Osentia®: A Novel Screening Tool for Fracture Risk

Speaker: Mark Towler, Professor, Department of Mechanical and Industrial Engineering, Ryerson University and St. Michael’s Hospital, both in Toronto (ON, Canada).
When: 12noon on Friday 14th of June 2019
Where: Tercentenary Lecture Theatre, 2nd floor, Trinity Biomedical Sciences Institute

Osentia®, invented by Mark Towler (Ryerson University / St Michael’s Hospital, Toronto, Canada), exploits a patented algorithm that combines information around a subject’s protein structure with their clinical risk factors to determine relative risk of fracture. The lecture will consider how Osentia® originated from basic research in Towler’s laboratory through its development in clinical trials emerging as a screening tool launched for over the counter (OTC) testing in 2016.

Mark Towler is Professor in the Department of Mechanical and Industrial Engineering at Ryerson University with a cross-appointment in St. Michael’s Hospital, both in Toronto (ON, Canada). He moved to Canada in 2013, having previously worked in the University of Limerick (Ireland), Alfred University (USA) and University Malaya (Malaysia). He holds a PhD in Biomaterials from Queen Mary College (London, UK). Towler has generated over $25M funding to sustain active research programs on glass-based medical devices and in-vitro diagnostics. He has published 160 papers in the peer reviewed literature and invented/co-invented five granted patents. He is the co-founder of two healthcare spin outs; Crescent Ops & Solas Diagnostics. He has supervised 16 PhD & 17 MSc theses to completion and mentored 18 post-doctoral fellows. He currently supervises ten graduate students and mentors two post-doctoral fellows who are working on projects in the orthopaedics, cardiac and trauma fields.

As Principal Investigator and leader of Ryerson’s Clinical Materials and Diagnostics group (www.ryerson.ca/cmd), he holds ~$3M active funding from the Canadian Institute of Health Research (CIHR) and the National Science and Engineering Research Council (NSERC).