

Pioneering Pathways: Innovative Trial Design in Translational Science

- 7:45am–4:00pm** **Registration**
- 8:30–8:40am** **Welcome (Ballroom)**
Katherine Hartmann, MD, PhD
Professor, Department of Obstetrics & Gynecology
Director, Center for Clinical and Translational Science
University of Kentucky
- 8:40–8:45am** **Keynote Speaker Introduction**
William Stoops, PhD, Conference Chair
Associate Vice President for Research Integrity
Dr. William R. Willard Professor in Behavioral Science
University Research Professor
Department of Behavioral Science
University of Kentucky
- 8:45–9:45am** **Morning Keynote (Ballroom)**
“Intervention Optimization: An Innovative Paradigm for Translational Science”
Linda Collins, PhD, FSBM, FSRNT
Professor of Social & Behavioral Sciences and Biostatistics
Director, Center for Advancement and Dissemination of Intervention Optimization
School of Global Public Health
New York University
- 9:45–10:15am** **BREAK**
- 10:15–11:30am** **Breakout Session – Novel Clinical Trial Designs: Opportunities and Challenges
(Meeting Room 9A)**
- Hilary L. Surratt, PhD, Session Co-Moderator**
Associate Professor, Department of Behavioral Science, College of Medicine
University of Kentucky
- Jamie L. Sturgill, PhD, Session Co-Moderator**
Assistant Professor, Department of Microbiology, Immunology, and Molecular Genetics,
College of Medicine, University of Kentucky
- 10:15** ***“A SMART Approach to Personalized Cognitive Behavioral Therapy”***
Shannon Sauer-Zavala, PhD, Associate Professor, Department of Psychology,
University of Kentucky; **Matthew W. Southward, PhD**, Assistant Professor, Department
of Psychology, The Ohio State University
- 10:35** ***“COVID-19 Platform Trials: A Tale of Two Studies”***
Jamie L. Sturgill, PhD, Assistant Professor, Department of Microbiology, Immunology,
and Molecular Genetics, College of Medicine, University of Kentucky

10:55 ***“Community Clinical Trials: Using Cluster Randomized Trials to Assess Community-Level Vaccination Interventions”***

Marc T. Kiviniemi, PhD MBA, Professor, Health Behavior and Society, College of Public Health, University of Kentucky; Kathryn M. Cardarelli, PhD MPH; Emily Slade, PhD; Diane Francis, PhD; Amy Herrington, DNP, RN, CEN, CNE; Anna Hoover, PhD; Kevin Pierce, MD; Jamie Sturgill, PhD; Rachel Gillespie, MS, University of Kentucky

11:15 ***“Optimizing PrEP Care Delivery through Adaptive Intervention Strategies for Underserved Rural People Who Inject Drugs: A SMART Design”***

Hilary L. Surratt, PhD, Associate Professor, Department of Behavioral Science, College of Medicine, University of Kentucky; Elizabeth M. Arnold, PhD, Laura C. Fanucchi, MD, Philip Westgate, PhD, University of Kentucky; Christie Green, MPH, Cumberland Valley District Health Department; Rebecca Rains, MSW, Knox County Health Department; Nikita L. Vundi, DrPH, Madison County

10:15–11:30am **Breakout Session – Pragmatic Trials: Facilitating the Translation of Evidence into Practice (Meeting Room 9B)**

Laurie McLouth, PhD, Session Co-Moderator

Assistant Professor, Department of Behavioral Science, College of Medicine
University of Kentucky

Mary E. Lacy, PhD, Session Co-Moderator

Assistant Professor, Department of Epidemiology and Environmental Health, College of Public Health
University of Kentucky

10:15 ***“Overview of Pragmatic Trials”***

Mary E. Lacy PhD, Assistant Professor, Department of Epidemiology and Environmental Health, College of Public Health, University of Kentucky

10:25 ***“Improving the Quality of Cancer Care through Pragmatic Trials”***

Timothy W. Mullett, MD, MBA, FACS, Professor, Division of Cardiothoracic Surgery, College of Medicine, University of Kentucky

10:40 ***“Clinic Practitioner and Support Staff Perceptions of Implementation Strategies to Increase Patient Referrals to DSMES”***

