



UNC
ORTHOPAEDICS

OrthoRaMS SEMINAR SERIES

Orthopaedic Research and Musculoskeletal Science

Thursday, March 5, 2026 12:00-1:00

Location: Dickson Conference Room, 3200 Thurston Bldg.
Zoom Meeting ID: 972 4253 1148, **PW:** 286522



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Knee Deep in Societal Norms: The Role of Gender-based Socio-cultural Factors in Mediating Knee Injuries in Females/Women

The role of gender-based sociocultural factors in the context of knee injury risk stratification and management paradigms remains under-explored. In contrast to the variable of "sex", "gender" refers to a social structure that involves hierarchies of power which influence the distribution of resources — including access and use of health services — across all people in every society. Recent evidence demonstrates that the interaction of sex and gender may have a role in mediating risk and recovery from knee injuries such as anterior cruciate ligament (ACL) injuries. In this presentation, I interpret the gendered environmental approach that posits embedding both gender and sex into the current ACL injury management paradigm. I examine variables of internalized sociocultural experiences such as self-objectification, gender role socialization, exercise identity, and gender-based stereotype threat. I then relate these variables to knee biomechanics during different types of low- and high-impact tasks. Building on these findings, my current work aims to examine how these factors affect or mediate recovery outcomes in real-world settings. Looking to the future, this work aims to develop, execute, and validate gender-based educational interventions for females/women following ACL reconstruction, using a participatory co-creation approach. Overall, this research seeks to inform more nuanced and effective rehabilitation strategies for females/women.

BIO

Vaishnavi (Navi) Chiddarwar has been a postdoctoral researcher in the Department of Orthopaedics and Rehabilitation at the University of North Carolina at Chapel Hill since September 2025. With a broad clinical background as a physical therapist, she transitioned to pursuing research full-time and graduated with a Ph.D. in Rehabilitation Sciences from Texas Tech University Health Sciences Center, Lubbock, in August 2025. Navi was awarded the Ph.D. Academy Award by the British Journal of Sports Medicine, recognizing her pre-dissertation and dissertation work. Having worked as a sports physical therapist in India, treating athletes with various backgrounds, her clinical experiences continue to shape her research endeavors. Her long-term goal is to bridge the gap between research and clinical practice through simple, usable, real-world solutions. In her downtime, Navi tries out her mother's recipes and enjoys Hindi movies and music.