



# Touch PAPER

Newsletter of IGNITE Technology Transfer Office, NUI Galway.

## Directors Words

### University-Industry Collaboration

A key area of priority for Ignite TTO NUI Galway is the facilitation of industry collaborations, leveraging NUI Galway capabilities to assist small companies in their research & development efforts while also enabling NUI Galway researchers to bridge the gap between basic research and commercialisation. It was identified in the Report from the Innovation Task Force that Ireland's future success is dependent on increasing levels of innovation across all sectors of enterprise in the country. New technology based companies due their size regularly have limited capacity for R&D and innovation. Unlike large established enterprises, which have access to significant resources internally, they must seek other mechanisms, involving outside resources, to conduct their research. It is widely recognised that small and medium companies (SMEs) stand to derive the most benefit from such R&D collaborations with universities. NUI Galway plays an important role in this network of collaborative research.

Building relationships, partnerships and trust between industry and academia is of utmost importance to Ignite TTO and one which is of mutual benefit to both parties particularly when it leads to commercial success.

Enterprise Ireland offers a range of supports to fund collaborative research and innovation projects. The Innovation Voucher scheme is for small companies to facilitate interaction between SMEs and higher education institutions (HEI) enabling the company to have a research project carried out for them by the HEI. The Innovation Partnership initiative facilitates the coming together of companies and third-level researchers to work on specific R&D projects. Industry Led Research Programmes enables a number of companies to come together to focus on particular sectoral areas while Competence Centres, a joint initiative between EI and the IDA, consist of clusters of companies working together to tackle common research challenges and drive opportunities for innovation, growth and job creation.

Ignite TTO promotes collaborative research to both academics and industry and assists both parties to find the right expertise. This happens both internally as we find the most suited NUI Galway researchers to carry out research, or externally to secure the right industry partner for the project.

The advantages for a business engaging in collaborative research with NUI Galway are many:

1. Increases the research & development potential of the business.
2. Gives the company access to new technologies developed in the HEI sector.
3. Provides a cost-effective approach to innovative product & process development
4. Provides access to a range of funded programmes.
5. Presents opportunities to become a business partner or investor in a campus spin out.
6. Provides access to expertise, facilities, equipment, resources & business innovation centres.

To facilitate this collaboration, Ignite TTO is proactive in bridging the cultural gap between industry and academia. This is achieved through education and communication via NUI Galway-run entrepreneurial programmes, workshops and industry open days. Universities have long been known for their scientific breakthroughs and knowledge generation, but only through cooperative efforts with the private sector can successful commercialisation be achieved. It is ultimately the responsibility of both universities and enterprise to ensure such cooperation for mutual success.

We at Ignite TTO NUI Galway welcome contact from industry so please contact us to see how NUI Galway can help your business.

### Social Media madness has hit the Ignite TTO

Yes the social media frenzy has arrived in Ignite Technology Transfer Office. The Ignite TTO is currently active on Twitter, YouTube & LinkedIn and excited about using these channels of communication to work with you. Join our social networking groups and you will be the first to hear the latest and greatest in technology transfer opportunities as they arise from NUI Galway.

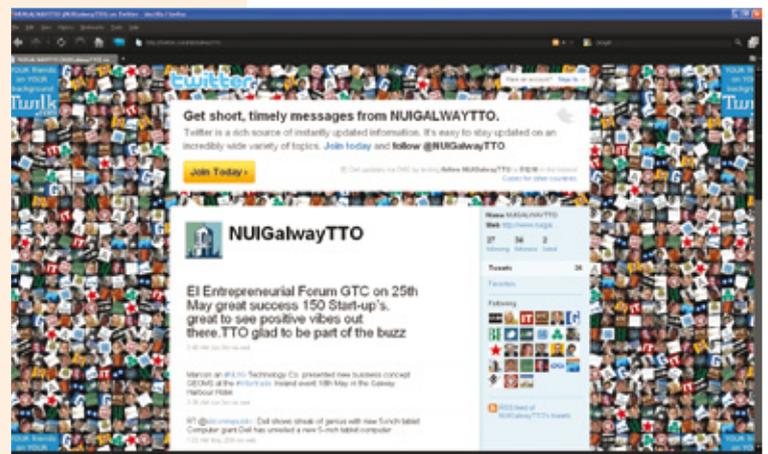
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Says Fiona Neary Ignite TTO "Social media is fast becoming an important element of daily business life and changing the very nature of business relationships, creating limitless opportunities for selling, prospecting, promotion and branding of your offering. The immediacy of online networks makes social media expertise a certain necessity for success in today's competitive marketplace"

So go ahead and become social...