Aaron J. Kruse-Diehr, PhD, Associate Professor, Department of Family & Community Medicine, College of Medicine, University of Kentucky

10:55 ***“Key Ingredients to Successful Pragmatic Trials: Adaptation and Advocacy”***

Matthew L. Bush, MD, PhD, MBA, FACS, Professor and Chair, Department of Otolaryngology - Head and Neck Surgery, College of Medicine, University of Kentucky

11:10 ***Discussant***

Laurie McLouth, PhD, Assistant Professor, Department of Behavioral Science, College of Medicine, University of Kentucky

11:20 ***Question & Answer***

20th Annual CCTS Spring Conference

Tuesday, April 1, 2025

Central Bank Center

Audience/Panel

10:15–11:30am Breakout Session – Institute for Biomedical Informatics Oral Presentation Session (Meeting Room 11)

Jeffery Talbert, PhD, Session Moderator

Professor, Division Chief for Biomedical Informatics, College of Medicine
Director, Institute for Biomedical Informatics
University of Kentucky

10:15 ***“Probing the Neural Bases of Individual Differences in Reward Sensitivity: Applications of Machine Learning Methods”***

Alison Schreiber, PhD, Assistant Professor, Department of Psychiatry, College of Medicine, University of Kentucky

10:35 ***“Muscle Ultrasound is Ideally Suited for Optimal Evaluation of Functional Recovery after Critical Illness”***

Sanjay Dhar, MD, Department of Internal Medicine, College of Medicine, University of Kentucky

10:55 ***“Prompting Medical Vision-Language Models to Mitigate Diagnosis Bias by Generating Realistic Dermoscopic Images”***

Nursat Munia, BS, Graduate Student, Department of Computer Science, Stanley and Karen Pigman College of Engineering, University of Kentucky

11:15 ***“VAMP8-Dependent Platelet Secretion Drives Aneurysm Progression: Insights from Clinical and Experimental Models”***

Shayan Mohammadmoradi, PhD, Postdoctoral Scholar, Department of Molecular and Cellular Biochemistry, College of Medicine, University of Kentucky

10:15–11:30am Breakout Session – Introducing Advarra eSource+EDC: CRSO’s New Research Tool for Study Teams (Meeting Room 12)

Panel:

Eric Bucholz, PhD, Research System Administrator

Marlene Starr, PhD, Associate Professor and Chief, Division of Research, Department of Surgery

Jessica Hesel, MBA, Executive Director CRSO

Hany Elkholy, PMP, Markey Cancer Center Research System Educator

Stephanie Cason, CCRP, Research System Educator

Joy Kimbrough, BSN, RN, CCR, MBA, Clinical Research Nurse Coordinator, Department of Surgery

Teresa Roberts, MBA, RN, BSN, OCN, CCRP, Clinical Research Nurse Manager
Markey Cancer Center

Ashley Tabor, Data Management Analyst Senior

10:15 ***eSource+EDC Overview***

10:50 ***System Demo***

11:05 *Question & Answer*

10:15–11:30am **Breakout Session – Community-Driven Success: Engagement through Cooperative Extension (Meeting Room 13)**

Jennifer L. Hunter, PhD, Session Co-Moderator

Acting Associate Vice President for Land-grant Engagement
Director, School of Human Environmental Sciences, University of Kentucky
Assistant Extension Director, Family and Consumer Sciences
Extension Professor, Human Environmental Sciences

Alison Davis, PhD, Session Co-Moderator

Assistant Vice President for Land-grant Engagement
Executive Director, Blueprint Kentucky
Extension Professor, Agricultural Economics

10:15 *Panel Discussion*

Nicole Breazeale, PhD, Associate Extension Professor, Community and Leadership Development

Alex Elswick, PhD, Assistant Extension Professor, Substance Use Prevention and Recovery

Rachel Guidugli, EdD, Assistant Extension Director for 4-H Youth Development

Katherine Jury, Senior Extension Specialist, Family and Community Health

Mark Mains, PhD, Extension Director for Workforce and Engagement, Blueprint Kentucky

Heather Norman-Burgdolf, PhD, Associate Extension Professor, Dietetics and Human Nutrition

Kayla Watts, Area Extension Director, Extension Field Programs

10:15–11:30am **Breakout Session – Modern Adaptive Trial Design (Meeting Room 14A)**

