

College supports world leading orthopaedic surgery research

Orthopaedic Fellow Adam Watson has spent the past two years conducting research and completing sub-specialist training in Calgary and Toronto, Canada, with funding support provided through RACS' Foundation for Surgery.

Dr Watson received the prestigious Ian and Ruth Gough Surgical Education Scholarship in 2016 which allowed him to complete his Masters of Surgical Education thesis.

Working with world leaders at the University of Toronto, Dr Watson investigated Entrustable Professional Activities (EPA) in orthopaedic surgical training to develop a core list of EPAs deemed critical for Trainees exiting the program.

He said these ranged across a wide array of tasks, both inside and outside the operating theatre, such as patient assessment, post-operative management of common orthopaedic presentations, like a hip fracture. Upon peer review, the diagnosis and work up of patients with rare but important conditions such as bone cancers, was also deemed a core task.

He said he hoped the list would help guide Trainees, teachers and examiners in learning and assessing key orthopaedic surgical competencies.

"EPAs are firmly established as a potent assessment tool in surgery and the new curriculum designed by the Australian Orthopaedic Association, called AOA21,

uses EPAs as an important part of its training and assessment rubric," Dr Watson said.

"My Masters of Surgical Education research developed a core list of EPAs, collated with the input of expert participants, which were deemed critical for Trainees to be able to manage, both independently and competently, before exiting an orthopaedic surgical training program.

"This work represents the first time a list has been formulated, with input from international leaders in the field, that spells out the key tasks involved in being an orthopaedic surgeon."

"I hope this research will benefit both Trainees and surgeons by defining clear tasks and abilities that are mandatory competencies for Trainees to master prior to leaving the orthopaedic training program.

"Ideally, in a competency-based training program, if a Trainee is deemed competent in all of these tasks at an early stage, they may be signed off to graduate from training."



Dr Adam Watson
with his wife
Dr Jane Mills and
their daughter Rose

Dr Watson said that while lists of EPAs deemed crucial for other specialties such as Psychiatry and Internal Medicine had been developed in recent years, his research was the first of its kind to list core competencies required by orthopaedic surgical Trainees.

"My hope is that this work will help Australasian surgical educators provide cutting edge training in orthopaedics by itemising those tasks that are deemed critical for orthopaedic Trainees to master," he said.

Dr Watson completed his world-first research under the supervision of Dr Tim Dwyer, FRACS in Canada and Professor Debra Nestel at the University of Melbourne.

He presented his work at a peer-reviewed meeting at the University of Toronto. It is currently prepared for publication.

He has previously pursued other research interests, investigating scapular involvement in rotator cuff repairs and conducting a randomised controlled trial into fixation of hip fractures.

While in Canada, Dr Watson also completed post-Fellowship training through a 12-month Sports and Arthroscopy Fellowship at the prestigious University of Toronto Orthopaedic Sports Medicine Program where he gained skills to treat complex and multiple ligament knee injuries and enhanced his arthroscopic treatments of complicated shoulder pathology.

He then spent a further year at the University of Calgary doing a high-volume Fellowship in Complex Hip and Knee Arthroplasty, including specific training in the Direct Anterior Approach Hip Replacement and complex revision procedures.

"Working at high volume academic hospitals in Toronto and Calgary provided a wonderful opportunity to focus on multi-ligament knee reconstructions and arthroscopic shoulder surgery followed by a 12-month Arthroplasty Fellowship focussing on revision hip and knee surgery and anterior approach hip replacements," he said.

"I have a strong interest in Sports Orthopaedic Surgery so the aim of my subspecialist training in Shoulder, Hip and Knee surgery was to maximize the impact I have on my patients when I return to Australia to take up a position at the Royal Hobart Hospital in Tasmania."

Before travelling to North America, Dr Watson completed a 12-month Shoulder and Upper Limb Fellowship in Geelong, Victoria, under the guidance of Professor Richard Page. This was followed by a six-month Trauma and Arthroplasty Fellowship also in Geelong.

In 2015 he was awarded a travelling Fellowship as part of the ASEAN Orthopaedic Association/AOA Cooperation which allowed him to visit hospitals in Myanmar, Indonesia and Singapore to provide educational lectures and attend scientific meetings and in 2012 he worked at the Shriners Hospital for Children in Portland Oregon as an International Paediatric Orthopaedic Resident.

Dr Watson is married to Dr Jane Mills, a Breast and Endocrine surgeon from Hobart, and while in North America they welcomed the arrival of their first child, a daughter named Rose.

Dr Watson thanked RACS for the support extended to him. He is extremely thankful to the dedicated teachers and surgeons who have invested so much time in



Dr Adam Watson

training him, both in Australia and Canada.

"During my time here, I've become more efficient and reproducible at several index operations in arthroplasty and sports surgery," he said.

"I hope that my research advances the assessment of Trainees to the benefit of the entire specialty of orthopaedic surgery and look forward to returning to Hobart to share the skills I have learnt and the EPAs we have defined with orthopaedic Trainees.

"My wife and I also enjoyed learning about the medical services in Canada and I think we can learn a lot from the systematic efficiency of their public health service.

"I feel hugely fortunate to not only have had the opportunity to broaden my surgical skills and complete my Master's Degree, but also to have had the time to spend with my wife and daughter while exploring various parts of Canada, including the wilderness in the Canadian Rockies which was a highlight."

Dr Watson will return to Australia later this year and will have a combined public and private practice at the Royal Hobart Hospital and Calvary Healthcare.

The Ian and Ruth Gough Surgical Education Scholarship was established to encourage surgeons to become expert surgical educators.

ACADEMIC HIGHLIGHTS

- 2016: Ian and Ruth Gough Surgical Education Scholarship – RACS Foundation for Surgery
- 2015: ASEAN Orthopaedic Association/AOA Cooperation travelling Fellowship
- 2012: International Paediatric Orthopaedic Residency, Portland, Oregon.

Karen Murphy
Surgical News journalist