INSTITUTE:

Dundalk Institute of Technology

RESEARCH AREA:

Medical Device Software Processes

Dr. Fergal McCaffery: World class leader in medical device software process development

Excellent Researchers
Delivering Impact
Software



Dr. Fergal McCaffery performs research in the area of medical device software engineering and is the Director of the Regulated Software Research Centre at Dundalk Institute of Technology (DKIT). Dr. McCaffery has built a sizeable and world class research team.

Since 2008, a total of 35 researchers and 5 academics have engaged in various funded research projects that have originated from his core research work, attracting approximately €4million in funding.

Dr. McCaffery has been a pioneer in a number of different research areas for the Institute and is the only DKIT researcher to obtain Science Foundation Ireland (SFI) funding through the Stokes and Principle Investigator programmes and to serve as a Principle Investigator on a CSET (Lero). Fergal obtained EU FP7 Artemis funding for the CHARTER project, which was cited as an exemplar flagship project by the European Commission. He is active and committed to commercialising his research work, having been involved in 3 Enterprise Ireland commercialisation projects (serving as Principle Investigator for 2 of these). He is also currently progressing an Enterprise Ireland Commercialisation Fund feasibility project and anticipates spinning out several companies from his research. Company collaboration is a further key priority, and Dr. McCaffery has recently completed an Enterprise Ireland Innovation Partnership feasibility study with Escher Ltd.



Or Fergal McCaffery, Regulated Software Research Centre Dundalk IT

As a result of this success, Fergal is recognized as a world class leader in medical device software process development. His team is currently developing process assessment models for ISO/IEC 62304, ISO/IEC 330XX, IEC 80001-1 and IEC 80001-2-2. He is an Irish expert for both international software process standards and international medical device software standards. Indeed he was selected as a member of the SPICE Academy – consisting of 17 of the world's leading software process improvement researchers.



•> When Dr. McCaffery joined the Department of Computing and Mathematics at DKIT in 2008 it became possible for students there to embark upon PhD studies for the first time. Consequently, 3 students have now successfully completed PhDs, with another 8 currently being supervised.

Dr. McCaffery has published over 150 peer-reviewed publications and presented a number of high profile national and international keynotes in relation to medical device software processes. His research has featured in a number of national media articles as well as in the RTE Science Squad series of 2012.

Dr. Mc Caffery has built very strong links with the international medical device standards community and large US based multinational medical device companies. Indeed he plans to grow his research and team to a level that will attract the multinationals to choose Ireland as the number one location for medical device software development. He has developed a postgraduate programme that is generating a pipeline of specialist graduates which will directly meet the needs of industry. His plans to spin out three companies from Enterprise Ireland supported commercialisation projects will also have benefits in generating new employment opportunities.

TESTIMONIAL

Dr. Fergal McCaffery

Dundalk Institute of Technology "The support available from the Research Office, Technology Transfer Office, Finance Department, Human Resources and my Head of School and Head of Department have greatly assisted me to develop a world-class research team. The infrastructure that is now in place to conduct research has definitely improved over this past few years and can be attributed a lot to the fact that a dedicated Head of Research is now in place within the Institute. In particular, the availability of research courses within the Institute greatly assists PhD students and postdocs."



Dr. Fergal McCafferyREGULATED SOFTWARE RESEARCH CENTRE

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