

EGA Corporate Members



Engineering Better Health

The Coming Together of Engineering and Health Care



Professor Madeleine Lowery



Mr Michael Ryan



Professor Ronan Cahill



Mr Fran Hegarty

Thursday, 4th October 2018 at 6.30pm

Theatre 326, Engineering & Materials Science Centre,
University College Dublin

Moderated by Prof. Prof David FitzPatrick, UCD Dean of Engineering

Biographies:



Prof. Madeleine Lowery – UCD School of Electrical & Electronic Engineering

Madeleine Lowery is a Professor in the School of Electrical and Electronic Engineering, University College Dublin. Her research is focused on using engineering methods to understand the human nervous system as it relates to movement, in health and disease, and to design therapies and technologies to improve impaired motor function. She leads an interdisciplinary research team in the area of Neuromuscular Systems and Neural Engineering. Her research interests include electromyography, bioelectromagnetics, myoelectric control of artificial limbs, electrical stimulation, deep brain stimulation and neural control of movement. She is a member of the IEEE and a member of the Council of the International Society of Electrophysiology and Kinesiology (ISEK). She is a Funded Investigator in the SFI Insight Centre for Data Analytics and the CURAM Centre for Research in Medical Devices. In January 2015 she was awarded a Consolidator grant by the European Research Council.



Mr Michael Ryan – Software Support Engineer, Dairy Master

Michael is a Software Support Engineer for DairyMaster's advanced Dairy and Farm management systems. For those of you that don't know, DairyMaster manufacture some of the most technologically advanced products for dairy farmers worldwide. DairyMaster's aim of making dairy farming more profitable, enjoyable and sustainable for farmers is supported by the forward, innovative thinking and the commitment of their team, led by their CEO, our own Prof Edmond Harty. Michael has extensive experience in Medical Device and RF services including design, maintenance, training and presentations. His specialties include Dialysis and Water-Treatment.

He will be talking to us today about how DairyMaster have adopted artificial intelligence, machine learning and autonomous systems to help farmers manage their farms and make better more informed decisions. We will also be learning about the 'MooMonitor' - the unofficial 'Fitbit for cows!' and how this device has revolutionised animal healthcare.



Prof. Ronan Cahill – Professor of Surgery, Mater Misericordiae University Hospital

Professor Ronan Cahill graduated MB,BAO,BCh (Hons) from University College Dublin in 1997 and then completed his basic and specialist surgical training in Ireland, gaining both MD by thesis (Health Research Board Clinical Research Fellow) and FRCS by examination. Thereafter, he was a clinical fellow at the IRCAD/EITS Institute in Strasbourg, France from 2007 to 2008 before moving to the Oxford Radcliffe Hospitals as senior fellow and then consultant and senior clinical researcher from 2008 to 2010. Ronan returned to Ireland in 2010 as consultant general surgeon (specialist interest in colorectal surgery) at Beaumont Hospital before taking up the position of Professor of Surgery at University College Dublin, and the Mater Misericordiae Hospital in June 2014. He is a recipient of both the Bennett and Millen Medals (RCSI Millen Lecturer 2010) and was the ASGBI Robert Smith Lecturer in 2014. He has a major academic interest in Surgical Innovation and New Technologies and active basic science, clinical and device development research partnerships both nationally and internationally.



Mr Fran Hegarty – Chief Healthcare Technology Officer, New Children's Hospital Dublin

Fran Hegarty has studied electronic engineering and medical physics and has worked in hospitals throughout his career supporting the application of technology in clinical practice. For many years he led the Clinical Engineering team in St James's Hospital, a team which supports a vast range of medical equipment and systems across that hospital. His research interests include clinical measurement, clinical informatics, assisted living technologies, art in health and healthcare technology management. He has published and presented widely on these topics and is lead author of the text book "Healthcare Technology Management - A Systematic Approach" CRC Press. In 2015 he was seconded to the new children's hospital project where he currently serves as Chief Healthcare Technology Officer.



Prof. David FitzPatrick – Dean of UCD Engineering Moderator

Professor David FitzPatrick is currently Principal of the UCD College of Engineering & Architecture, Dean of Engineering and Provost, Beijing-Dublin International College. An Engineer by background, he worked within the global orthopaedic industry for a decade before returning to Ireland to take up a position within the Department of Mechanical Engineering at University College Dublin. During the past two decades he has held leadership roles at School and College level in UCD, with a commitment to Internationalisation and Development.