

2025

CTSI Annual Scientific Meeting



**THE OHIO STATE
UNIVERSITY**

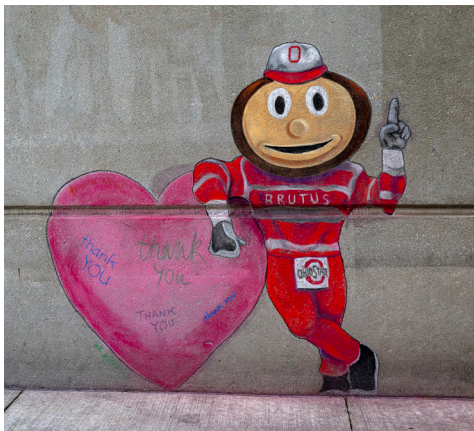
**CLINICAL AND TRANSLATIONAL
SCIENCE INSTITUTE**

Table of Contents

Welcome from Dr. Julie Johnson, PharmD	2
Agenda	3
Keynote Speaker, Dr. Cheryl Holder	5
Climate Change and Health.....	6
Oral Abstract Presentations.....	9
Women’s Health	10
Dissemination and Implementation.....	13
Building a Women’s Health Research Community at Ohio State	17
Faculty Clinical and Translational Research Speed Presentations.....	19
Virtual Poster Gallery and Thank You.....	24

Tag us on social media!

If you took any photos, videos or learned something new, tag us on X @OhioStateCTSI with the #CTSIASM2025



Welcome



**Dr. Julie Johnson,
PharmD**

**CTSI DIRECTOR
AND PRINCIPAL
INVESTIGATOR**

Dear Colleagues,

Welcome to The Ohio State University Clinical and Translational Science Institute's Annual Scientific Meeting. This year, we are excited to explore the critical intersection of climate and health, emphasizing how innovative solutions can address the far-reaching impacts of our changing environment while promoting health equity for all.

Keynote speaker, Dr. Cheryl Holder, will open the day by discussing the impacts of climate change on health. Dr. Holder's work examines the effects of social determinants on health outcomes and the overall health impact related to climate change. Throughout the day, we will hear from esteemed colleagues on various topics related to climate and health and women's health, along with hearing about innovative clinical and translational research going on throughout campus through poster presentations and two oral research presentation sessions.

I encourage you to take full advantage of the opportunities to network, engage in discussion and view the posters. Additionally, please join us for the reception and networking session at the end of the day, where you can connect with fellow attendees and continue conversations in a more informal setting.

Thank you for joining us this year. Together, we can advance today's discoveries to improve health for all.

JULIE A. JOHNSON, PHARM D

Director

The Ohio State University Clinical and Translational Science Institute

Agenda

- 7:30 - 8 a.m. Registration and Breakfast
- 8 - 8:05 a.m. Welcome, Dr. Julie Johnson
- 8:05 - 9 a.m. Keynote- Climate Change and Health, Dr. Cheryl Holder
- 9 - 10:15 a.m. Climate Change and Health- Work at Ohio State,
 - Moderator, Michael Oglesbee, PhD
 - Pulmonary Impacts of Climate Change, Kymberly Gowdy, PhD
 - Climate Change and Tick-Borne Illness, Risa Pesapane, PhD
 - Climate Change and Health Risk from Algae Changes, Jiyoun Lee, PhD
 - Climate Change and Environmental Justice, Smitha Rao, PhD
- 10:15 - 10:30 a.m. Break
- 10:30 - 11:30 a.m. Oral Abstract Speed Presentations
- 11:30 a.m. - 1 p.m. Lunch and Poster Viewing
- 1:15 - 2:45 p.m. Women's Health
 - Moderator, Leena Nahata, MD
 - Pravastatin and Pre-Eclampsia, Maged Costantine, MD
 - Managing Breast-Chest Cancer Risk in Diverse High-Risk Populations, Tasleem Padamsee, PhD
 - Cardiovascular Health in African American Women, Karen Patricia Williams, PhD
 - Transgenerational Transmission of Psychiatric Illness, Tamar Gur, MD, PhD