Kert Viele, PhD, Session Moderator

Director of Research, Berry Consultants

10:15 *“Platforms, RAR, Enrichment, and More: A Review of Current Trends in Adaptive Design”*

Corrine Elliott, PhD, Statistical Scientist, Berry Consultants

10:35 *“A Case Study in Adaptive Design: The STEP Platform Trial”*

Eva Mistry, MD, MSc, Associate Professor, Neurology and Rehabilitation, University of Cincinnati

10:55 *“Adaptive Vaccine Trials: COVID and Post-COVID”*

Kurt Viele, PhD, Director of Research, Berry Consultants

11:15 *Open Discussion*

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10:15–11:30am **Opportunities in AI to Change Study Design Approaches: An Interdisciplinary Discussion Panel (Meeting Room 14B)**

Katherine Thompson, PhD, Moderator

Associate Professor, Dr. Bing Zhang Department of Statistics
College of Arts and Sciences
Principal Investigator, Artificial Intelligence and Machine Learning Hub
University of Kentucky

10:15 ***Introduction of the UK AI/ML Hub and Panelists***

10:30 ***Panel Discussion***

Ken Campbell, PhD

Professor, College of Medicine, Department of Internal Medicine
Director of Translational Research, Division of Cardiovascular Medicine
Director, CCTS Biospecimens Core
Director, Gill Cardiovascular Biorepository
University of Kentucky

Zeya Wang, PhD

Assistant Professor, Dr. Bing Zhang Department of Statistics, College of Arts and Sciences
Co-Investigator, Artificial Intelligence and Machine Learning Hub
University of Kentucky

Cody Bumgardner, PhD

Director, Center for Applied Artificial Intelligence in the Institute for Biomedical Informatics
Assistant Dean, Artificial Intelligence and Data Science, College of Medicine
Associate Professor
University of Kentucky

Lina Sharab, DDS

Associate Professor, Division of Orthodontics
College of Dentistry
University of Kentucky

11:30am–12:15pm **Frederick Douglass High School Poster Session (Ballroom 2)**

11:30am–12:30pm **Von Allmen Center for Entrepreneurship Poster Pitch Competition (Ballroom Stage)**

11:30am–1:00pm **Lunch (Ballroom)**

11:30am–1:00pm **Poster Sessions (Ballrooms 2–3 & Lobby)**

1:00–1:15pm **BREAK**

1:00–2:40pm **College of Health Sciences Research Day (Meeting Room 10)**

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- 1:15–1:45pm Awards and Recognitions (Ballroom)**
Philip A. Kern, MD
Professor and University Research Professor
Department of Internal Medicine, Division of Endocrinology
College of Medicine
Co-Director, Center for Clinical and Translational Science
University of Kentucky
- 1:15–2:45pm College of Dentistry Research Day Donald E. Knapp Memorial Lecture (Meeting Rooms 7 & 8)**
- 1:45–1:50pm Keynote Speaker Introduction (Ballroom)**
William Stoops, PhD, Conference Chair
Associate Vice President for Research Integrity
Dr. William R. Willard Professor in Behavioral Science
University Research Professor
Department of Behavioral Science
University of Kentucky
- 1:50–2:45pm Afternoon Keynote (Ballroom)**
“Contemporary Clinical Trials: Current Advances and the Role of AI”
Chris Lindsell, PhD
Professor of Biostatistics & Bioinformatics
Director, DCRI Biostatistics
Co-Chief, Division of Biostatistics & Bioinformatics
Duke University
- 2:45–3:00pm BREAK**
- 2:45–4:30pm Poster Session – College of Health Sciences (Lobby)**
- 3:00–4:30pm Poster Session – College of Dentistry (Ballroom 3)**
- 3:00–5:00pm College Research Days**
Internal Medicine Research Day (Meeting Room 13)
College of Nursing Scholarship Showcase (Meeting Room 9B)
College of Medicine Research Day (Meeting Room 12)
- 3:00–5:00pm CCTS Clinical Research Oral Presentation Session (Meeting Room 14A)**
Victoria King, PhD, Session Co-Moderator
Associate Professor, Department of Internal Medicine
College of Medicine
Career Development Director, Center for Clinical and Translational Science
University of Kentucky
- 3:00 “Catalyzing Community Action through Precision Public Health Analytics”**
Margaret McGladrey, PhD, Assistant Professor, College of Public Health, University of Kentucky
- 3:15 “Prevalence of Housing Insecurity Among Hospitalized Patients”**