## Start-Ups in 3rd Level Innovation Centres Really Do Work

A Company profile : **Marcon Computations** has developed strong links with Ignite TTO office

**MARCON COMPUTATIONS INTERNATIONAL**  
Advanced Engineering and Environmental Solutions

### Location:

NUI Galway Business Innovation Centre

### Name:

MarCon Computations  
www.marcon.ie

### Sector:

Environmental Management Software

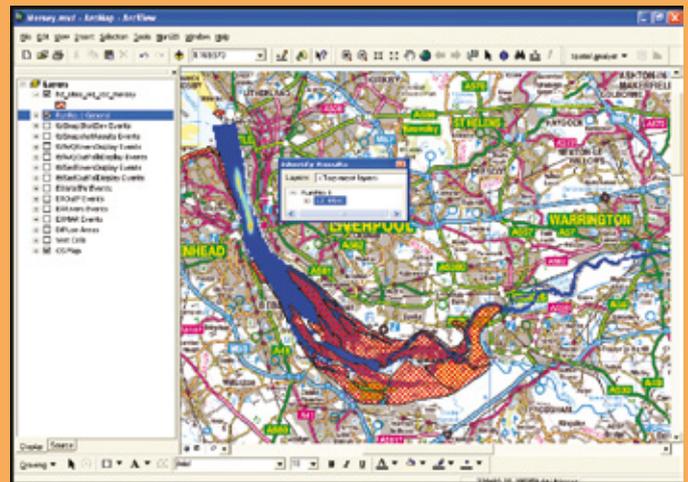
### Why does the Company Stand Out?

We have a reputation for designing powerful and robust, user friendly software that empowers environmental managers and stake holders. To date our focus has been on the bespoke MarGIS, a framework that integrates sophisticated fluid dynamic models into a GIS software system thus automating time-consuming tasks. The English Environment Agency uses MarGIS to assess the impact of pollution discharges into all the major bays on its west coast, and has declared it as a 'best practice'.

In Ireland, our software is being used to aid aquaculture natural resource management, and has been promoted by the U.N. Food & Agriculture Organization as a case study in how to use software to promote sustainable aquaculture.

### Origins of the Company:

The company in its current form is the result of a management buyout in 2006 and is privately owned. The change in ownership has brought with it a shift in emphasis. We are moving away from consultancy and bespoke software development to product development for the commercial market.



### Regional Impact of the Company- e.g. Employment.

The core team remains below 5. However there are plans to expand to 16 at a future date. This expansion is dependent on obtaining development investment for our new product initiatives.

### How Company is Progressing Financially and Examples of Funding Received.

To date we have self funded through contracts the development of our flagship GIS product MarGIS and to cover operating costs. We did take part in an Innovation partnership project with Enterprise Ireland and NUI Galway, which boosted our research and development efforts.

### Future Plans

To develop green software for the world aquaculture market that will streamline the process of sustainable shellfish farming while minimizing its carbon footprint.

To pursue public sector contracts in the United States and apply our existing technologies to the U.S. coastal regions.

# Profile

## NUI Galway's Enterprising Academics Participate in Innovative Training Programme

**N**UI Galway Ignite TTO form part of the Accelerating Campus Entrepreneurship (ACE) Initiative who recently hosted a training programme on embedding entrepreneurship into the curriculum. The aim of the programme is to provide a forum for academic and research staff to explore the possibilities of embedding entrepreneurship education within their institution.



The programme intended to promote an awareness of the philosophical and practical issues relating to enterprise education whilst providing a practical toolkit for effective delivery of entrepreneurship education. Through the interactive format of the programme, participants were able to share best practice for sustainable pedagogies in entrepreneurial learning and develop a network of excellence for enterprise educators within the HEIs in Ireland

The programme involved a two-day residential on the 20th and 21st May at Cork Institute of Technology. NUI Galway were active

participants with five academics attending. Michael Campion and Geraldine Grady represented Business whilst Ger O'Connor and Hugh Melvin attended from Science and Engineering. The ACE consortia were delighted have Kathryn Cormican from NUI Galway host a workshop dedicated to embedding entrepreneurship into engineering.