Agenda

- 2:45 - 3:45 p.m. Dissemination and Implementation Science Panel:
What is it, and how can I use it?
- Moderator, Molly McNett
 - Introduction to the ABCs of D&I, Alicia Bunger, PhD, MSW
 - Accelerating Pace and Pushing Bounds: How Implementation Science Can Be (More Efficiently) Integrated into Clinical Effectiveness Research, Kathryn A. Hyzak, PhD
 - Panel Presentation
 - Elise Berlan, MD, PhD
 - Susie Breitenstein, PhD, RN
 - Shana McGrath, MA, CCC-SLP
- 2:45 - 3:50 p.m. Building a Women's Health Research Community at Ohio State
- Tamar Gur, MD, PhD
 - Tiffany Daniel, MHA, LSSGB
- 3:45 - 4 p.m. Break
- 4 - 5 p.m. Faculty Clinical and Translational Research Speed Presentations
- 5 - 5:05 p.m. Closing, Dr. Julie Johnson
- 5:05 - 6 p.m. Reception and Networking Session

Keynote Speaker: Dr. Cheryl Holder



Dr. Cheryl Holder

**FLORIDA INTERNATIONAL
UNIVERSITY HERBERT WERTHEIM
COLLEGE OF MEDICINE,
ASSOCIATE PROFESSOR**

[Access Dr. Holder's TED Talk](#)

Dr. Cheryl L. Holder, a Princeton University and George Washington University School of Medicine graduate, is a National Health Service Corp Scholar, Internist, and HIV Specialist who served as Medical Director of one of Miami's largest community health centers and on NIH and CDC health advisory and programmatic review panels. She dedicated her career to improving health of underserved populations.

In 2009, Dr. Holder joined Florida International University's Herbert Wertheim College of Medicine as a founding associate professor, teaching social determinants of health, diversity and climate change's health impacts. Additionally, from 2020 until her retirement in December 2023, she was Associate Dean of Diversity, Equity, Inclusivity and Community Initiatives. She recently returned as a Professor of Medical Education to continue her community-focused work.

She co-founded Florida Clinicians for Climate Action in 2018 and now serves as its executive director. Additionally, she is co-chair of Miami Dade Heat Health Task Force and member of National Academy of Medicine's Climate Collaborative. Her TED Talk "The link between climate change, health and poverty" garnered over 300,000 views.

Dr. Holder's keynote presentation will talk about the intersection of climate, health and poverty. Dr Holder will explain how air pollution, insects, contaminated water, mental health, extreme weather, contaminated food and undernutrition are all impacted by our climate.



Climate Change and Health

Faculty from across campus will be discussing the research and impact of climate change and health. As an increasingly important topic, ideas discussed will range from tick-borne illnesses to climate justice, and there will be an opportunity for a Q&A at the end.

Moderator, Michael Oglesbee, PhD

Dr. Mike Oglesbee is the Director of The Ohio State University Infectious Diseases Institute and a Faculty Lead for the Ohio State Infectious Diseases Discovery Theme. He is also the Director of the College Summer Research Program and Infectious Diseases Signature Program and is a professor in the Department of Veterinary Biosciences. Dr. Oglesbee earned his DVM, (summa cum laude), and PhD from The Ohio State University and was a Diplomate at the American College of Veterinary Pathologists. His research interests include Neuropathology and the role of heat shock proteins in viral replication, antiviral immunity and neuroinflammation, the latter of which he was named a Fellow by the American Association for the Advancement of Science in recognition of his contributions.



Climate Change and Health Speakers



Pulmonary Impacts of Climate Change, Kymberly Gowdy, PhD

Dr. Kymberly Gowdy is an Associate Professor in the Department of Internal Medicine at The Ohio State University, where she examines mechanisms of how air pollution increases susceptibility and severity of infectious and inflammatory lung diseases. Specifically, her research examines how environmental pollutants alter the pulmonary host defense response and lipid metabolism and if dietary fatty acids can reverse these perturbations. She received her Doctorate in Immunology and Toxicology from the North Carolina State University in 2008 and was a postdoctoral fellow at Duke University from 2008-2011 and the National Institutes of Environmental Health Sciences from 2011-2014. Dr. Gowdy is author/co-author of more than 75 publications including peer-reviewed articles, reviews and book chapters. Additionally, she is the Associate Director of The Ohio State University College of Medicine Medical Scientist Training Program

Climate Change and Health Risk from Algae Changes, Jiyoung Lee, PhD

Dr. Jiyoung Lee is Professor and Chair in the Division of Environmental Health Sciences, College of Public Health. She has a joint appointment with the Department of Food Science and Technology and is Co-Director of the Ecology, Epidemiology and Population Health program at the Infectious Diseases Institute at Ohio State.

