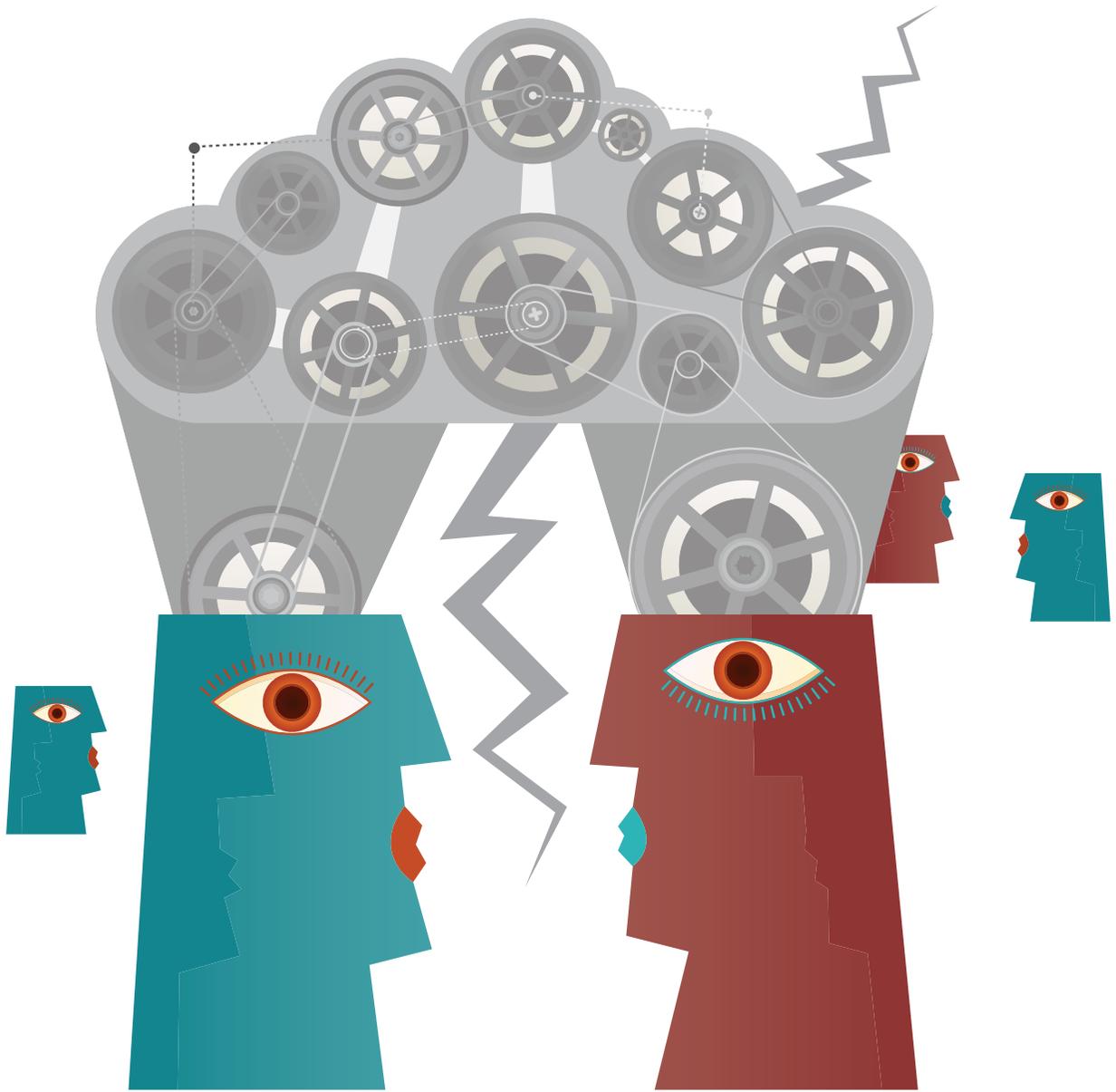


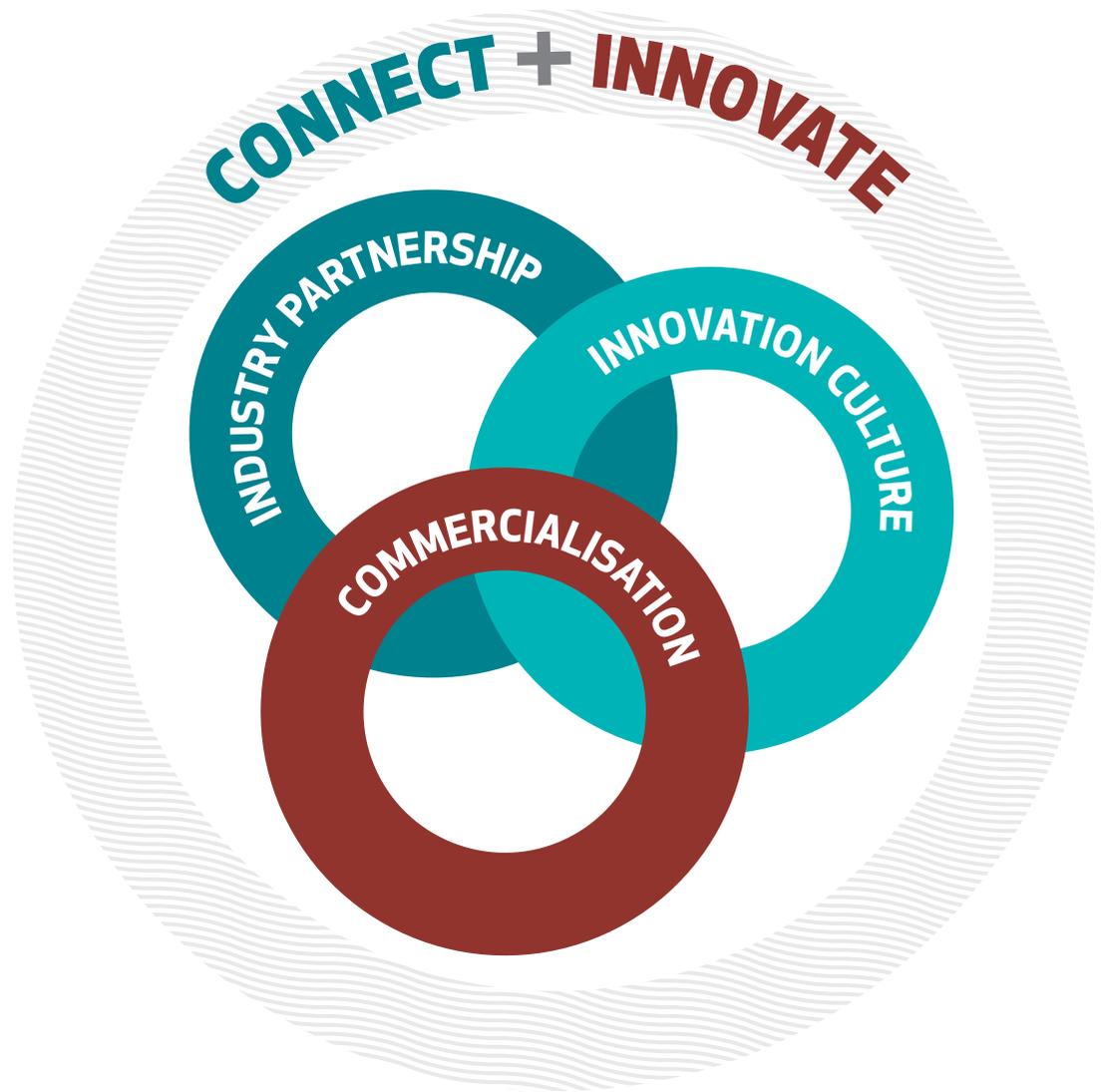


COMMERCIALISATION
NUI MAYNOOTH
CONNECT + INNOVATE



CONNECT
+ INNOVATE

2010/2011



The Commercialisation Office continues to focus on 3 pillars of activity:

- Connecting NUI Maynooth researchers with industry and the market place
- Developing a culture of research commercialisation at NUI Maynooth
- Identifying and commercialising the IP developed by NUI Maynooth researchers

The output of these 3 pillars of activity contributes to the growth and development of the knowledge economy.

This brochure summarises our 2010 activity and introduces our plans for 2011 and beyond.

INTRODUCTION

NUI Maynooth continues to be a national leader in the commercialisation of research and 2010 was another good year. Our key performance metrics are outlined below, the main highlight being that we completed 8 license deals and created 3 new spin-out companies, matching our successes of 2009. Against international standards of licenses and spin-outs per research expenditure, NUI Maynooth again ranks in the top percentiles. This performance is down to the outstanding research and the desire of NUI Maynooth researchers to see their work make not just a scientific impact but an economic one. The Office continues to be supported by Enterprise Ireland under their Technology Transfer Strengthening Initiative.

