiple hematologic malignancies and acquired or congenital bone marrow failures, such as aplastic anemia or sickle cell disease. In 2011, the University of Illinois at Chicago GlobalBMT initiative was launched in the Division of Hematology/Oncology and the Center for Global Health to partner with hospitals treating patients with hematologic diseases in LMICs where BMT is highly needed, and patients cannot afford to travel to other countries to receive treatment. The training has had 21 trainees and is composed of: observership in the BMT inpatient unit and outpatient clinics, the Stem Cell Lab, the HLA lab, and the Blood Bank; 10 lectures from UIC faculty; and one-to-one sessions with the training director addressing plans related to each country. The partnership of UIC GlobalBMT with multiple institutions has resulted in: establishing the first BMT in Nepal and in Bolivia, a new center at Ramaiah Medical College in Bangalore, India; training and implementation of allogeneic BMT at the National Cancer Institute in Kyiv, Ukraine; haploidentical BMT in Havana, Cuba.

Moderators:



Suman Setty, MBBS, PhD

*Councilor, CSCTR
Professor of Pathology
University of Illinois Chicago*



Juan Sigala Lozano, MD

*Third Year Pathology Resident
University of Illinois Chicago*

Speaker:



Damiano Rondelli, MD

*Michael Reese Professor of Hematology
Division Chief, Hematology/Oncology
Director of Blood & Marrow Transplant
University of Illinois at Chicago*

4:15 pm - 4:30 pm

Break

SCW Lobby
(second floor)

4:30 pm – 6:15 pm

Moderated Poster Discussions and Opening Reception

Nursing Event
Center
(third floor)



Jennifer Alexander-Brett, MD, PhD

President, CSCTR

Past Chair, AFMR Midwestern Region

Associate Professor of Medicine

Washington University School of Medicine in St. Louis



Syed Bukhari, MD, MSc

Chair, AFMR Midwestern Section

T32 Cardiology Fellow

Department of Cardiovascular Medicine

Johns Hopkins University

Poster Research Categories

Click on a category to view abstracts.

[Case Reports](#)

[T0 Research/Science](#)

[T1 Research/Science](#)

[T2 Research/Science](#)

[T3 Research/Science](#)

[T4 Research/Science](#)

6:15 pm

Dinner (on your own)

Tuesday, April 14, 2026

Meeting
Room

8:00 am – 3:15 pm

Registration Table

SCW Lobby
(second floor)

8:00 am – 9:00 am

Mentor and Attendee Breakfast

SCW Thompson
Room
(second floor)

1. Making Industry Connections: Getting a foot in the door

Mentor: Debbie Leah Buonomo, PharmD

2. Making Industry Connections: Getting a foot in the door

Mentor: Stephen Liu, PharmD

3. Demystifying Journal Operations: Where does my paper go when I hit submit?

Mentor: Mark E. Schweitzer, MD

4. Implementation Science: Treatment works, now what?

Mentors: Sara J. Becker, PhD

5. Implementation Science: Treatment works, now what?

Mentor: Tara G. Mehta, PhD

6. Starting Your Own Program

Mentors: David J. Kennedy, PhD and Laneshia Tague, MD

7. Academic Leadership Advancement

Mentor: Jennifer Alexander-Brett, MD, PhD

8. Academic Leadership Advancement

Mentor: Syed Bukhari, MD, MSc

9. Work Life Balance

Mentors: Steven Dudek, MD and Suman Setty, MBBS, PhD

9:00 am - 9:15 am

Break

SCW Lobby
(second floor)

9:00 am - 1:00 pm

Set up posters for Tuesday, April 14, 4:45 pm presentation

Nursing Event
Center
(third floor)

9:15 am - 9:45 am

Awards Presentation

Outstanding Young Investigator Award

Ryan A. Coute, DO

K-Awards

Adrienne L. Johnson, PhD

Andrea Pappalardo Wlochowicz, MD

Oral Abstract Awards

Sohini Dutt, PhD

Smriti Gurung, PhD

Sidharth Mahapatra, MD, PhD

Grant Nelson, BA

Omar Osorio

Morgan Payne, BS

Jordan Petrick

Themis Thoudam, PhD

Chelsey Wood, MD

SCW Thompson
Room
(second floor)

Travel Awards

Zahraa W. Alsafwani, MSc
Weiguo Chen
Caroline R. Daggett, MD Candidate
Alison Ha, PhD
Selah McKenney, MD Candidate
Julia H. Miao, MD
Rayaan Rauf, BA
Bivek Timalisina, MSc
Joshua Wydra, BS