Dr. Lee's research focuses on infectious disease transmission, exposure pathways and the associated health risks. Her work explores microbial transport and fate, as well as the complex interactions within microbial communities and their hosts across various temporal and spatial scales. Key areas of her research include examining health risks associated with cyanotoxin exposure, particularly its links to liver disease, cancer, gut microbiome disruptions, and neurodegenerative, respiratory and reproductive conditions. She also investigates wastewater-based surveillance for tracking SARS-CoV-2, influenza viruses, norovirus outbreaks, microbial communities and antibiotic resistance genes. Her work extends to pandemic prevention and preparedness through novel sensing, surveillance and modeling approaches, as well as addressing emerging pathogens and diseases at the intersection of water, food and climate. Additionally, Dr. Lee develops innovative solutions to mitigate pathogens, harmful algal blooms, cyanotoxins and the spread of antimicrobial resistance, including autonomous on-site UV-C system. She received her PhD from the Department of Environmental Health Sciences, University of Michigan, and MS and BS from the Department of Microbiology, Seoul National University, Seoul, S. Korea.



Climate Change and Health Speakers



Climate Change and Tick-Borne Illness, Risa Pesapane, PhD

Risa Pesapane is a broadly trained disease ecologist who studies parasites and pathogens in both human and animal populations. She joined The Ohio State University in 2019 and has developed a comprehensive research and teaching program on tick-borne disease. Dr. Pesapane's laboratory has been designated as the reference lab for ticks from animals by the Ohio Department of Agriculture, and she is the Director of the Buckeye Tick Test laboratory within the Infectious Diseases Institute which is the contracted lab for tick-borne pathogen surveillance in the state.

Climate Change and Environmental Justice, Smitha Rao, PhD

Dr. Smitha Rao's work at the intersection of environment, development, and social policy is informed by her interdisciplinary background in social work and human geography. Her research interests include: (1) extreme weather events and contextual vulnerability, (2) improving adaptive capacities among communities to deal with climatic and other stressors and (3) effects of air pollution on environmental health and improving access to clean energy. Dr. Rao has over a decade of macro-practice experience spanning academic and not-for-profit settings. This included post-disaster community-based reconstruction and rehabilitation efforts, campaign strategy and design for local and international environmental organizations on climate change, phasing out toxins from industry, and promoting sustainable agriculture practices. Her current work encompasses social vulnerability in the context of disasters and disaster risk reduction to develop knowledge and inform policies centering underserved communities. Her interdisciplinary work touches upon climate change implications for vulnerable groups, energy poverty, anti-oppressive praxis and ecological justice.





Oral Abstract Speed Presentations

Hear from the next generation of researchers as they present five-minute, five-slide presentations about the exciting work going on at Ohio State for clinical and translational science.

Aliyah Bennett, College of Medicine- Salmonella infection/mortality is enhanced in male mice and associated with an altered systemic immune response

Yani Cao, PhD, College of Public Health- The influence of extreme weather on life expectancy in the contiguous United States

Yanni Cao, PhD, College of Public Health- The influence of extreme weather on life expectancy in the contiguous United States

Kirsten Johnson, MD, PhD, College of Medicine- Investigating Intra-Tumoral Direct Cellular Therapy to Treat Keratinocyte Carcinomas

Jack Krupa, BA, College of Nursing- Prevalence of Adverse & Positive Childhood Experiences by Income & Education Levels: NSCH 2016-2023

Kyulim Lee, DMD, MS, PhD, College of Dentistry- The Oral Microbiome in Pediatric Hematopoietic Cell Transplant Recipients

Ning Li, Wexner Medical Center- Sex-Specific Risks for Sinus Tachycardias and Atrial Fibrillation

Hannah Lovins, College of Medicine- Eicosapentaenoic Acid Improves Ozone-Induced Airspace Inflammation through an Oxylipin-Mediated Mechanism

Eleanor Rimmerman, MS, College of Arts & Sciences- Association Between Non-Invasive Screening Tools and Self-Reported Walking Impairment in Patients with Peripheral Artery Disease

Wesley Schwind, BS, College of Medicine- Rapid batch quantification of AAV9-mediated GFP expression in murine retina cross sections

Shakthivarrun Suresh, College of Pharmacy- Understanding Inflammatory Biomarkers in Venous Thromboembolism: Exploring Therapeutic Potential from BB-031



Women's Health

Women's health is not a female-only issue, nor is it only limited to maternal health. Women's health impacts all, and researchers from across campus will present on a broad spectrum of women's health research ranging from psychiatric illness to cardiovascular research.