The good news is that despite the drop in NUI Maynooth research expenditure (experienced by all Irish HEI's as SFI and EI funding slowed down in 2010), the commercialisation activity pipeline remains strong for the next couple of years. News that funding conditions should improve in 2011 is welcomed by our Office, particularly the "curiosity-driven, blue-sky research" funding that is so essential to seeding truly innovative projects.

2010

2010 METRICS



3 NEW SPIN-OUT COMPANIES
13 NEW INDUSTRY LINKS
8 NEW LICENSE DEALS
13 NEW INVENTION DISCLOSURES

FUTURE PIPELINE

2011

We expect 2011 to be another good year for spin-out company creation at NUI Maynooth. There are several projects at maturity stage which we expect to launch. These include:

OPEN
INNOVATION

SPIN-OUTS

ONE



A company to commercialise a method for digitally watermarking music. This project is lead by Ron Healy, Dr. Jian Wang and Dr. Joe Timoney in the Computer Science Department.

TWO



A company to commercialise a remote surveying device with application in wireless environmental monitoring. The project has emerged from developments by Dr. John Dooley in the Callan Institute and a partner security group.

THREE



A company to commercialise novel electro-spray technology with applications in drug delivery and transfection of biological payloads. This project is led by Dr. Shirley O'Dea and Dr. Michael Maguire with clinical input from a leading pulmonary clinician.

FOUR



A company to provide online IQ enhancements for children, based on ten years of research by Dr Bryan Roche of the Psychology Department.

Further down the line we expect to see new opportunities emerge from existing NUI Maynooth commercialisation projects such as:

VIRTUAL INSTRUMENTATION MANAGEMENT

A UNIVERSAL PLATFORM FOR WAVE ENERGY CONTROL OPTIMISATION

NOVEL COMPOUNDS FOR CONTROL OF TYPE 2 DIABETES

SENSORS FOR CLINICAL MONITORING IN POST- OPERATIVE CARE

A PLATFORM OF BIOSENSORS FOR DETECTION OF EMBEDDED BIOMARKERS FOR COUNTERFEIT DETECTION

LICENSE
DEALS

COMMERCIALISATION

COMMERCIALISATION OF ¹ NUI MAYNOOTH RESEARCH

2010 SPIN-OUT COMPANY ACTIVITY

NUI Maynooth spun-out 3 new companies in 2010, all based on research work carried out at the University over the last couple of years.

They are:

- **Mutebutton Limited**, founded by Dr. Ross O'Neill from the Hamilton Institute, to commercialise technology developed by him, Dr. Paul O'Grady and Prof. Barak Pearlmuter. The technology is set to revolutionise the treatment of Tinnitus, a debilitating disorder in which the sufferer perceives pathological noise, created by the sufferer's brain in response to incomplete audio input from imperfect hearing. The Mutebutton device uses patent pending sensory substitution technology to augment the sufferer's hearing via taste and touch receptors.
- **Aniscan Limited** was founded in Nov 2010. The company was formed to commercialise technology developed by Dr. Ronan Farrell and Jim Kinsella of the Callan Institute, in collaboration with the company promoter Stephen Murphy. The company will launch a product and related service for health monitoring of high value animals such as race horses.
- **Cerebeo Limited** was founded by Dr Jennifer Craig and Prof John Lowry. Cerebeo will supply high quality, niche pre-clinical research to the pharmaceutical industry. The company will focus primarily on the screening of lead compounds for developers of therapeutics for diseases such as Alzheimer's and Schizophrenia etc. using models incorporating novel sensor technology.

LICENSING & SUPPORT OF PREVIOUS YEARS'

SPIN-OUT COMPANIES

We also continue to support the license deals and spin-out companies we completed in the last couple of years. Some highlights include:

Socowave completed a funding round of €3m in 2010 allowing them to continue on their path to commercialise their mobile communications technology.

Beemune grows from strength to strength and is now in late stage testing of three separate products for bee health. Large scale trials are currently underway in the US with two novel treatments for Nosema and the Varroa mite.

Bluebox Sensors had a very successful 2010, with increased revenue from the previous year and a continued expansion its customer base.

iGeotech provides backend solutions to enable Geospatial data services and expects to deliver its own brand front end geospatial consumer products this year on the back of private investment.

OPEN INNOVATION

The Innovation Value Institute (IVI), originally formed through a strong link between NUI Maynooth and Intel, has been selected to host the EI/IDA IT Innovation Competence Centre. The consortium's more than 40 members are among the world's leading organizations and include Chevron, Intel, Microsoft, Google, SAP, BP, Ernst & Young and The Boston Consulting Group.