"The feedback from participants has been excellent", NUI Galway ACE Programme Manager Maébh Coleman reports, "delegates from NUI Galway made such a huge contribution to the programme, it was a valuable learning experience for all who participated".

## Yes - Entrepreneurship is strong in the West of Ireland

Well done to all the organizers of the WEI Entrepreneurial Forum held in the Galway Technology Centre on May 25th 2010. There were a host of Business supports available such as Government agencies, third level institutes, financial institutes, advisors etc, and a well thought out line up of speakers. The event was a tremendous success with over 150 start-ups/SME's/Entrepreneurs turning up on the day to mingle and network with key support organisations for their business development opportunities.

## Challenges in Wound Care Press Release

NUI Galway and the University of Huddersfield, West Yorkshire, UK, have signed a Memorandum of Understanding to promote cultural, scholarly and commercial interaction between the two institutions and to collaborate on the development, and dissemination, of an E-Learning resource for wound care education.

Dr. Caroline McIntosh, Head of Podiatry (NUI Galway) and Dr. Karen Ousey, Principal Lecturer, Department of Nursing (University of Huddersfield) have jointly developed an E-Learning resource entitled "Challenges in Wound Care" with assistance from Leanne Cook, Vascular Nurse Specialist for Mid-Yorkshire NHS Trust, and Lecturer Practitioner at the University of Huddersfield. This is an interactive e-learning resource for practitioners involved in wound care and tissue viability. The tool aims to offer an inter-professional approach to wound care and tissue viability issues encouraging an awareness of professional roles and the need for liaison and referral to ensure optimum patient care and enhance professional practice.

The e-learning resource was initially funded by the School of Human and Health Sciences, University of Huddersfield, and was subsequently funded by the Yorkshire and Humber Strategic Health Authority, UK. The e-learning resource is to be launched on the Strategic Health Authority's e-learning platform in May 2010.

Dr. Caroline McIntosh has published a number of peer-reviewed papers in the field of tissue viability, particularly on the diabetic foot and undertook her PhD in the

Entrepreneurship Forum 2010 was a unique opportunity for new innovative companies and individuals with business ideas to meet with over 20 support organisations in the one room to tease out new business ideas. The Forum included workshops such as:

**Social Bits** presented on the opportunity of Social Media for business.

**eMedia** discussed the market for iPhone Apps

**Mazars** discussed the importance of a good business plan for start-ups seeking finance

**Magnetti Foods** present a case study on the development of their successful food business.

**Starlight** is a company that builds web apps and creates animation and the company has a strong focus on creativity.

Each support organisation had its own space provided including the Ignite TTO NUI Galway and the amount of innovativeness, creativity, new business concepts and positive vibes visiting the stands looking for assistance was inspiring. It is obvious there is no shortage of new business concepts but the key part of turning these business concepts into a commercial reality is being surrounded by good business supports and to get most of these supports in one room all together was a good initiative.

Overall a great event and more of these Entrepreneurship Forums are a must for the future.

## Ignite TTO Entrepreneurial pilot on Market Validation a success

NUI Galway Ignite TTO & DERI collaboration with J.E. Cairnes School of Business and Economics. For the past 3 months, John McGuire Technology Transfer Office has worked closely with Dr. Ann Torres (Lecturer in Marketing) John and Ann have designed a pilot scheme to get students involved and closer to real-world Market Validation.

Yesterday, six teams of Masters Students presented their Market Validation Reports to a panel of experts in the field. Congratulations to all the Students on a job well done and a very successful Pilot.

### The Background:

After meeting over coffee in the Cairnes Business School, John and Ann decided that something new was required, John faced a problem, and he had to evaluate some NUI Galway technologies but had no resources to

provide market validation. Ann was open to something new, she needed her students to get some real-world experience with Industry professionals during their Research Methods Project and assignment.

"It made absolute business sense to team up and collaborate, A win-win for all departments, we should do more of this type of collaboration and utilize the resources within the University." John McGuire, TTO.