Moderator, Leena Nahata, MD

Leena Nahata, MD, is a Professor of Clinical Pediatrics at The Ohio State University College of Medicine and founding medical director of the Fertility and Reproductive Health Program at Nationwide Children's Hospital. She is a board-certified pediatric endocrinologist and the Associate Division Chief for Research for the Division of Endocrinology. As an NIH-funded Principal Investigator in the Center for Biobehavioral Health at the Abigail Wexner Research Institute, Dr. Nahata is leading and collaborating on several clinical research studies focused on improving reproductive and psychosocial outcomes in pediatric populations at risk for infertility.



Women's Health Speakers

Pravastin and Pre-Eclampsia, Maged Costantine, MD

Dr. Costantine is the director of the Division of Maternal Fetal Medicine and the Frederick P. Zuspan MD Chair of Obstetrics and Gynecology. He's an internationally recognized clinical investigator, having authored more than 140 scholarly articles and book chapters. Recently, his work has focused on the potential role of statins in preventing preeclampsia. Dr. Costantine currently serves as the principal investigator of Ohio State's site of the Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network. He also serves as the principal investigator or site principal investigator on numerous multicenter federal or industry-sponsored studies of pregnant individuals. Dr. Costantine also serves on several Scientific Review Groups for the National Institutes of Health as well as other research organizations in the United States and internationally.



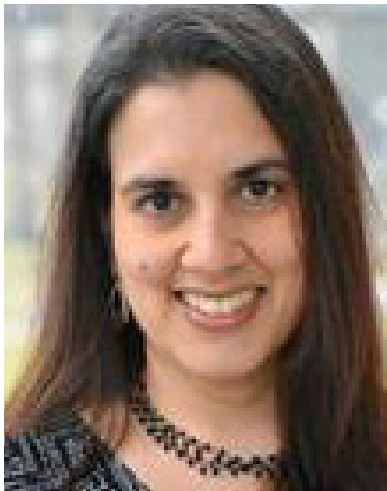
Transgenerational Transmission of Psychiatric Illness, Tamar Gur, MD, PhD

Dr. Tamar Gur, MD, PhD received her Bachelor of Science in Biology from Brown University. She then went on to complete both her MD and PhD as part of the NIH-Funded MSTP program at the University of Pennsylvania. Her graduate studies were completed under the mentorship of Dr. Julie Blendy, and her work centered on the transcription factor CREB and its role in neurogenesis in response to antidepressant treatment. She completed her residency training in Psychiatry (Research Track) at the Hospital of the University of Pennsylvania where she honed her interest in Reproductive Psychiatry under the mentorship of Dr. Neill Epperson. She is currently an Associate Professor with Tenure in the Departments of Psychiatry, Neuroscience and Obstetrics and Gynecology at The Ohio State University College of Medicine.



She is also an Associate Professor in the Division of Environmental Health Sciences in the College of Public Health at The Ohio State University. Her clinical work focuses on treatment of perinatal depression and anxiety. Her translational research laboratory focuses on the link between prenatal stress, microbiota and inflammation. She uses a variety of techniques, including rodent models and clinical cohorts, to investigate how stress during pregnancy shapes the developing brain. Her research endeavors have been supported by NIMH, the March of Dimes, and the Brain and Behavior Research Foundation. In addition, she serves as Associate Director of the NIH-funded Ohio State Medical Scientist Training Program. Finally, she is delighted to serve as the Inaugural Endowed Director of the Soter Women's Health Research Program, where she directs efforts to investigate women's health across the lifespan with a focus on stress.