Top Three Poster Abstracts in each Research Category**Case Reports**

Brittani Lubeck, MD
Farwah Shah, MD, MPH
Rishi Sharma, MEng

T0 Research/Science

Patrick Belvitch, MD
Diya M. Bhatia
Jacob F. Wood

T1 Research/Science

Haider Mirza, BS
Bibek Shrestha, MD
Tyler Shugg, PharmD, PhD

T2 Research/Science

Mohammed Abdalkarim, MD
Thaer Alhroob, MD
Benjamin Jones, BS

T3 Research/Science

Jasmine Berry, MPH
Madhu Vishnu Sankar Reddy Rami Reddy, BS (two abstracts awarded in this category)

T4 Research/Science

Ringo Leung, BS
Sarah E. Roehrs, BS
Kathryn Tsai, BS

9:45 am - 10:45 am

Cardiology/Pulmonary Lecture**Frontiers of Thoracic Surgery**

During the lecture the audience will learn about new innovations and frontiers of surgical therapy for thoracic diseases including lung cancer, esophageal cancer, airway diseases, benign lung conditions as well as the application of lung transplant in managing lethal conditions.

SCW Thompson
Room
(second floor)

Moderators:



Jennifer Alexander-Brett, MD, PhD

*President, CSCTR
Past Chair, AFMR Midwestern Region
Associate Professor of Medicine
Washington University School of Medicine in St. Louis*



Prabhatchandra Dube, PhD

*Research Associate
The University of Toledo*

Speaker:



Ankit Bharat, MD

*Chief of Thoracic Surgery in the Department of Surgery
Harold L. and Margaret N. Method Professor of Surgery
Professor, Surgery (Thoracic Surgery)
Medicine (Pulmonary and Critical Care)
Northwestern University Feinberg School of Medicine*

10:45 am - 11:00 am

Break

SCW Lobby
(second floor)

11:00 am - 11:45 am

Catalyzing Collaboration: Transforming Clinical and Translational Research Through Industry and Academic Partnerships

SCW Thompson
Room
(second floor)

Moderators:



Jennifer Alexander-Brett, MD, PhD

*President, CSCTR
Past Chair, AFMR Midwestern Region
Associate Professor of Medicine
Washington University School of Medicine in St. Louis*



Jeffrey Salomon, MD, MBA

*Councilor, CSCTR
Past Chair, AFMR Midwestern Section
Pediatric Critical Care Medicine Physician
University of Nebraska Medical Center*

Speakers:



Debbie Leah Buonomo, PharmD

*Medical Science Liaison
Verona Pharma*



Dasan Thambiayya, PhD

*Senior Medical Science Liaison
Genentech*

11:45 am – 12:45 pm

Lunch

SCW Thompson
Room
(second floor)

12:45 pm – 1:45 pm

CSCTR John B. Hickam Endowed Lecture

The John B. Hickam Endowed Lectureship was established in 1981 to honor John Hickam, President of CSCTR in 1970. At the time of his death in 1970, Dr. Hickam was Chair of Medicine at Indiana University School of Medicine. Dr. Hickam was internationally recognized in medical research, particularly in the areas of lung, heart, and circulatory system diseases. Dr. Hickam was also responsible for administering research programs, which established the Indiana University School of Medicine as one of the nation's primary centers for research in heart disease.

SCW Thompson
Room
(second floor)

Improving the World Through Academic Medicine

A brief personal background and a discussion of challenges, strategies and opportunities for emerging physician-scientists.

Moderator:



Steven Dudek, MD, ATSF

Past President, CSCTR

Chief, Pulmonary, Critical Care, Sleep and Allergy

Dean E. Schraufnagel Professor of Medicine

Department of Medicine, Division of Pulmonary, Critical Care, Sleep and Allergy

University of Illinois Chicago

Speaker:



Mark E. Anderson, MD, PhD

Dean of the Biological Sciences Division

Dean of the Pritzker School of Medicine

Executive Vice President for Medical Affairs

Paul and Allene Russell Professor Department of Medicine

The University of Chicago Medicine

1:45 pm - 2:00 pm

Break

SCW Lobby
(second floor)

*Concurrent Sessions:

*2:00 pm – 3:15 pm

Translational Science Oral Session I: Pulmonary, Critical Care, Cardiology, and Renal

SCW Room 206
(second floor)

Moderator:



Laneshia Karee Tague, MD, MSCI

Chair-Elect, AFMR Midwestern Section

Assistant Professor of Medicine

Washington University School of Medicine

Oral Abstract Presenters:

