



SYMPOSIA AND SPECIAL SESSIONS

Wearable technologies for musculoskeletal health monitoring

30 July 2024, 8:45 AM - 10:15 AM

Britta Berg-Johansen, California Polytechnic State University, USA

Neck musculoskeletal models: challenges and solutions

30 July 2024, 8:45 AM - 10:15 AM

Anita Vasavada, Washington State University, USA

Soft tissue mechanics, damage and remodeling

30 July 2024, 8:45 AM - 12:00 PM

Anne Robertson, University of Pittsburgh, USA
Victor Barocas, University of Minnesota, USA

Biomechanical modeling for population-based assessment of fall and fracture risk

30 July 2024, 10:30 AM - 12:00 PM

Anitha D Praveen, Singapore-ETH Centre, Singapore
Benedikt Helgason, ETHZ, Switzerland

Recent advances in skin biomechanics

30 July 2024, 2:15 PM - 3:45 PM

Aisling Ni Annaidh, University College Dublin, Ireland
Adrian Buganza Tepole, Purdue University, USA

Spine Meets Clinic Symposium

30 July 2024, 2:15 PM - 6:15 PM

Thomas Oxland, ICORD, Canada
Sidney Fels, University of British Columbia, Canada
Jeff Barrett, University of British Columbia, Canada
Nima Ashjaee, University of British Columbia, Canada

Computation modeling of cardiac diastole

31 July 2024, 8:30 AM - 10:00 AM

Vicky Wang, Auckland Bioengineering Institute, New Zealand
Mark Ratcliffe, University of California San Francisco, USA

Cellular mechanobiology and morphogenesis

31 July 2024, 8:30 AM - 11:45 AM

Mattia Bacca, University of British Columbia, Canada
Alessio Gizzi, University Campus Bio-Medico, Rome, Italy

AI-Based Brain Biomechanics

31 July 2024, 10:15 AM - 11:45 AM

Yuan Feng, Shanghai Jiao Tong University, China
Songbai Ji, Shanghai Jiao Tong University, China;
Worcester Polytechnic Institute, USA

Advancing personalized cardiovascular medicine: integrating machine learning and mechanistic modeling

31 July 2024, 2:00 PM - 3:30 PM

Simone Saitta, Politecnico di Milano, Italy
Francesco Sturla, IRCCS Policlinico San Donato, Italy

Multiscale modeling using combined multibody and finite element simulation

31 July 2024, 2:00 PM - 3:30 PM

Sidney Fels, University of British Columbia, Canada
Ian Stavness, University of Saskatchewan, Canada

Microscopic blood flows and blood cell dynamics

31 July 2024, 4:30 PM - 6:00 PM

Junfeng Zhang, Laurentian University, Canada

Using parametric finite element approaches to guide tissue engineering strategies and experimental protocols for orthopaedic applications

31 July 2024, 4:30 PM - 6:00 PM

Christian M. Puttlitz, Colorado State University, USA

From cells to systems: Computational modeling of soft tissues across scales

1 August 2024, 1:00 PM - 2:30 PM

Behrooz Fereidoonzhad, Delft University of Technology, the Netherlands
Gerhard Holzapfel, Graz University of Technology, Austria & NTNU Trondheim, Norway

Biomechanical modeling in orthopaedics: Translational perspectives from clinician-scientists

1 August 2024, 2:45 PM - 3:45 PM

Cari Whyne, Sunnybrook Research Institute, Canada
Stewart McLachlin, University of Waterloo, Canada

Mechanical loading in bone-cancer cross talk

1 August 2024, 2:45 PM - 3:45 PM

Lidan You, University of Toronto, Canada