Women's Health Speakers



Managing Breast-Chest Cancer Risk in Diverse High-Risk Populations, Tasleem Padamsee, PhD

Dr. Padamsee is a sociologist by training and brings theoretical and methodological tools from sociology and women's studies to bear on public health problems. She is a scholar of health disparities and health systems, whose research program explores the intersections of social inequality, public policy and health care. Dr. Padamsee is the Principal Investigator of the Daughter Sister Mother Project, which conducts multi-method studies of how diverse individuals at elevated risk for breast-chest cancer make prevention decisions and how these groups can better be supported to manage their cancer risks.

Funded by K01 and R21 awards from the National Cancer Institute as well as the Ohio State Cancer Control Program and the Stefanie Spielman Fund, these studies have documented the multi-level dynamics of risk-management decision making, racial and socioeconomic disparities in access to breast cancer prevention methods, gaps in population-based screening programs to identify high-risk women and more. This team is presently designing interventions to support improved risk management among high-risk women; undertaking related research in a broader range of racial-ethnic groups, genders, and countries; and launching a new approach to cohort-based breast-chest cancer education and prevention among high-risk groups in historically marginalized communities in Ohio. Dr. Padamsee is also a methodological expert and campus-wide leader in the use of qualitative- and mixed-methods research in the health sciences.

Cardiovascular Health in African American Women, Karen Patricia Williams, PhD

Dr. Karen Patricia Williams is a Nursing Distinguished Professor of Women's Health at The Ohio State University College of Nursing and Director of the Martha S. Pitzer Center for Women, Children and Youth. She is also a member of the Cancer Control Program at The Ohio State University Comprehensive Cancer Center – James. Dr. Williams is the Director for the Research on Black Women's Health Across the Diaspora where she focuses on conducting that builds on the assets of women in cancer prevention and control and cardiovascular disease prevention to promote health equity.





Dissemination and Implementation Science Panel

This panel will introduce the history, language, key concepts and research questions in D&I science. Discussions will be led about approaches to integrating D&I focused aims in efficacy and effectiveness studies to better prepare for future implementation.

Moderator, Molly McNett, PhD

Dr. McNett is the Associate Dean for Evidence-Based Practice and Implementation Science, and a Clinical Professor in the College of Nursing at The Ohio State University. In her role, she directs and oversees all programming for the Helene Fuld Health Trust National Institute for Evidence-Based Practice in Nursing & Healthcare, and routinely works with interdisciplinary healthcare teams nationally to implement research evidence into practice settings. Dr. McNett has an established program of research that centers on identifying and implementing best practices for acute care management of patients with complex critical care and neurological injuries.



Dissemination and Implementation Science

Speakers

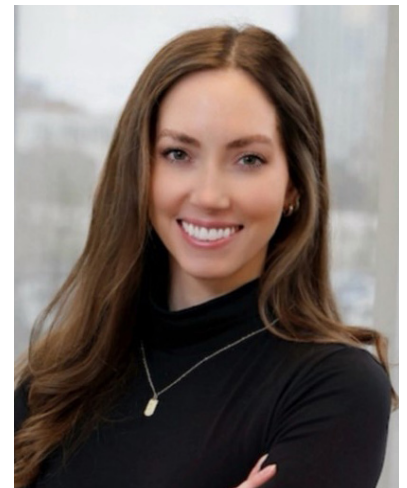


Introduction to the ABCs of D&I, Alicia Bunger, PhD, MSW

Alicia Bunger, PhD, MSW is a Professor of General Internal Medicine, co-leads Community Engagement within the Clinical Translational Science Institute (CTSI) and is a faculty affiliate with the Center for the Advancement of Team Science, Analytics, and Systems Thinking in Health Services and Implementation Science Research (CATALYST) at Ohio State University. Her research program centers on how health and human service organizations collaborate to implement evidence-based interventions, promote service access across systems, and integrate care for children and families. She is trained as a social worker, behavioral health services researcher, and implementation scientist. Her work has been funded by the National Institutes of Health, Robert Wood Johnson Foundation, US Children's Bureau, among others.

