

**INSTITUTE:**

Waterford Institute of Technology

**RESEARCH AREA:**

Information and Communications Technology

**Professor Willie Donnelly:  
Translating research into economic impact**

**Excellent Researchers  
Delivering Impact**

Research Development



Institutes of Technology Ireland

Professor Willie Donnelly is the Head of Research and Innovation at Waterford Institute of Technology (WIT). Since taking up the position in 2003, he has established WIT as a leading research institute, with 400 research staff and research students and €130m in research contracts secured in the period 2003–2013.

Professor Donnelly has supported the strategic development of the Institute's research in the key thematic areas of Telecommunications Software and Systems, Pharmaceutical and Molecular Biotechnology, Materials Engineering and Eco-innovation as well as significant advances in health, business and entrepreneurship research.

Willie is also founder and director of the Telecommunications Software and Systems Group (TSSG), a world-class research centre for mobile services and communications management. He founded the TSSG at WIT in 1996, growing it from 3 to 120 people since that time and generating over €80M in competitive funding. Willie has positioned the TSSG as one of Europe's leading research centres in the European Future Internet programme. Indeed he represents Ireland on the European Future Internet member states Forum (FIF).

He has led over 40 major European research and commercialisation projects since 1996, creating major economic and employment impacts for the south-east. Prof. Donnelly's main research interest lies in telecommunications network management,



*Prof. Willie Donnelly, TSSG, Waterford Institute of Technology*

with particular emphasis on autonomic network management, bio-inspired network management techniques and the challenges of managing the future internet. The TSSG postgraduate programme currently has 25 PhD students from around the world. He has strategic research partnerships with major universities in Europe, Asia and North America. ➔

**Professor Willie Donnelly** | [www.tssg.org](http://www.tssg.org)

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•→ Prof. Donnelly established the WIT Arclabs Innovation Centre in 2005, using a combination of HEA and Enterprise Ireland funding. Arclabs provides a unique research and innovation platform combining world-class research, entrepreneurial training and business development and high potential start-ups which has led to the creation of more than 500 jobs in the region. It has supported more than 200 industry/academic collaborations over the last 5 years. The partnership between TSSG and Arclabs, underpinned by their co-location at the WIT Carriganore campus, has established a cluster of High Potential Start-up companies in mobile services.

Willie is a founding member of spin-out companies FeedHenry and Zolk C. FeedHenry is a major player in Enterprise Mobile Applications in the Cloud and Zolk-C is a world leader in location based interaction technologies for tourism.

Nationally, Willie has led two HEA funded PRTL projects, M-Zones and FutureCom. Both projects played a key role in establishing Ireland as a key driver of research and innovation in communications management. He also received PRTL funding for two research buildings in WIT, which house 120 research staff and students.

Prof. Donnelly initially received funding from Science Foundation Ireland for a development grant in 2006 to investigate management solutions for communications networks. In 2009 he successfully applied as Lead Principal Investigator for a Strategic Research Cluster grant entitled Federated, Autonomic Management of End-to-end communication services (FAME). In 2011 FAME successfully completed its mid-term review, with the reviewers noting that the cluster is *"one of the largest and strongest groupings of academic researchers in network management in the world"*. ■

## TESTIMONIAL

**Prof. Willie Donnelly**  
*Waterford Institute  
of Technology*

*"The IOT tradition of stakeholder partnerships in the delivery of education for economic benefit is at the heart of the TSSG's philosophy of using research and innovation to drive economic development. This is achieved through the TSSG's open innovation platform incorporating multi-national industries, start-ups and entrepreneurs supported by a network of academic researchers, PhD students and engineers."*



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