



Newsletter of the Australian
Institute for Musculoskeletal
Science (AIMSS)

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**VICTORIA
UNIVERSITY**
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My AIMSS



Hello, my name is **Professor Alan Hayes** and I am the Deputy Director of AIMSS and also a Program Director in Sarcopenia – Biomedical and translational. I have been involved in AIMSS since its formation and location at the Western Centre for Health Research and Education (WCHRE). AIMSS was well supported financially by The University of Melbourne, and formed a key platform for Victoria University's application for Collaborative Research Network funding. With Western Health seeing AIMSS as its flagship institute, the three entities supported AIMSS and were keen to advance research in the areas of bone, muscle and joint. I have had the opportunity to work with some fabulous people from Western Health's Physiotherapy department and develop strong collaborative partnerships with a number of colleagues, both internal and external through the strong networking that has occurred.

Unfortunately, the three areas of bone, muscle and joint were exactly that, three mostly separate areas, and with subsequent staff movements, it is fair to say momentum was lost.

However, with change comes opportunity, and the arrival of Prof. Gustavo Duque has seen a reinvigoration of AIMSS with a renewed enthusiasm for it to be the best musculoskeletal institute in Australia (I would like to aim for the world, but Gustavo has said one step at a time ☺). AIMSS has provided me new opportunities for collaborative grants and an involvement in sponsored clinical trials. Importantly, the outward face of AIMSS has made huge inroads and it is now a member of BiomedVic and the prestigious International Association of Geriatrics and Gerontology (IAGG) Global Ageing Research Network. I am looking forward to presenting a symposium and oral presentation at the IAGG conference in July this year. AIMSS is also providing excellent support for its members and members in training (students), including travel grants, access to a Biostatistician and Seed Grants. With new income generating initiatives to further support research, a number of new Project Directors as well as newly dedicated AIMSS staff, and the excellent facilities available at the WCHRE, in 5 years' time I aim to be confidently able to say I am part of AIMSS, the best musculoskeletal institute in Australia!

From our Director



AIMSS is busy

"Busy" is the most frequently mentioned word at AIMSS these days. In addition to their NHMRC applications, our members have been dedicated to increasing their research productivity, expanding their collaborations, recruiting new students, and obtaining funding from multiple sources.

Following the well-known principle of "publish or perish", our members have already published 21 peer-reviewed papers in 2017 (a 200% growth compared with March 2016). In addition, we had a very active participation at the World Congress of Osteoporosis in Florence (Italy), with three symposia and several papers and poster presentations. The First Australian and New Zealand Conference for Sarcopenia and Frailty Research, which was organised by AIMSS, was a total success. The quality of the presentations can be seen in a special issue of the Australasian Journal on Ageing (<http://onlinelibrary.wiley.com/doi/10.1111/ajag.2017.36.issue-S1/issuetoc>). In summary, we are happily busy, and proud of sharing our accomplishments with you.

Prof. Gustavo Duque – Director AIMSS

Our Team Member of the Month



My name is Ebrahim Bani Hassan and I am the Program Director of Imaging at AIMSS. I was born in the mountainous Azerbaijan, Iran. Since childhood I had a passion for animals and medicine.

Therefore, I chose to become a veterinarian and made my way into a DrVetMed program (Azad Univ. of Tabriz), followed by a DrVetSci degree by residency in Large Animal Medicine and Fellowship in the field at the University of Tehran, ranking first in the nation. Falling obsessively in love with musculoskeletal pathobiology, I completed a PhD research on musculoskeletal pathophysiology, followed by research jobs, tutorship and postdocs at the University of Melbourne. I joined AIMSS (which I call the best place to work and learn) in 2016 and since then I have been working on the pathobiology and diagnostics of osteosarcopenia and other musculoskeletal conditions. Also, I am in charge of the clinical imaging and image analysis facilities at AIMSS. Hence, I am involved with multiple collaborative projects on bone and muscle health and interactions of the musculoskeletal system with adipose tissue and the nervous system.

Outside academia, I read books and listen to audiobooks. I believe that I have to be very productive to compensate for the CO₂ that I produce in every breath; therefore, I cannot sleep at night if I have not produced something during the day to show for it. Speaking of CO₂, I am an environmentalist (love mother earth; camps and hikes) and a die-hard evolutionist. My favorite philosopher is Friedrich Nietzsche.

AIMSS Publication of the Month

DNA methylation and the social gradient of osteoporotic fracture: A conceptual model.

Brennan-Olsen SL, Page RS, Berk M, Riancho JA, Leslie WD, Wilson SG, Saban KL, Janusek L, Pasco JA, Hodge JM, Quirk SE, Hyde NK, Hosking SM, Williams LJ. Bone. 2016 Mar; 84:204-12.

This paper presents the conceptual foundation and direction of Dr Brennan-Olsen's research program, which is focused upon the social-biological nexus and aimed at elucidating the underlying mechanisms for the social gradient of osteoporosis. This program of research aligns strongly with the objectives of AIMSS to exemplify novel approaches to address the burgeoning problem of musculoskeletal disease, and it epitomises the AIMSS "BITE" model

Our Collaborator of the Month



Dr. Jeff Gimble is an Endocrinologist and Professor of Stem Cell Biology at Tulane University in Louisiana (USA).

Dr. Gimble's laboratory focuses on the isolation and characterization of adult stem cells from adipose tissue and bone marrow. These stromal cells have multiple differentiation potential. With more than 400 publications, Dr. Gimble is exploring the regulatory mechanisms governing the adult stem cell's fate and how they can be applied to regenerative medical problems. Prof. Gustavo Duque and Dr. Gimble obtained one NHMRC grant in 2009, and have published several papers on the role of lipotoxicity in muscle and bone. This year, Dr. Gimble is a Chief Investigator in one of our NHMRC applications, which was submitted by our AIMSS member A/Prof. Damian Myers, CIA in this project.



Australian and New Zealand Society for Sarcopenia and Frailty Research

2017 ANNUAL MEETING • ADELAIDE, SA • 24 & 25 NOVEMBER

Abstract submission for the 2017 Annual Meeting of the ANZSSFR will open soon. Propose a symposium and/or submit your research results: www.anzssfrmeeting.com.au

AIMSS Seminar Series

Our AIMSS Seminars for January and February have been a total success in terms of attendance, quality of the presentations, and outstanding speakers. We hope to see you all at our next Seminar on May 1st where we will learn from our international guest speaker Prof. Mike McClung.

Short News:

- Welcome to our new Members of AIMSS: Project Directors **Prof. Andrew McAinch**, **A/Prof. Nigel Stepto**, **Dr. Emma Rybalka**, **Dr. Craig Goodman**, **Dr. David Rouffet**, and **Dr. Rachel Duckham**.
- Welcome to our new AIMSS Manager **Mrs. Gwen McMaster-Fay**, and to our new Clinical Trials Coordinator **Merima Murathodzic**.
- We are recruiting for our clinical trial on a new treatment for older people with sarcopenia. For more information contact our Research Coordinator Merima via e-mail: mimm@unimelb.edu.au