Accelerating Pace and Pushing Bounds: How Implementation Science Can Be (More Efficiently) Integrated into Clinical Effectiveness Research, Kathryn A. Hyzak, PhD

Dr. Hyzak is a trained implementation scientist with a primary appointment in the Department of Physical Medicine and Rehabilitation at The Ohio State University College of Medicine. Her work is focused on closing the research-to-practice pipeline gap for individuals living with traumatic brain injury (TBI) in rehabilitation and community-based treatment settings. Funded through the National Institutes of Health, Dr. Hyzak uses implementation science theories, mixed methodologies and community-based co-design approaches to develop and test equitable implementation strategies to accelerate the adoption, reach, implementation, scalability and sustained use of evidence-based interventions in real-world practice settings. Dr. Hyzak is co-chair of the national Traumatic Brain Injury Model Systems Implementation Science Special Interest Group (SIG), and also serves on the Executive Committee of the Brain Injury SIG of the American Congress of Rehabilitation Medicine. She is a board member and sponsorship chair of the Society for Implementation Research Collaboration. Dr. Hyzak enjoys team-science approaches to answering system-level questions to improve the quality and effectiveness of health care for individuals living with brain injury and co-occurring conditions.



Dissemination and Implementation Science

Panel Presenters



Elise Berlan, MD, PhD, Nationwide Children's Hospital

Dr. Elise Berlan is a Professor in the Department of Pediatrics at The Ohio State University College of Medicine and is a faculty physician at Nationwide Children's Hospital in the Division of Adolescent Medicine. She attended medical school at the University of Iowa, completed her Pediatric residency and an additional year as Chief Resident at the Children's Hospital of Philadelphia, and completed her Fellowship in Adolescent Medicine at Boston Children's Hospital, as well as a Master of Public Health degree at the Harvard School of Public Health.

Dr. Berlan is a researcher, educator, clinician and advocate for young women's reproductive health. She founded the BC4Teens/Young Women's Contraception Program at Nationwide Children's and leads the hospitals' diverse efforts in Teen Pregnancy Prevention. Her research efforts have most recently focused on implementation research to improve access to quality sexual and reproductive healthcare. She is a Fellow in the American Academy of Pediatrics, Society for Adolescent Health and Medicine and Society for Family Planning. Dr. Berlan finds joy in maintaining interpersonal connections and providing ongoing mentorship to peers and junior clinicians is an important part of her role.

Susie Breitenstein, PhD, RN

Dr. Susie Breitenstein is a Professor and the Associate Dean for Research at The Ohio State University College of Nursing. Her research is dedicated to strength-based approaches that enhance the social and emotional well-being of parents and children. Through her work in web-based and hybrid delivery models of parent training interventions and implementation science, Dr. Breitenstein strives to improve program access and sustainability, ensuring families have access and support to evidence-based programs. Her clinical experience as a child and adolescent psychiatric nurse fuels her passion for parent-focused interventions, significantly impacting family health and well-being.



Dissemination and Implementation Science Panel Presenters



Shana McGrath, MA, CCC-SLP

Shana McGrath, MA, CCC-SLP is a speech language pathologist and evidence-based practice team lead at The Ohio State University Wexner Medical Center Outpatient Rehabilitation. Their work focuses on advancing quality improvement and implementation science within neurorehabilitation practice with particular emphasis on psychosocial aspects of care.

Q&A to follow the panel discussion.



Building a Women’s Health Research Community at Ohio State

One of two panel sessions, this will take place in the Barbie Tootle room.

Discussions will include:

What strategies can we employ to identify and bring Women’s Health researchers together to foster collaboration?

What specific support and resources are needed to execute on these strategies and build a cohesive Women’s Health research effort at Ohio State?

A presentation will occur about the Soter Women’s Health Health Program and the goal is to get feedback on the strategic plan through breakout stations that focus on specific research elements.

Building a Women's Health Research Community at Ohio State Panel Presenters



Tamar Gur, MD, PhD

Dr. Tamar Gur, MD, PhD received her Bachelor of Science in Biology from Brown University. She then went on to complete both her MD and PhD as part of the NIH-Funded MSTP program at the University of Pennsylvania. Her graduate studies were completed under the mentorship of Dr. Julie Blendy, and her work centered on the transcription factor CREB and its role in neurogenesis in response to antidepressant treatment. She completed her residency training in Psychiatry (Research Track) at the Hospital of the University of Pennsylvania where she honed her interest in Reproductive Psychiatry under the mentorship of Dr. Neill Epperson. She is currently an Associate Professor with Tenure in the Departments of Psychiatry, Neuroscience and Obstetrics and Gynecology at The Ohio State University College of Medicine.