- 2:00 pm **RADIATION-INDUCED LUNG INJURY IS MEDIATED BY ENDOTHELIAL TRPM2**
Weiguo Chen
University of Illinois Chicago
- 2:12 pm **A STRUCTURAL AND FUNCTIONAL ANALYSIS OF TREM2/IL-34 INTERACTIONS IN INFLAMMATORY DISEASE SETTINGS**
Joshua Wydra, BS
Washington University in St. Louis
- 2:24 pm **ENGINEERING A MULTICELLULAR 3D HUMAN AIRWAY ORGANOID PLATFORM TO MODEL REPAIR AND REGENERATION**
Sohini Dutt, PhD
Washington University in St. Louis
- 2:36 pm **LONGITUDINAL STABILITY OF A PARTIALLY MIGRATED AMULET DEVICE: IMPLICATIONS FOR SURVEILLANCE AND NON-INTERVENTIONAL MANAGEMENT**
Rayaan Rauf, BA
University of Missouri Kansas City
- 2:48 pm **AEROSOLIZED CYANOBACTERIAL HARMFUL ALGAL BLOOM TOXINS INDUCE HEIGHTENED PRO-INFLAMMATORY RESPONSES AND DIFFERENTIAL GENE EXPRESSION IN HEALTHY AND ASTHMATIC HUMAN AIRWAY CELLS**
Bivek Timalisina, MSc
University of Toledo
- 3:00 pm **ATTENUATION OF MRSA-INDUCED LUNG ENDOTHELIAL INJURY BY YAP SIGNALING**
Alison Ha, PhD
University of Illinois Chicago

*2:00 pm – 3:15 pm

Translational Science Oral Session II: Endocrine/Metabolism, Gastroenterology, Geriatrics, Health Disparities, Environmental Factors

SCW Room 213
(second floor)

Moderator:



Suthat Liangpunsakul, MD, MPH

Past President, CSCTR

Professor of Medicine

Indiana University School of Medicine

Oral Abstract Presenters:

- 2:00 pm **A MODEL FOR IMPLEMENTING PSYCHOTHERAPY FOR INDIVIDUALS WITH COGNITIVE IMPAIRMENTS**
Adrienne L. Johnson, PhD
University of Wisconsin

- 2:11 pm **PK4-DRIVEN MITOCHONDRIAL FRAGMENTATION PROMOTES MITOCHONDRIAL DYSFUNCTION AND PROGRESSION OF ALCOHOL-ASSOCIATED LIVER DISEASE**
Themis Thoudam, PhD
Indiana University
- 2:22 pm **GLP1 RECEPTOR AGONISTS AND RISK OF ATRIAL FIBRILLATION IN ADULTS WITH OBESITY OR TYPE 2 DIABETES**
Grant Nelson, BA
University of Toledo
- 2:33 pm **USING HUMAN-CENTERED DESIGN METHODS TO UNDERSTAND WHY SOME SCHOOLS DO NOT STOCK INHALER**
Andrea Pappalardo Wlochowicz, MD
University of Illinois Chicago
- 2:44 pm **GUT-DERIVED MICROBIAL UREMIC TOXINS INDUCE VASCULAR REMODELING: A POTENTIAL DRIVER OF ARTERIOVENOUS FISTULA FAILURE**
Chelsey Wood, MD
University of Chicago
- 2:55 pm **COVID-19 MRNA VACCINATION AND SURVIVAL IN LUNG CANCER: AN IMMUNE MODULATION HYPOTHESIS**
Caroline R. Daggett, MD Candidate
University of Toledo
- 3:05 pm **COMPREHENSIVE ANALYSIS OF THE NEBRASKA (NE) PEDIATRIC MEDULLOBLASTOMA COHORT**
Zahraa W. Alsafwani, MSc
University of Nebraska

*2:00 pm – 3:15 pm

Translational Science Oral Session III: Hematology/Oncology, Rheumatology/Immunology, and Neurology

SCW Thompson
Room
(second floor)

Moderator:



Attaya Suvannasankha, MD

Professor of Clinical Medicine

Indiana University School of Medicine

Oral Abstract Presenters:

- 2:00 pm **EXPLOITING IRON OVERLOAD TO ACTIVATE FERROPTOSIS AND POTENTIATE CISPLATIN RESPONSE IN PEDIATRIC GROUP 3 MEDULLOBLASTOMAS**
Sidharth Mahapatra, MD, PhD
University of Nebraska Medical Center

- 2:11 pm **ENHANCING IMMUNOTHERAPY EFFICACY IN MYELOMA WITH A DUAL ACTION MITOCHONDRIAL TOXIC PEPTIDE THAT OVERCOMES RESISTANCE AND INDUCES TUMOR CELL DEATH**
Smriti Gurung, PhD
Indiana University
- 2:22 pm **POST-TRANSLATIONAL MODIFICATION OF HUMAN IL-33 IMPACTS CYTOKINE INFLAMMATORY ACTIVITY**
Morgan Payne, BS
Washington University School of Medicine
- 2:33 pm **ENGINEERING EVS TO PROMOTE RESOLVIN PRODUCTION FOR COPD AND ASTHMA THERAPY**
Omar Osorio
Washington University School of Medicine
- 2:44 pm **UPREGULATION OF THE ADAPTIVE IMMUNE RESPONSE AND RISK OF FUTURE BREAST CANCER IN PATIENTS WITH LOBULAR CARCINOMA IN SITU (LCIS)**
Jordan Petrick
University of Wisconsin-Madison
- 2:55 pm **FUNCTIONAL SPECIALIZATION OF TUMOR-EDUCATED PLATELETS IN GLIOBLASTOMA**
Selah McKenney, MD Candidate
University of Toledo
- 3:05 pm **DIAGNOSIS OF RENAL CANCER USING IMAGING AND ARTIFICIAL INTELLIGENCE**
Julia H. Miao, MD
University of Chicago

