

QUARTERLY NEWSLETTER Q1 2013

Welcome to the latest edition of the information sharing newsletter from the National University of Ireland Maynooth Commercialisation Office. Our goal is to share relevant market news and activities on the commercialisation of NUI Maynooth research. We hope you enjoy this newsletter. For more information visit:

WHY WE DO WHAT WE DO: INSIGHT 2005-2012

NUI MAYNOOTH UPDATE

Setting up and operating a viable Technology Transfer Office (TTO) is now part of every successful university / research institute strategy. This "third stream" of activity underpins the success of the institution in transferring technology for economic benefit. A successful TTO adds significant "value" to the institution in terms of attracting industry partnership and funding, ensuring highest impact for research programs, returning value to stakeholders, enriching the student experience and providing local and national economic benefit.

The NUI Maynooth TTO or Commercialisation Office, as we call it here, was set up in 2005 and further developed with Enterprise Ireland (EI) funding under the Technology Transfer Funding Initiative (TTSI). Under TTSI the Office secured additional staff and an operational budget, subject to targets, processes and metrics agreed with EI. That program ran from mid 2007 until the end of 2012 and it is useful for us to review what has been achieved under the program. The Commercialisation Office was set up with the remit to:

- formulate TT related policies and templates best adapted to the University;
- develop an institutional culture for TT;
- successfully "sell" TT internally and externally;
- attract industry and technology marketing partners; and
- deliver the highest impact metrics, such as licensing and spin-out company formation.

Over the period of TTSI, TT activity blossomed and the culture and process of commercialisation have become embedded at NUI Maynooth. Indeed NUI Maynooth is widely regarded as a significant player in TT and our culture of commercialisation, partnerships with industry and performance in TT stands out.

The figures summarise some of the metrics related to TT, (a) showing cumulative numbers of invention disclosures, patents filed, license deals completed and new spin-out companies formed, over the course of TTSI, and (b) showing a snap shot of comparison between NUIM and US average (AUTM) and EU average (ASTP) on license deals and spinouts per \$100m spent on research (the NUIM numbers are cumulative over 3 years amounting to about €70m research spend, which is close to \$100m). While NUI Maynooth invention disclosures (representing the level of activity) and patent filings (representing our ability to identify commercial opportunities) are on a par with International norms, we excel in the numbers of license deals and spin-off companies we produce. We have also developed a reputation for being industry friendly, straight-forward, transparent and professional in our engagements with industry collaborators.

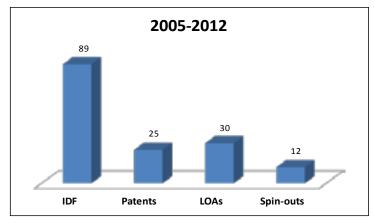


Figure (a) NUI Maynooth outputs since office inception

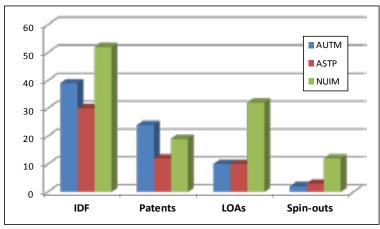


Figure (b) Average outputs per \$100m dollar research spend

Our Spin-out companies and License deals

The quality of the outputs should not be in question and our spin-outs include stand-out enterprises like Blue Box Sensors, Relational Frame Training, Mutebutton, iGeotech, Beemune, ProFector Lifesciences and Socowave; several of which won national awards. In addition to creating these companies we have participated in developing technologies which we have licensed to companies like Intel, Wavebob, Solvay, Edwards, Trinity Biotech, Cisco, OSI and Biosensia. That companies of this calibre take our technologies for commercialisation is a testament to the value of the science and engineering research programs we run.

Our Social and Economic Impact

The majority funding for the Commercialisation Office comes from EI, whose charter is governed by the Dept. of Enterprise, Jobs and Innovation (DEJI). The agenda is thus heavily influenced by the remit of DEJI and we are constantly reminded that research funding at Irish universities should have economic impact. Our relationships with industry, our undergraduate and postgraduate teaching, our technology transfer via licensing to existing companies or via new company formation all read on this impact, and we perform extremely well.

There is also a parallel story, linked closely to the role of any university. Technology itself has huge social as well as economic impact, and many of our spin-out companies will create social as well as economic value.

For example:

- The technology offered by Bluebox Sensors is now being used by large pharmaceutical companies to improve their development of drugs for CNS diseases, such as Alzheimer's, Parkinson's, Epilepsy and Dementia.
- Mutebutton will commercialise a device for the alleviation of tinnitus, a debilitating ailment striking approximately 40million people worldwide and for which there are no current successful treatments.
- Beemune aims to market agents for the amelioration of Colony Collapse Disorder (CCD), which is responsible for a worldwide crisis in bee pollination of food related crops. CCD threatens global food supply and any remedy will have huge social impact.
- Relational Frame Training is a revolutionary approach to developing the skills necessary for analytical and logical thinking, the basis of human intelligence. The technology is set to help develop the basis for intelligence in kids whose potential can be left untapped by standard academic schooling.

The embedding of Technology Transfer as a key remit of third level institutes is relatively new to Ireland, particularly relative to technology exporting economies like the USA. It is well recognised, however, that to develop any knowledge-led economy, the role of third level institutes as sources of knowledge, skills and research is essential. The EI program of TTSI has produced dramatic results in terms of culture change, partnerships and outputs. Science Foundation Ireland has recently adopted knowledge transfer or "impact" as part of their remit, and thus we should expect that pressure to perform in TT will remain embedded in the research and education story in Ireland. NUI Maynooth is well placed to continue to perform at the highest levels in this activity. The quality of research, the enthusiasm of our researchers to engage in this process, and the support for TT at senior management in the University are all key drivers in our success story.

EI BIG IDEAS SHOWCASE MARKET UPDATE



The Enterprise Ireland Big Ideas Showcase 2012 provided a public platform for the inventors and promoters of commercial opportunities developed in Ireland's Higher Education Institutes. NUI Maynooth showcased 3 technologies, 1 each from our Computer Science and Chemistry Departments and a 3rd from Relational Frame Training, a recent spinout company.



Photo: Minister Sean Sherlock (C) with Owen Laverty (L) and Tom Whelan (R) NUIM



Photo: Dr Niall Finnerty (L) and Dr Fiachra Bolger (R) NUIM



Photo: John Chambers Relational Frame Training (RFT)