The technologies used for this pilot were from our Digital Enterprise Research Institute, ATOM and SEDICI. The Inventors (Krystian Samp and Slawek Grzonkowski) also played a big part in this pilot and attended Q&A sessions for the students during the project which helped us succeed with this pilot project. "It was great to receive different views and Marketing Validation on my patent pending technology, I was impressed." Slawek Grzonkowski, DERI

NUI Galway Ignite TTO are very excited about the success of this pilot project and both John and Ann are committed to run this program again next year.

need to build and disseminate evidence-based wound care. Dr Caroline McIntosh and Dr Karen Ousey have also co-edited the text "Lower Extremity Wounds- a problem-based learning approach".

Dr. Karen Ousey is a principal lecturer within the School of Human and Health Sciences at the University of Huddersfield. Her clinical background is in orthopaedics and tissue viability and her research interests include problem-based learning as a learning and teaching strategy; quality issues and tissue viability. Karen has published in various journals in the area of tissue viability. Additionally she has authored the text 'Pressure area care'.

Dr. Caroline McIntosh engaged with the Technology Transfer Office at NUI Galway and has worked closely with John McGuire (Commercialisation Executive) for advice and help around commercialising their invention. John and Caroline are collaborating on commercial models and will be presenting this to the HSE and other interested parties in the near future.

"This offering has great potential and I firmly believe there will be global demand for such content. It's a pleasure to work with committed researchers that have an interest to commercialise their inventions" John McGuire, Commercialisation Executive, TTO, NUI Galway.

## Embedded Entrepreneurship at NUI Galway

NUI Galway has commenced their Spring/Summer calendar of events for academic researchers with a full day event aimed at encouraging students to capitalise on the potential of their academic research. Around 120 of NUI Galway's science and engineering PhD students participated in this year's event on 15th April 2010 which encouraged students to think about entrepreneurship as a viable career option.

The event included presentations on starting up, spinning out and intellectual property and included a 'Dragon's Den' competition based on poster exhibitions from around 120 science and engineering researchers who participated.

NUI Galway entrepreneur in residence Alan Phelan provided a keynote speech on the how's and why's of startups whilst PJ King



*Pictured at the event are L-R: PJ King, Dr Kathryn Cormican, Alan Phelan, Dr Peter Corcoran and ACE Programme Manager Maébh Coleman*

included a frank commentary on the do's and don'ts of starting a technology company. The session was chaired by the faculty Dean and Vice Dean and the group were joined by SFI, IRCSET and law firm FR Kelly.

Maebh Coleman ACE Programme Manager at NUI Galway says 'the ACE message is gaining momentum at NUIG and with successful events like the research day

becoming more and more common across campus, we are looking forward to a very bright and entrepreneurial future for our graduate scientists and engineers'

Further information:  
Maebh Coleman ACE Committee: Email: [Maebh.coleman@nuigalway.ie](mailto:Maebh.coleman@nuigalway.ie)  
Tel: +353 91493550

## NUI Galway 'Smarter Shopper' project shortlisted for €50,000 Enterprise Ireland Student Enterprise Awards 2010

A team of students from NUI Galway have made it to the final of this year's Enterprise Ireland Student Enterprise Awards with their 'Smarter Shopper' project. They are one of 15 teams that have been selected as finalists in the hotly contested competition, from an original application list of 250 students. The winners will be selected at the national final, which takes place in June.

The shortlisted NUI Galway project team members, Stephen Lenihan, Christopher Divilly and Eamonn Connolly, have come up with an exciting project called 'Smarter Shopper'.

The Smartphone application allows you to generate shopping lists easily by scanning items ; it then automatically queries your local supermarkets/retailers online websites to extract prices and generates a price comparison to let you know where to go to get the best deals! The students mentor is Dr. Hugh Melvin from the Discipline of Information Technology.

The Enterprise Ireland Student Enterprise Awards, now in their 27th year, are Ireland's biggest and longest established third-level student enterprise competition. It offers an unrivalled prize fund totalling €50,000 in cash and mentor support, for the national and category winners.