3:15 pm - 3:30 pm

Break

SCW Lobby
(second floor)

3:30 pm - 4:30 pm

AFMR Keynote Presentation

Moderator:

SCW Thompson
Room
(second floor)



David Kennedy, PhD

Past President, CSTR

Professor of Medicine

University of Toledo College of Medicine and Life Sciences



Syed Bukhari, MD, MSc

Chair, AFMR Midwestern Section

Department of Cardiovascular Medicine

Johns Hopkins University

Speakers:



Craig M. Jarrett, MD, MBA, MS

*Cardiothoracic Surgeon, Clinical Informaticist & Physician Investigator
University Hospitals*

A CTSA perspective on how to interface clinical informatics and data science training

This presentation will provide a practical overview of how Clinical and Translational Science Award (CTSA) Programs can help bridge the gap between clinical informatics and data science training to support modern clinical research. As healthcare increasingly generates vast amounts of electronic health record (EHR) data, researchers must develop new skills and collaborative models to effectively leverage these data for scientific discovery.

Drawing on real-world experiences within a CTSA environment, this session will discuss how clinicians, informaticians, and data scientists can work together to design and execute database-driven research. The presentation will highlight the growing role of large-scale, aggregated EHR data platforms, such as Epic Cosmos and TriNetX, that allow researchers to rapidly explore clinical questions across millions of patients using de-identified data. These platforms can significantly reduce the time, cost, and logistical barriers traditionally associated with clinical research while enabling rapid hypothesis generation and population-level analyses.

Participants will learn how training programs within CTSA institutions can help clinicians develop the foundational skills needed to interface with these data platforms and collaborate effectively with informatics and data science experts. The talk will emphasize practical lessons learned from database-based studies, including how to identify appropriate research questions, understand the strengths and limitations of EHR-derived data, and design studies that align with the capabilities of modern data platforms.

Finally, the session will discuss the importance of interdisciplinary collaboration—often described as a “three-legged stool” of clinical domain expertise, informatics/data science expertise, and research methodology—to successfully translate large-scale clinical data into meaningful scientific insights and improved patient care. Overall, the presentation will provide attendees with a pragmatic CTSA-focused perspective on how to integrate clinical informatics and data science training to empower the next generation of clinical researchers.



Robert Erne McCullumsmith, MD, PhD, FACNP

*Professor and Chair
Research Director of the Neurosciences Institute in the College of
Medicine & Life Sciences
The University of Toledo*

Development of a "Data Science Pathway of Excellence" for medical students

Information on the development of a data science pathway of excellence will be presented, including specific curriculum developed, details of electives, and approaches to teaching and learner engagement.



Hunter Eby

MD, PhD Candidate

The University of Toledo College of Medicine

Acquisition of Data Sciences skills during medical school and residency- A learners perspective

The rapid expansion of clinical data, electronic health records, and large-scale biomedical databases has created new opportunities for physicians to engage in data-driven research. However, formal training in data science is often limited during medical education. This talk presents a learner's perspective on acquiring data science skills during medical school and residency. Drawing from personal experiences in clinical research, bioinformatics, and real-world data analysis, the presentation will discuss practical strategies for developing competencies in programming, statistical analysis, and large database research while balancing clinical and academic responsibilities. Particular emphasis will be placed on leveraging available resources, identifying mentorship opportunities, and integrating data science tools into clinically relevant research projects. The goal is to highlight accessible pathways for trainees interested in building data science expertise and to illustrate how these skills can enhance translational research, clinical decision-making, and career development in modern medicine.

4:30 pm - 4:45 pm

Break

SCW Lobby
(second floor)

4:45 pm - 6:15 pm

Moderated Poster Discussions and Closing Reception

Nursing Event
Center
(third floor)



Jennifer Alexander-Brett, MD, PhD

President, CSCTR

Past Chair, AFMR Midwestern Region

Associate Professor of Medicine

Washington University School of Medicine in St. Louis



Syed Bukhari, MD, MSc

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T32 Cardiology Fellow

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Poster Research Categories

Click on a category to view abstracts.

[Case Reports](#)

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