She is also an Associate Professor in the Division of Environmental Health Sciences in the College of Public Health at The Ohio State University. Her clinical work focuses on treatment of perinatal depression and anxiety. Her translational research laboratory focuses on the link between prenatal stress, microbiota and inflammation. She uses a variety of techniques, including rodent models and clinical cohorts, to investigate how stress during pregnancy shapes the developing brain. Her research endeavors have been supported by NIMH, the March of Dimes, and the Brain and Behavior Research Foundation. In addition, she serves as Associate Director of the NIH-funded Ohio State Medical Scientist Training Program. Finally, she is delighted to serve as the Inaugural Endowed Director of the Soter Women's Health Research Program, where she directs efforts to investigate women's health across the lifespan with a focus on stress.

Tiffany Daniel, MHA LSSGB

Tiffany Daniel serves as a Strategic Planning Manager at The Ohio State University Wexner Medical Center. In this role, she leads a range of projects supporting strategic and business plan development for clinical departments and research initiatives, including the Soter Women's Health Research Program. She holds a Bachelor of Science in Health Information Management and Systems and a Master of Health Administration from The Ohio State University. She is also a certified Six Sigma Green Belt and is committed to advancing patient-centered care through innovative solutions



Q&A to follow the panel discussion.



Faculty Clinical and Translational Research Speed Presentations

Learn about research going on at Ohio State that you may not have heard about! Representatives from various colleges on campus will present a showcase of exciting and innovating work.

Moderator, Kartik Venkatesh, MD, PhD

Kartik is a board-certified obstetrician and gynecologist, maternal-fetal medicine specialist, and PhD epidemiologist. At The Ohio State University, he holds dual faculty appointments in Obstetrics and Gynecology and Epidemiology. In the Division of Maternal Fetal Medicine, Kartik leads the Perinatal Epidemiology Program. As a physician-scientist, Kartik's overarching goal is to improve pregnancy outcomes for individuals living with diabetes and improve cardiometabolic health outcomes in pregnancy and postpartum using innovative approaches that integrate clinical trials and perinatal epidemiology.



Faculty Clinical and Translational Research Speed Presentation Speakers



Nathan Doble, PhD, MSc, MSci

Dr. Nathan Doble is a Professor at The Ohio State University College of Optometry. Dr. Doble's research interest is the design, development and construction of high-resolution optical imaging systems for in-vivo visualization of the human retina at the cellular level. Such systems promise better understanding, earlier diagnosis and improved treatment of a range of retinal and systemic conditions. Dr. Doble holds M.Sci, M.Sc. and Ph.D. degrees in the fields of laser physics and adaptive optics.

Przemysław Radwański, PharmD, PhD

Przemysław Radwański, PharmD, PhD, is an Associate Professor at The Ohio State University College of Pharmacy. Research in the Radwański lab focuses on cardiac biophysics and pharmacology with the twin goals of understanding the mechanisms of life-threatening abnormal heart beats (cardiac arrhythmias) and developing effective antiarrhythmic therapies. In essence, Dr. Radwański's approach could be summarized as better clinical outcomes through basic scientific insights.



Faculty Clinical and Translational Research Speed Presentation Speakers



Sarah Peters, PhD, MS

Dr. Peters earned her PhD at the State University of New York at Albany in 2014 with a thesis project that investigated the role of extracellular compliance (stiffness) on matrix remodeling occurring salivary gland development. She continued her studies of oral tissues at the University of Alabama at Birmingham, where she focused her postdoctoral training on bone and tooth development regulated by the superfamily of transforming growth factor beta (TGFbeta) signals. During these studies, she discovered that TGFbeta signals in dental pulp stem cells regulated the chemoattraction of sensory afferents into developing teeth and was awarded a K99/R00 investigating mechanisms regulating afferent innervation of the dental pulp in 2018.

