

# "What really moves you?"

## A public lecture on the wonders of your musculoskeletal system.

Lecture Theatre B, Central Teaching Hub,  
University of Liverpool  
17.45 – 19.00, 1<sup>st</sup> July 2016

The human body is a remarkable dynamic machine capable of precision tasks as well as displays of power and endurance. This lecture by 3 international experts will explore the balance between strength and weight in the bony skeleton, the remarkable range of speed, power and endurance amongst our muscles, and the consequences of wear and tear on the joints. Come and understand a little more about the amazing body you live in! The lecture will end with a short panel discussion including questions from the audience chaired by Prof. Jim Gallagher, University of Liverpool.

### **What do Bruce Willis and Samuel L Jackson have to do with Bone Health? - Eugene McCloskey (Sheffield)**

Eugene McCloskey is Professor of Adult Bone Diseases at the University of Sheffield and President of the Bone Research Society, UK. He is Chair of the ISCD/ International Osteoporosis Foundation FRAX Clinical Task Force. He has published approximately 300 original articles in research areas encompassing the treatment of cancer-associated osteolysis, osteoporosis and Paget's disease, vertebral fracture definition, non-invasive skeletal assessments and the development of the FRAX fracture risk assessment tool. Eugene was recently awarded the International Osteoporosis Foundation Medal of Achievement to honour an individual researcher who has significantly advanced the field of osteoporosis through his original and outstanding scientific contributions.



### **Exercise and Muscle Health - Jonathan Jarvis (Liverpool)**



Professor Jonathan Jarvis, BSc, PhD, is Professor of Sport and Exercise Science at Liverpool John Moores University. He has investigated the response of muscle to increased and decreased activity for 30 years. He trained at Queen Elizabeth College London and Imperial College. If bone is the framework of the human vehicle, then muscle is the motor. Professor Jarvis has shown the remarkable range of adaptation in muscle that underlies the response to training or to disuse. In this lecture he will explore the changes in a muscle when it grows in response to weight training, or wastes away during unloading, or becomes extremely resistant to fatigue after marathon training.

### **Cartilage and Osteoarthritis - Virginia Kraus (Durham USA)**

Dr. Virginia Byers Kraus, MD, PhD, is Professor of Medicine and Adjunct Professor of Pathology and Orthopaedic Surgery at the Duke University School of Medicine. She is a practicing Rheumatologist with over 20 years experience in musculoskeletal research focusing on osteoarthritis. She trained at Brown University (ScB 1979), Duke University (MD 1982, PhD 1993) and Duke University Medical Center. Her career has focused on elucidating osteoarthritis pathogenesis and translational research into the discovery and validation of biomarkers for early osteoarthritis detection, prediction of progression, and monitoring of disease status. She served as the President of the Osteoarthritis Research Society International (OARSI, 2013-2015). In addition, she is a member of the Orthopaedic Research Society, American College of Rheumatology and the national board of directors of the Arthritis Foundation (AF). For work related to prevention of post-traumatic arthritis, she is a recipient of the 2015 Kappa Delta award from the American Academy of Orthopaedic Surgeons and Orthopaedic Research Society.