**BUSINESS
DEVELOPMENT**





**CONNECT
EVENT 2011**

INDUSTRY PARTNERSHIP

**COLLABORATIVE
RESEARCH**

7

**CONNECT
+ INNOVATE**

CONNECTING INDUSTRY² WITH NUI MAYNOOTH

COLLABORATIVE RESEARCH

2010 saw NUI Maynooth sign 12 new partnership contracts with industry. These links are based on research collaborations and range from agreements with SME's under the Enterprise Ireland Innovation Voucher programme to collaborations with multinational companies where NUI Maynooth has relevant research excellence. NUI Maynooth has over 50 ongoing industry collaborations across all disciplines (excluding Innovation Value Institute (IVI) which alone has over 40 links), a strong indication of the outward facing culture at NUI Maynooth.

CONNECT 2011

The Commercialisation Office will host Connect 2011 in April at Carton House. The event has a similar format to the 2009 inaugural event at which NUI Maynooth displayed its key research activities in science, business and engineering. The event focuses on networking and relationship development, interspersed with short talks (from entrepreneurs and industry partners) on the themes of innovation, technology commercialisation and economic growth. We expect a similar turnout to the Connect 2009 which exceeded 250 delegates.

BUSINESS DEVELOPMENT

A core part of the remit of the Commercialisation Office is linking NUI Maynooth academic research with industry product development. There are significant advantages for both parties: industry can implement research programmes or influence basic research which they simply cannot afford to do themselves but is vital to their future product development; while academic research informed by the market place allows researchers to tackle problems of key concern to business and society. To continue to drive toward a national agenda of innovation and knowledge intense enterprises, it is essential we continue to invest significantly in research and development and improving this academia-industry link is a vital component.



**COMMERCIALISATION
SKILLS**

**BUSINESS
PARTNERS**

INNOVATION CULTURE

ENTREPRENEURSHIP

SEEDING INNOVATION AT NUI MAYNOOTH ³

INNOVATION AND COMMERCIALISATION OF RESEARCH

The Commercialisation Office will run its Generic Skills module "Innovation and Commercialisation of Research" GSE2 through May of 2011, following its successful launch last year. The module aims to introduce early career researchers to the culture of commercialisation of research and equip them with the skills required to commercialise the outcome of their research, to provide them with the ability to interact with industry and to improve their skills to innovate and act with an entrepreneurial mindset.

The module covers the basics of intellectual property, technical marketing, product development, spin-out company formation and research commercialisation contracts. Also included are a couple of workshops and exercises, including preparation of a marketing pitch, culminating in a group business plan competition. These are very useful in informing the student how to present their ideas as a business opportunity rather than as just interesting science, a practical approach which then complements their academic training.

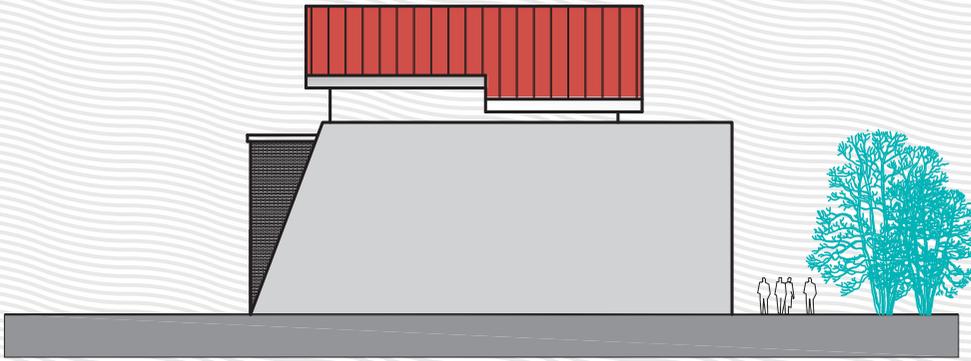
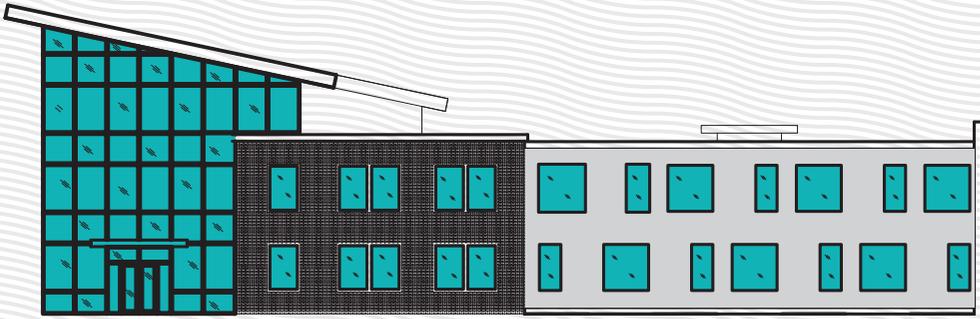
The current economic climate requires that graduates have the know-how, competencies and confidence to set-up and deliver new commercial opportunities. Our detailed case-studies and practical workshops facilitate this in a relaxed hands-on environment.