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Lynden Bond, PhD, Assistant Professor, College of Social Work, University of Kentucky

3:30 ***“Buprenorphine Utilization Following Removal of Prior Authorization Requirements in the Kentucky Medicaid Population”***

Dustin Miracle, PharmD, PhD, Postdoctoral Fellow, Department of Biostatistics, College of Public Health, University of Kentucky

3:45 ***“Protocol for Assessing the Impact of a Plant-Based Diet for Diabetes Prevention: Pilot Study”***

Kayla Anderson, MPH, Graduate Student, Department of Pharmacology and Nutritional Sciences, College of Medicine, University of Kentucky

4:00 ***“Culturally Targeting Infographic Messages to Increase Alzheimer's Prevention Among Black Adults”***

Yolanda Jackson, MS, Graduate Student, College of Communication and Information, University of Kentucky

4:15 ***“Neonatal Intensive Care for Queer (NICQu) Families: An Update from the NICQu Families Research Team”***

Olivia Yinger, PhD, Assistant Professor, School of Music, College of Fine Arts, University of Kentucky

4:30 ***“Evaluating Cannabidiol as a Novel Therapeutic in the Treatment of Subarachnoid Hemorrhage”***

Saif Ahmed, BS, Medical Student, College of Medicine, University of Kentucky

4:45 ***“Pancreatic Amylin as a Novel Biomarker for Pancreatitis-related Diabetes”***

Nirmal Verma, PhD, Assistant Professor, Department of Pharmacology and Nutritional Sciences, College of Medicine, University of Kentucky

3:00–5:00pm

CCTS Translational Science Oral Presentation Session (Meeting Room 9A)

Joel Thompson, PhD, Session Co-Moderator

Chief Scientific Officer
Center for Clinical and Translational Science
University of Kentucky

Yosra Helmy, PhD, Session Co-Moderator

Assistant Professor, Department of Veterinary Science
Martin-Gatton College of Agriculture, Food and Environment
University of Kentucky

3:00 ***“Estrogen Receptor Alpha Regulates the Liver Circadian Clock in Female Mice”***

Victoria Alvord, MS, Graduate Student, Department of Biology, College of Arts and Science, University of Kentucky

3:15 ***“The Impact of Highly Effective Modulator Therapies (HEMTs) on the ABCG5 ABCG8 Sterol Transporters”***

Meredith Campbell, BS, Graduate Student, Department of Physiology, College of Medicine, University of Kentucky

- 3:30** *“Liposomal Clodronate Causes Macrophage Depletion Following Severe High-thoracic Spinal Cord Injury”*
Sajeev Kaur, PhD, Postdoctoral Scholar, Spinal Cord and Brain Injury Research Center, College of Medicine, University of Kentucky
- 3:45** *“Mapping Of Noradrenergic Neurons in Adult Offspring with Prenatal Fentanyl Exposure Using Light-Sheet Microscopy”*
Analia Loria Kinsey, PhD, Associate Professor, Department of Pharmacology and Nutritional Sciences, College of Medicine, University of Kentucky
- 4:00** *“Plasminogen Activator Inhibitor-1 Deficiency Augments Hypertension-induced Cardiac, But Not Aortic Pathology in Mice”*
Alex Pettey, BS, Graduate Student, Department of Physiology, College of Medicine, University of Kentucky
- 4:15** *“Enhancing TIL Efficacy in NSCLC through Epigenetic Reprogramming and Computational Modeling”*
Daniel Plaughter, PhD, Postdoctoral Fellow, Department of Toxicology and Cancer Biology, College of Medicine, University of Kentucky
- 4:30** *“UKY-86 as a Novel Pharmacological Treatment for Methamphetamine Use Disorder (MUD)”*
Mallory Wardell, Undergraduate Student, Department of Psychology, College of Arts and Sciences, University of Kentucky
- 4:45** *“Maternal Opioid Use with and without HCV Infection Disrupts the Structure and Immune Landscape of Placenta”*
Heather True, PharmD, Graduate Student, Department of Microbiology, Immunology, and Molecular Genetics, College of Medicine, University of Kentucky

