

## Emer Cahill, MBA



Emer began her career as a Design Engineer with Northern Telecom, later Nortel Networks. During her time with Northern Telecom she completed an MBA. Further pursuing her interest in design, the subject of her dissertation investigated the development of creativity in engineering students. Emer spent three years as a lecturer with Athlone IT before joining the staff of the Electronic Engineering Department in GMIT, now ATU Galway City where she established and teaches an Enterprise & Innovation module to final year engineering students. She also has extensive experience guiding and mentoring Electronic Engineering students' design projects. Emer has co-taught on the Design Innovation Project module of the MSc in Design and Innovation for the past four years and also teaches on ATU's Masters in Teaching and Learning program. She is currently course coordinator for the MSc in Design & Innovation and strongly believes that the course unlocks innovative potential in our students, bringing benefits to them as individuals & to their companies.

## Dr Rory Mooney, PhD



Dr Rory Mooney holds multiple awards in the field of Innovation and Design, including the Irish Times First Time Founder award and Overall Innovation of the Year award in 2022. In 2011 he was the winner of the Inaugural Enterprise Ireland Cleveland Clinic, Clinical Innovation awards. He won the Irish Laboratory Awards, Innovation of the Year in 2018 and the Munster Seedcorn Investor Readiness competition in 2019.

Rory holds three granted patents as lead inventor, with eight further patent applications. He has authored and co-authored in excess of ten peer reviewed journal publications in Biomedical Engineering. Rory was awarded a PhD in Tissue Engineering and an MSc in Biomedical Engineering from the University of Limerick, a BE in Mechanical Engineering from the University of Huddersfield, a National Diploma in Tool Design and a National Certificate in Mechanical Engineering from Sligo Institute of Technology, and a Certificate in Medical Science from the Royal College of Surgeons.

Dr Mooney has held senior engineering roles with two large medical devices companies over the last 25 years, initially as a principal engineer at Lake Region Medical, Integer Corporation, Ireland. In 2006 he joined Stryker Innovation, EMEA for four years as an Innovation Project Engineer managing development projects of special instruments and commercialising new technologies, gaining vast experience. Rory setup and ran his own medical device product development and commercialisation consultancy, Ideas BioTech Ltd., for nine years, until becoming co-founder of Class Medical Ltd. Class Medical is a start-up medical device company spun out of the University of Limerick in 2015, where he was founding CEO and lead inventor of their TUCSV safety valve technology. Having steered the company through the start-up phase, Rory in 2019 switched his focus over to become the Chief Technical Officer and also directing operations.

Dr Mooney also works as an academic in Mechanical and Biomedical Engineering, joining GMIT's team in 2017. He previously lectured at the University of Limerick, specialising in Creative Design, Mechanical and Medical Device Design. Rory's main areas of interests lie in creative design, human physiology, and entrepreneurship.

## Dr Martin Taggart, PhD



Martin Taggart is a Fellow of the Chartered Institute of Building (CIOB), and a Chartered Construction Manager (CIOB). He is also a Fellow, Chartered Building Engineer, with the Chartered Association of Building Engineers.

Dr Taggart has worked in the construction and built environment sector for over 40 years. For the past 17 years, he has worked as a lecturer in the School of Engineering at ATU (Galway). His specialist teaching areas include action orientated research methodology, innovation and enterprise, project management and construction management.

Earlier in his career, Martin worked as a senior project manager for the John Laing construction group and ran his own successful project management consultancy company. He has worked extensively in the United Kingdom and Ireland. He now lives in Connemara and is a very active member of the built environment community in the west of Ireland and nationally, and the wider Lean process improvement community.

Martin is an active researcher and has published internationally on several themes including Construction Defects, Building Information Modelling, Lean Construction and Action Orientated Research Methodologies. His work has received over 200 citations in leading publications and conferences.

## Derek Thornton CEng MTech MSc



Derek began his career with Engineering Consultants John Brown Engineers & Constructors in London and Glasgow after graduating from University of Galway with a degree in Mechanical Engineering. He worked in the Advanced Analysis unit within the Offshore Structures division carrying out cutting edge simulation using numerical methods such as Finite Element Analysis (FEA). These analyses were on critical components in new oil and gas offshore structures on significant projects for Client companies Shell Oil, British Gas and British Petroleum.

Moving to Paris he worked for the multi-cultural Doris Engineering as a Technical Liaison Engineer on the Norwegian 'Troll Olje' project which is a sister installation to 'Troll A' - the tallest structure moved by mankind. Derek went on to work as a Consultant for Halliburton in London applying his extensive experience in design & innovation on substantial energy projects.

On returning to Ireland Derek completed a Masters (MTech) in Advanced Manufacturing Technology in 1999 at the University of Limerick. His research thesis focused on the reverse engineering of complex surfaces in partnership with the Toolmaking Industry Research Advisory Centre (TIRAC) at ATU Sligo. He went on to take up a position as Lecturer at ATU – Donegal in the Department of Electronic & Mechanical Engineering. Derek taught on modules in Mechanical Design, CAD, Finite Element Analysis, Additive Manufacturing & Reverse Engineering, Innovation Management, was Academic Supervisor on Student Work Placements and supervised Level 8 Mechanical Engineering final year projects.

An interest in innovation in SMEs led Derek to work as Academic Supervisor on a number of technology transfer projects with companies in Northern Ireland through the cross-border InterTradeIreland funded 'Innovation Boost' programme. He worked on a portfolio of projects over 18 years as a catalyst for companies to innovate and develop new products. Working with companies such as CDE, Edge Innovation, Telestack, and Nugent Engineering in sectors such as Sand & Aggregates Processing, Waste Recycling, Automotive and Marine.

Derek graduated with an MSc in Technology Management in 2008 and his research explored the role of absorptive capacity in innovation at SMEs in partnership with the Technology Centre WiSaR (Wireless Sensor and Applied Research) Lab at ATU Donegal and has published on this topic.

Joining ATU Galway in 2022 Derek has been Lecturing on Level 8 Mechanical Engineering programmes and the Level 9 MSc in Design and Innovation in modules areas such as: Engineering Design, Enterprise & Innovation, Product & Service Design and Design & Innovation.

Derek holds the title of Chartered Engineer (CEng MIEI) from Engineers Ireland.