

IARIA Fellowship Information

Brendan O'Flynn is a Senior Staff Researcher at the Tyndall National Institute, and is Head of Group for Wireless Sensor Networks Group. Since 2004 he has been defining and leading the research activities of the Wireless Sensor Networks (WSN) group. This multidisciplinary group consists of over 20 researchers comprising of postdoctoral researchers, postgraduate students, engineers and scientists.



Since 2004 he has grown the WSN Group to over **25 researchers** – Postdocs, staff researchers and students. He has secured **>5M€ in research funding** based on competitive proposals in **national and international collaborative projects**. Leveraging off his applied research project background, much of his research budget is based on **industry partnerships** that he has developed with Irish industry and multinational corporations. This has resulted in direct funding for applied research contracts, national agency funded projects and sponsorship of **postgraduates** under his supervision.

As a researcher, Brendan has **published extensively** (Publications>200, Citations>1000) on:

- *System integration*/miniaturized sensing systems
- *Hardware/software co-design* of embedded systems
- *Deployment* of reliable and robust complex systems

Brendan's key inputs to the Tyndall Institute in helping it to achieve its strategic objectives are in the areas of: Science, Technology and Innovation, Enterprise, Innovation and Growth, Education and Training, Support to Irish Academia, Communications, People and Sustainability – through the development, management & coordination of a world-class, multidisciplinary research group focussed on delivering Smart Sensors, Circuits and Systems.

The research focus of the WSN group is in the development of next generation embedded systems. These low-power consumption solutions are designed to meet the requirements associated with the indefinite lifetime deployment of low maintenance context aware sensing systems for deployment in the world around us so as to create information.

Brendan O'Flynn is **unique in UCC** in developing and managing a research team which **balances research excellence with the delivery of high impact commercial outputs**, in the form of technology and people transfer to Irish industry thus enabling sustainability and growth in Irish start-ups, SMEs and multinationals. Brendan has a track record of **identifying and protecting novel IP** arising from his research and his group has executed 12 **licenses** over the past 5 years, for which he received a University "Impact Award" from the UCC president in 2014.

The **industry-focused, applied research agenda** that he has developed is core to the activities of the WSN Group he directs resulting in the following transfer of technology/IP and staff to industry. As a funded investigator on the SFI Centre CONNECT, Brendan WSN group is developing system level hardware and software for the "Internet of Things" and smart sensor integration. These are cross cutting research activities which address the requirements of the different applications the team is investigating – energy/building monitoring, environmental monitoring and health/motion monitoring.

Brendan has an extensive track record in publishing this research in peer reviewed journals and conferences. Brendan has supervised to completion six Phd students and seven research masters students and has published extensively in this field

Brendan is an IARIA research fellow (<http://www.iaria.org/fellows.html>) and is a reviewer for multiple Journals committee member on several conference panels internationally.