She then brought the R00 portion to the Ohio State College of Dentistry in 2020 for a tenure-track assistant professor role in the Division of Biosciences. Since being here, she has continued to study the role of this crosstalk between dental pulp stem cells and sensory nerves during development and earned an R03 from the National Institute of Dental and Craniofacial Research. She is also funded by a second R03 that investigates how tooth composition, structure, and ability to heal after an injury change with age. These studies are intended to identify signaling axes that regulate how our teeth manage injury and inflammation inherent to the daily activities and exposures of the oral cavity. Building this foundation of information will be crucial to the development of next-generation therapeutics that can ideally replace root canal treatments and extractions with strategies that enhance tooth vitality and healing capacities at all stages of life. Her research has received several seed grants, collaborative awards, and external awards, including an NIDCR award called MIND the Future that is geared toward building and retaining diversity in early career faculty.

Faculty Clinical and Translational Research Speed Presentation Speakers

Sakima Smith, MD, MPH

Dr. Smith is currently an associate professor of medicine with tenure at The Ohio State University. He obtained his medical degree from Temple University School of Medicine in 2006. He completed his internal medicine residency at Barnes-Jewish Hospital/Washington University in 2009, and completed his general cardiology and heart failure/transplant fellowships at Ohio State. He also completed a research fellowship and Masters in Public Health from Ohio State in 2014. He was awarded the James V. Warren Fellowship Research Award in 2014, in 2017 he received the Denman Distinguished Undergraduate Research Mentor award, and in 2019 he was the Landacre Research Honor Society Distinguished Researcher of the Year.



Dr. Smith established his independent research lab via funding from the Robert Wood Johnson Faculty Development Grant in 2015, an NIH K08 Grant in 2017, and an NIH R01 Grant in 2019. His research program spans basic cardiovascular research to population health, diversity, and health outcomes. His research program is focused on the mechanisms underlying the targeting and regulation of BII-spectrin in human heart failure and translating those findings to other disease states and pathways using novel and cutting-edge methods and technologies, including inducible pluripotent stem cell cardiomyocytes and cardiovascular optogenetics. In his lab he trains undergraduate students, medical students, medical residents, graduate students and post-doctoral students. Notably, 13 of his undergraduate students have matriculated to various medical schools over the past nine years, including two to MD-PhD programs. He also serves on several thesis committees, mentors cardiology fellows and serves as an associate program director for the cardiovascular disease fellowship program. His lab has been supported by NIH funding since 2017, and he serves as a PI for two T32s: Postdoctoral T32 Training in Cardiometabolic Science and a Translational Science T32 Predoctoral Training Program with a particular emphasis on mentorship. Finally in 2022 he was selected to be a standing member to the NIH's Cardiovascular and Respiratory Disease Study Section for a five-year term, and in 2023 he was selected to serve as an associate editor for the Journal of the American Heart Association.

Faculty Clinical and Translational Research Speed Presentation Speakers



Katelyn Swindle Reilly, PhD

Katelyn Swindle-Reilly, Ph.D., is an Associate Professor and College of Engineering Innovation Scholar with appointments in Biomedical Engineering, Chemical and Biomolecular Engineering, and Ophthalmology and Visual Sciences. She completed a B.S. in Chemical Engineering at Georgia Institute of Technology. She received her M.S. in Chemical Engineering and Ph.D. in Energy, Environmental, and Chemical Engineering from Washington University in St. Louis.

She completed postdoctoral training in Biomedical Engineering at Saint Louis University where she developed scaffolds for peripheral nerve regeneration. After completing her postdoctoral training, Dr. Swindle-Reilly worked as a Senior Scientist at Rochal Industries

where she researched and developed several patented and FDA cleared wound care products. She concurrently lectured in Biomedical Engineering at The University of Texas at San Antonio. She joined The Ohio State University in 2016 and was promoted to Associate Professor and named a College of Engineering Innovation Scholar in 2023. Her current research interests focus on the design of polymeric biomaterials for soft tissue repair and drug delivery with focused applications in ophthalmology. Dr. Swindle-Reilly also as Chief Technology Officer for Vitranu, Inc., a startup company that licensed ocular drug delivery technologies developed by her lab at Ohio State.

Virtual Poster Gallery and Thank You

Find all of today's posters in our virtual poster gallery. Scan the QR code or click the link below!



go.osu.edu/CTSIASMPosterGallery

Thank you for joining us today. We hope you will stay and network at our reception, held in the Great Hall Meeting Room (Room 1101-1105) from 5 - 6 p.m.

If you took any photos today or want to share what you learned, tag us on X @OhioStateCTSI and use the #CTSIASM2025