STUDENT ENTREPRENEUR COMPETITION

The Student Entrepreneur Competition, run by the Commercialisation Office, is now in its fourth year and continues to grow in both quality and quantity of entrants. This year's competition kicked off in January 2011, where the competitors pitched their concepts in front of an internal judging panel. The groups are mentored and asked to pitch again, after which a number are then selected for the following round where external business people review the business plans and pitches. Four competitors are then selected for the final, to take place in April in an open-to-the-public Dragon's Den format. The total prize fund on offer is €10,000, with €6,000 earmarked for the winning team.

BUSINESS PARTNERS

Our extended team of business partners continues to be a vital part of our commercialisation process. The team now includes more than 100 professionals in various roles such as marketing, product development, legal, IP, business owners, clinicians, investors from organisations of all sizes. This group remain our sounding block to help ensure the commercialisation projects we focus on are "market-informed" and we continue to deliver solutions to "problems that are worth solving".



Artist's impression of the Innovation and Incubation Centre to be located on the North Campus

THE CENTRE WILL HOUSE SPIN-OFF AND SPIN-IN COMPANIES ACROSS A RANGE OF DISCIPLINES
AND ATTRACT GROWTH COMPANIES TO ENGAGE IN COLLABORATION WITH THE UNIVERSITY

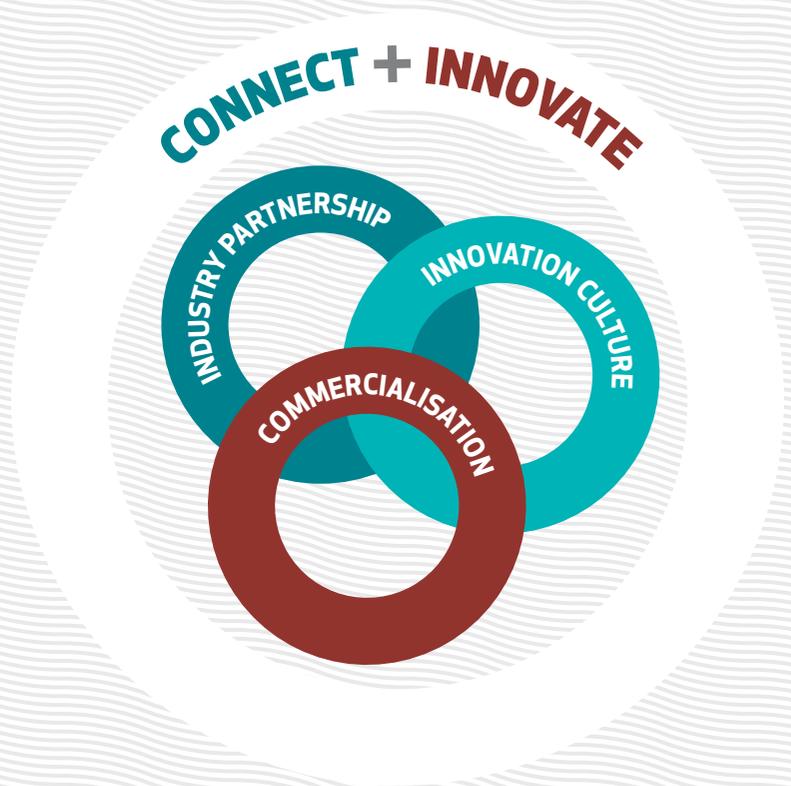
NUI MAYNOOTH AND THE KNOWLEDGE ECONOMY ⁴

INNOVATION CENTRE

NUI Maynooth has secured planning for the development of an Innovation and Incubation Centre to be located on the North Campus. The University has a committed budget to support the construction and running of the building and we have applied to Enterprise Ireland for supporting funds. The Centre will house spin-off and spin-in companies across a range of disciplines and will allow NUI Maynooth to both cater for its own spin-out companies and attract growth companies to engage and collaborate with the University. The Centre will offer support services and mentoring to its clients.

CONNECT
+ INNOVATE

2010/2011



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