

FACULTY RESEARCH TALKS

LISTEN. LEARN. COLLABORATE.

Zoom talk | Friday, Sept. 6, 2024 | Noon to 1 p.m.



PRESENTER 1:

**MEREDITH
CHAPUT**

Assistant Professor
School Kinesiology
and Rehabilitation
Sciences

Neural Activity After Knee Injury: Mechanism to Clinical Translation

In this presentation, Dr. Chaput will discuss her research on neuroplasticity associated with musculoskeletal injury with a focus on functional magnetic resonance imaging and clinical assessments of function. She will provide relevant background information and present an upcoming project in development that will begin this fall semester. Next, she will discuss future research directions to expand neuroimaging within the field of orthopedic physical therapy.

Dr. Chaput is a board-certified sports physical therapist, assistant professor of physical therapy and co-director of the Cognition, Neuroplasticity and Sarcopenia Research Lab. Dr. Chaput received her doctorate in translational biomedical sciences in 2023 from Ohio University. Her research aims to understand whole brain neuroplasticity after knee injuries. Specifically, she is interested in determining how individuals compensate with visual attention for motor control with the goal of developing neurotherapeutic interventions that better target ineffective plasticity.



PRESENTER 2:

LIKE LI

Associate Professor
Department
of Mechanical
and Aerospace
Engineering

Long-Duration Renewable Energy Storage and Industrial Decarbonization Through Thermochemical Approaches

In this presentation, Dr. Li will discuss his research on thermochemical energy storage (TCES) with a focus on materials/structures investigation and reactors development. He will introduce the technology of TCES and the essential role it can play in renewable energy storage and decarbonization of the grid and industrial heat. He will also present the major challenges and progress at the material and reactor levels, with a highlight on representative research projects in his current group.

Dr. Li leads the Thermal Energy Storage and Decarbonization Lab focusing on advanced energy storage technologies research, development and demonstration to contribute to the transition to a clean and decarbonized energy future. His group has received funding from federal agencies and industries, including the NSF, DOE, NASA, Army Research Laboratory and Tennessee Valley Authority. His research group focuses on gas-solid reactions and thermal/chemical transport in materials and reactors, and thermochemical reactor design, development and demonstration for solar and other renewable energy storage and utilization.



PRESENTER 3:

YARA ASI

Assistant Professor
School of Global
Health Management
and Informatics

Armed Conflict as a Determinant of Health and Well-Being

In this presentation, Dr. Asi will discuss her research on health systems, policies and outcomes in fragile and conflict-affected populations. She will describe why the biomedical model alone is insufficient in addressing the health needs of these populations. She will also share why an examination of the sociopolitical context is necessary to accurately assess population health needs as well as design meaningful interventions, including in the work of humanitarian agencies and in the use of humanitarian applications of technology.

Dr. Asi is a non-resident fellow at the Arab Center Washington DC, DAWN MENA, and a 2020-2021 U.S. Fulbright Scholar to the West Bank. Her research agenda focuses on health, human rights and development in conflict-affected and fragile settings. She has been published in peer-reviewed journals as well as *The New York Times*, *The Washington Post*, and *The Guardian*.