2022 William R. Hazzard, MD
Translational Research in Aging Symposium

Wednesday, December 14, 2022
8:45 a.m. – 3:30 pm EST

Wake Forest University Reynolda Campus
Farrell Hall, Broyhill Auditorium

Musculoskeletal Health, Fractures, and Falls

8:45 am **Welcome**
Stephen B. Kritchevsky, PhD

Session 1: Fractures and Falls
Session Moderator: Stephen Kritchevsky, PhD

8:55 **Overview of Atrium Health Wake Forest Baptist's Fracture Prevention Program**
Anne F. Lake, DNP, ONP-C, FNP-C, CCD
Department of Orthopaedic Surgery and Rehabilitation
Atrium Health Wake Forest Baptist

9:15 **Predicting fall-risk in older adults: Challenges and Opportunities**
Jaime L. Speiser, PhD, MSc
Assistant Professor, Biostatistics and Data Science
Wake Forest University School of Medicine

9:35 **Fractures in the Geriatric Patient: A Trauma Surgeon's Perspective**
Madhav Karunakar, MD
Chief, Division of Orthopaedic Trauma
Atrium Health Musculoskeletal Institute

9:55 Q & A

10:10 BREAK

Session 2: Muscle-Bone Crosstalk
Session Moderator: Jamie Justice, PhD

10:30 **Overlapping Changes in Omic Profiles Highlight Similarities in Musculoskeletal Tissue Aging**
Ellen Quillen, PhD
Assistant Professor, Section on Molecular Medicine
Wake Forest University School of Medicine

10:50 **The Role of the Osteocyte in Muscle/Bone Crosstalk with Aging** — Featured Speaker
Lynda Bonewald, PhD
Director, Indiana Center for Musculoskeletal Health
Indiana University School of Medicine

11:30 Q & A

11:45 pm LUNCH

Session 3: Advances in Musculoskeletal Imaging
Session Moderator: Tina Brinkley, PhD

12:45 **Clinical Observation of Diminished Bone Quality and Quantity through Longitudinal HR-pQCT-derived Remodeling and Mechanoregulation**
Caitlyn Collins, PhD
Assistant Professor, Biomedical Engineering and Mechanics
Virginia Tech

1:05 **INVESTigation of Bone Health Using Medical Imaging and Finite Element Analyses**
Delanie Lynch, MS and **Ashley Weaver,** PhD
Department of Biomedical Engineering
Wake Forest University School of Medicine

1:25 **Opportunistic Computed Tomography: New Paradigm for Osteoporosis Research and Clinical Care**
Leon Lenchik, MD
Professor of Radiology
Wake Forest University School of Medicine

1:40 Q & A

1:55 BREAK

Session 4: Interventions to Improve Musculoskeletal Health Outcomes

Session Moderator: Kristen Beavers, PhD, MPH, RD

2:15 **Bisphosphonate Use for Lean Mass Preservation in Patients Undergoing Major Weight Loss: Results From the WE RISE Pilot Clinical Trial**

Laura Flores, PhD, MD-PhD Scholar
University of Nebraska School of Medicine

2:30 **Acute *Catabolic* Effects of Exercise on Bone: Should the Exercise Prescription for Bone Health be Modified?** KEYNOTE

Wendy Kohrt, PhD
Nancy Anschutz Chair in Women's Health Research
Distinguished Professor of Medicine,
Division of Geriatric Medicine
University of Colorado Anschutz Medical Campus

3:30 RECEPTION

2022 William R. Hazzard, MD Translational Research in Aging Symposium

Symposium Namesake

William R. Hazzard, MD

Dr. Hazzard is Professor of Medicine at Wake Forest School of Medicine, which he re-joined in 2010 after retiring from the University of Washington in Seattle. In 1986, Dr. Hazzard first joined the faculty of the Wake Forest University School of Medicine, where he served as Professor and Chairman of the Department of Internal Medicine and founding Director of the J. Paul Sticht Center on Aging until 2000. This unique dual position allowed the concurrent, mutually reinforcing development of that department and center that has emphasized education and training of medical students, residents, and fellows in an academic mode based upon excellence in both research and care of patients across the continuum so essential for the welfare of elderly patients.

Keynote Speaker

Wendy M. Kohrt, PhD

Dr. Kohrt is a Distinguished Professor of Medicine in the Division of Geriatric Medicine and the Nancy Anschutz Chair in Women's Health Research at the University of Colorado Anschutz Medical Campus. She is the Director of Research for Geriatric Medicine, Acting Director of the VA Eastern Colorado Geriatric Research, Education, and Clinical Center (GRECC), Director of the Energy Balance Assessment Core for the Colorado Nutrition and Obesity Research Center, Associate Director of the Center for Women's Health Research, and Associate Director of the Colorado Clinical and Translational Sciences Institute. Her research interests include novel factors that influence the musculoskeletal adaptation to exercise and the metabolic actions of estrogens. She has received continuous funding from the NIH as a principal investigator since 1991 and has more than 280 research publications. Dr. Kohrt is the PI of two NIH Center grants and a VA Merit Review, and serves as Chair of the Steering Committee for the NIH Common Fund Molecular Transducers of Physical Activity Consortium (MoTrPAC).

Featured Speaker

Lynda Bonewald, PhD

Dr. Bonewald is the Founding Director of the Indiana Center for Musculoskeletal Health, ICMH, with over 100 members from 27 schools and four campuses. She received her Ph.D. in Immunology/Microbiology from the Medical University of South Carolina, was promoted from Assistant to Full Professor at the Univ. of Texas Health Science Center at San Antonio and served as director of the Bone Biology Research Program and as Vice Chancellor for Research at the University of Missouri-Kansas City. She is a Past- President of the American Society for Bone and Mineral Research and the Association of Biomolecular Resource Facilities. She has served as Chair of the Board of Scientific Councilors for the NIH NIDCR and served on Council for NIH NIAMS. She received the IADR "Basic Research in Biological Mineralization Award", the Sun Valley "RIB Award", the prestigious ASBMR William F. Neuman award and is a UM Curators Professor Emeritas, an IU Distinguished Professor and an AAAS Fellow. She has been continually funded by NIH for over thirty years and is best known for her work in the study of osteocytes and is responsible for tools used by researchers globally to determine osteocyte biology and function. She is currently studying bone and muscle crosstalk with aging.