3:00–5:00pm

Institute for Biomedical Informatics Oral Presentation Session (Meeting Room 11)

Jeffery Talbert, PhD, Session Moderator

Professor, Division Chief for Biomedical Informatics, College of Medicine

Director, Institute for Biomedical Informatics

University of Kentucky

- 3:00** *“Advancing Research and Innovation Through AI”*
Samuel Armstrong, MS, Software Engineer, Institute of Biomedical Informatics Center for Applied AI, University of Kentucky
- 3:15** *“Predicting Adverse Effects for Antifibrotic Therapy in Pulmonary Fibrosis Using Large Digital Twins.”*
Ishanu Chattopadhyay, PhD, Assistant Professor, College of Medicine, University of Kentucky
- 3:30** *“Physician Assistant Student Attitudes Toward the Utilization of AI to Enhance Psychiatry Skill Development”*

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Yuyan Xia, PhD, Postdoctoral Scholar, Department of Physical Therapy, College of Health Sciences, University of Kentucky

- 3:45** *“Quality Assessment of AI-Generated Response to Patient-Reported Information Gaps Regarding HPV Oropharyngeal Cancer”*
Patrick Bidros, BA, Medical Student, College of Medicine, University of Kentucky
- 4:00** *“Swin-KAT: Advancing Swin Transformer with Kolmogorov-Arnold Network for CT Image Quality Assessment”*
Kazi Ramisa Rifa, BS, Graduate Student, Department of Computer Science, Stanley and Karen Pigman College of Engineering, University of Kentucky
- 4:15** *“Multi-Omic and Biochemical Profiling of Heart Failure Specimens at the University of Kentucky”*
Austin Minton, BS, Graduate Student, Departments of Physiology and Internal Medicine, College of Medicine, University of Kentucky
- 4:30** *“The Applicability of Google Lens in Dermatology: A Retrospective Diagnostic Accuracy Study in Over 150 Patients”*
Mindy Baker, BS, Medical Student, Department of Dermatology, College of Medicine, University of Kentucky

3:00–5:00pm

Examining Lived Experiences and Health: Research Findings from DREAM/SPARK Scholars (Meeting Room 14B)

Adebola Adegboyega, PhD, Session Co-Moderator
Assistant Professor, College of Nursing
University of Kentucky

Lovoria B. Williams, PhD, APRN-BC, FAANP, FAAN, Session Co-Moderator
Professor, College of Nursing, University of Kentucky
Associate Director, Sally Humphrey Research Professor Cancer Health Equity, Markey Cancer Center
Associate Director, Center for Clinical and Translational Science
University of Kentucky

Darlingtina Esiaka, PhD, Session Co-Moderator
Assistant Professor
Department of Behavioral Sciences
University of Kentucky

- 3:00** *“The Relationship among Perceived Environmental Exposures, Socioeconomic Factors, and Chronic Disease Outcomes”*
Mandy Dickerson, Undergraduate Student, College of Public Health, University of Kentucky
- 3:10** *“The Impact of Adverse Childhood Experiences on COVID-19-Related Stress and Mental Health in Emerging Adults”*
Botshelo Angoma, Undergraduate Student, College of Arts and Sciences, University of Kentucky

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- 3:20** ***“A Collaborative Model for Diabetes Education: Connecting RDNs and Promotores de Salud”***
Eduardo Soria Chiroque, Undergraduate Student, College of Arts and Sciences, University of Kentucky
- 3:30** ***“The Impact of Adultification Bias on Self-Image and Academic Success Among Black Women”***
Keyoncee Washington, Undergraduate Student, Kentucky State University
- 3:40** ***“Genetic Risk and Perceived Neighborhood Disorder with Dementia Across Diverse Populations: Results from All of Us”***
Xian Wu, PhD, Postdoctoral Scholar, Department of Biostatistics, College of Public Health, University of Kentucky
- 3:50** ***“A Meta-analysis of Labor Determinants and Sleep Health across the Lifespan”***
Jillian Silva-Jones, MA, Graduate Student, Department of Psychology, College of Arts and Sciences, University of Kentucky