

IAS Workshop Report

“Musculoskeletal Health in the 21st Century”

30 June – 1 July 2015
University of Surrey, UK

Objectives: The aim of this multidisciplinary workshop was to focus on musculoskeletal health, joint biology, arthritis prevention through physical activity (including biomechanics of musculoskeletal tissues), effects of diet and nutrition, understanding the underlying physiology and pathophysiology of cartilage and bone, new insights from genetic diseases of the musculoskeletal system.

Short summary of presentations: Modern society is facing an ever-increasing ageing population. Studying healthy ageing is a key research priority, along with a better mechanistic understanding of the pathophysiology of ageing that occurs in a number of age-related musculoskeletal disorders. Arthritic and musculoskeletal diseases represent a major cause of disability and morbidity globally and result in enormous costs for our health and social care systems. By gaining a better understanding of healthy musculoskeletal ageing we can provide better care and new therapies for common musculoskeletal disorders. “Musculoskeletal Health in the 21st Century” was a multidisciplinary workshop that brought together some of the major stakeholders including clinicians, basic scientists and funding bodies to focus on musculoskeletal health. The attendees discussed and debated the concept of intervention and disease prevention. This was a unique workshop because it focused on musculoskeletal health and arthritis prevention by taking a “One Health” approach, including presentations by medical professionals, veterinarians and scientists. There was much discussion after each session and participants had the opportunity to debate unresolved issues with recognised experts in the field. Postgraduate students and early career researchers attended and benefited from the knowledge of internationally renowned experts.

Key themes: The workshop included sessions on joint health, arthritis prevention through physical activity (including biomechanics of musculoskeletal tissues), effects of diet and nutrition, understanding the underlying physiology and pathophysiology of cartilage and bone, prognostic biomarkers and new insights from genetic diseases of the musculoskeletal system.

Next steps: This was a fantastic opportunity to showcase musculoskeletal research at the University of Surrey. The workshop provided benefits for the whole faculty and the University of Surrey and the networking opportunities enhanced Surrey’s position in this multidisciplinary area both nationally and internationally. The leading workshop organiser, Professor Ali Mobasher, Associate Dean for Research & Enterprise at the University of Surrey, is currently editing a Special Supplement entitled “Musculoskeletal Health in the 21st Century” for the Springer/BioMed Central journal BMC Musculoskeletal Disorders. **Please see attached documents for further details.**

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