

From the director

AIMSS is Joint Research

The musculoskeletal system represents more than 65% of the body mass of a healthy young adult. This complex system is composed of three major elements: bone, muscle and joints. Being AIMSS a musculoskeletal research institute, we conduct research activities looking at these systems from bench-to-bedside-to-community. In the last three years, AIMSS has experienced a steady growth performing research on bone and muscle diseases, which has placed our Institute as a world leader in areas such as osteoporosis, sarcopenia, osteosarcopenia, nutrition, exercise and falls and fractures.

However, I should also highlight that the third component – joints – has not been neglected. Led by Prof. Keith Lim, the members of our affiliated clinical unit of Rheumatology at Western Health is conducting several very interesting trials on osteoarthritis, rheumatoid arthritis, and other rheumatic diseases affecting the musculoskeletal system. In fact, I never stop congratulating him and his team for being recognised as an Asia Pacific League of Associations (APLAR) Centre of Excellence for Research, Training and Education; the only one in Australia.

I must admit that I was very excited and proud when I saw the AIMSS logo on their APLAR-awarded certificate.

From the bench side, our Program Director Professor John Hamilton, a worldwide leader in joint research, is actively participating at our activities and is currently cosupervising PhD students performing joint-related biomedical experiments at AIMSS. In the near future, John will be physically here at AIMSS sharing his fantastic knowledge and expertise with our members. From a community perspective, A/Prof. Sharon Brennan-Olsen has conducted several studies looking at the characteristics and impact of joint diseases not only in Australia but also worldwide. Her high quality research on osteoarthritis and rheumatic arthritis has generated several important publications.

In the near future, we are starting a number of joint-related interesting projects, which involve our members of AIMSS. As an example, in collaboration with A/Prof. Phong Tran and his team at the Orthopaedics unit at Western Health – another natural partner of our Institute – our members are starting several clinical trials and are jointly designing and proposing a biobank. As you could see, joint is not our "little brother" but a strong and equally growing sibling that shares the same level of love and support from AIMSS and its members.



Gustavo Duque Director, AIMSS



Professor Rosemary Calder Health Policy Expert, Mitchell Institute

Australian Health Policy Collaboration (AHPC)

A note from Professor Rosemary Calder

The Mitchell Institute for Education and Health Policy at Victoria University is one of Australia's trusted thought leaders in education and health policy. Our focus is on improving our education and health systems so more Australians can engage with and benefit from these services, supporting a healthier, fairer and more productive society.

The Mitchell Institute also leads the Australian Health Policy Collaboration (AHPC), an initiative that brings together over 50 leading health organisations and 70 chronic disease experts to drive progress in tackling and reducing chronic disease.

Over the last two years, Associate Professor Brennan-Olsen and Professor Gustavo Duque from AIMSS and the AHPC have been working closely to inform and influence current policies and practice to improve population health. AIMSS is a signatory population and supporter of the work of the AHPC, and, since 2017, AIMMS has supported several pieces of work including, "Australia's Health Tracker by Socio-Economic Status".

In 2018, A/Prof Brennan-Olsen and the AHPC team also submitted a project proposal to the "Try, Test and Learn Fund", an initiative of the Australian Government Department of Social Services.

The latest Burden of Disease study, undertaken in 2015, identified musculoskeletal conditions as the third leading burden of disease in Australia and the most expensive in terms of percentage of health expenditure. There is much to be done and that can be done to improve population health and reduce preventable chronic conditions. The collaboration between AIMSS and the AHPC has already delivered benefits through enhanced capacity and complementary initiatives. We look forward to continue working with AIMSS and to our combined efforts contributing directly to tangible policy improvements in Australia.



Dr Karen du Plessis

Meet our team

Dr Karen du Plessis Clinical Research Manager, AIMSS

Karin du Plessis was Born in South Africa where she completed her undergraduate degree, Karin has also lived in New Zealand for 10 years before moving to Australia in 2008. She holds a PhD in Psychology from Massey University. Karin has extensive experience in managing complex multi-site research projects and clinical trials in the fields of mental health and medical research

Prior to starting with AIMSS in March 2019, she managed a clinical cardiac registry and its associated research projects at Murdoch Children's Research Institute. As Clinical Research Manager, Karin oversees AIMSS' clinical research unit, and is here to support all members in successfully executing their clinical research projects from inception to completion. AIMSS welcomes Karin in her new role.



Jeremy D. Walston, M.D Raymond and Anna Lublin Professor of Geriatric Medicine, Johns Hopkins Asthma and Allergy Center, Baltimore, USA

Featured Collaborator

Jeremy D. Walston, M.D.

Dr. Walston is the Raymond and Anna Lublin Professor of Geriatric Medicine in the Division of Geriatric Medicine and Gerontology at Johns Hopkins University and the Principal Investigator of the Johns Hopkins Older Americans Independence Center (OAIC). His laboratory and clinical translational research program focuses on the identification of age-related molecular and physiological changes that contribute to frailty and chronic disease states, and on the translation of basic biological findings into clinically relevant

Recent highlights include the identification of an intramitochondrial angiotensin system that changes with age, interventions that target mitochondria and the angiotensin system to slow the trajectory towards functional decline and frailty, and a novel inflammatory index that is highly predictive predictive of mortality and functional decline in older adults.

Dr. Walston has co-authored more than 200 peerreviewed publications, including publications in the New England Journal of Medicine, the Proceedings of the National Academy of Science, and the Journal of Gerontology.

He is the American editor for the Oxford Textbook of Geriatric Medicine. In addition to his role as the PI of the OAIC and several other NIH and foundation awards. he maintains an active clinical practice in Geriatric Medicine, directs the Biology of Healthy Aging Program at Johns Hopkins, and is the Deputy Director of the Division of Geriatric Medicine and Gerontology at the Johns Hopkins School of Medicine

Featured publications



"Bone Health: A Reflection of the Social Mosaic" J J Miszkiewicz, S L Brennan-Olsen, J A Riancho (Editors), Springer.

Upcoming events



Seminar Series: Morbidity and Mortality following Low Trauma Fractures in Older People **Professor Jackie Center**



Seminar Series: Social inequity and musculoskeletal health: Phrasing the problem, discussing the solutions **Professor Rosemary Calder** Date TBD









Awards



Ghazala Naureen: wins the ASBMR Young Investigator Award to attend the European Calcified Tissue Society (ECTS) Ph.D. Training Course in September 7-10, 2019 at Camplus Guest Bononia in Bologna, Italy.



Jason Talevski: wins the ESCEO-AgNovos Healthcare Young Investigator Award (2000EUR prize) at the WCO-IOF-ESCEO World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases in April 2019 in Paris, France. Abstract: "Effect of clinical care pathways on health-related quality of life and physical function following fragility fracture: A meta-analysis.'