Congratulating the team on its success, Seamus Bree, Enterprise Ireland's West Region Director, said: "These awards are a really important opportunity for third level students to test their flair for business. They get great experience working as a team, and become more confident of their sense of judgement, more adept at decision-making and developing ideas, and more resourceful

in making their ideas a reality. The Enterprise Ireland Student Enterprise Awards play a very important role in promoting and harnessing the research, innovation and entrepreneurial talent of our third level students, and I wish the NUI Galway team every success in the national final."



*Pictured are L-R: Christopher Divilly, Stephen Lenihan and Eamon Connolly.*

## REAP the rewards of Industry – Academia Partnerships

The REAP project (Road map for Employment-Academic Partnerships) is a collaborative project involving 8 significant Higher Education Institutional partners – one of which is NUI Galway. The main aim of this project consortium is to engage an HEI, the employer and the learner in a broader, flexible, expandable partnership arrangement for mutual benefit.

This consortium proposes to change the nature of the relationship between the education provider and the workplace by the development of a partnership model that recognizes and values the needs and contributions of the worker, the workplace as a centre of learning and the higher education institutions as key service providers.

Many examples of excellent interactions and partnerships already exist in each institution but unfortunately these are isolated cases and successes and are not always institutionally embedded in the way that the Higher Education establishments “do business”.

Industry – Academia interactions are beneficial and strategically important to both organisations. With this in mind, the REAP project has the following aims:

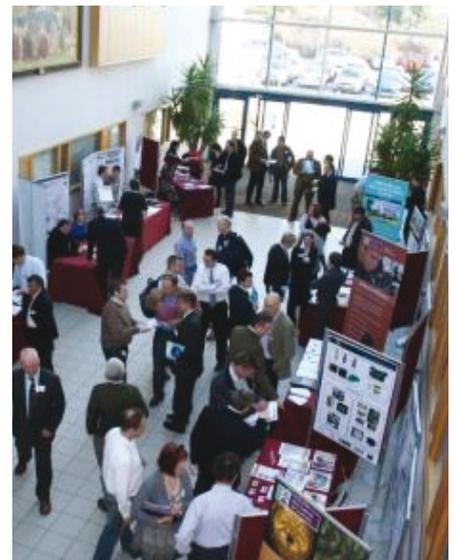
- Develop a shared vision of what this partnership can deliver for both parties with workable guidelines
- Have a greater understanding of the challenges and barriers to this partnership
- Identify methods on how industry and academia can collaborate:
  - Academics/researchers into the workplace
  - Develop specialist courses for industry partners
  - Promote Undergraduate co-operative work placements
  - Employers into education
  - Professional postgraduate programmes

In order to strengthen one element of the employment-academic partnership, the REAP project in conjunction with the NCBES (National Centre for Biomedical Engineering Science) here in NUI Galway recently hosted an interactive showcase for industry entitled “Enterprise & Technology - The R&D Challenge”. This successful event saw over 50 companies networking with the NCBES scientists, engineers and clinicians exploring the various avenues for collaboration including use of equipment, facilities and expertise available in the NCBES.

REAP plans to host another such Industry Day in the autumn of 2010 with another key research centre in NUI Galway.

If your company/business would like to see a particular research topic or indeed a centre showcased, then contact one of the REAP team members at [niamh.corcoran@nuigalway.ie](mailto:niamh.corcoran@nuigalway.ie) or 091-495677.

Further details on the REAP project can be found at [www.reap.ie](http://www.reap.ie)



Showing the recent NCBES Industry event

## A good year for some companies despite the barriers

NUI Galway is looking for new companies to join its successful Business Innovation Centre on campus. The centre offers office and bio facilities and is ideally suited for start-up, early stage technology businesses. Also on offer is access to facilities, equipment and know-how across the University, with additional support available from NUI Galway’s Ignite Technology Transfer Office.

Dr Neil Ferguson from NUI Galway’s Ignite Technology Transfer Office, says: “The aim of the incubation centre is to create an environment, which promotes entrepreneurship and new business growth. Companies currently based at NUI Galway have gone from strength to strength, despite the difficult economic climate”.

Some of the companies currently based at NUI Galway include network monitoring solutions company Netfort Technologies,

Medical Device company Zuresa, learning solutions company Learn Skills, 3D content company RealSim, online accounting solutions provider SwiftAccounts.ie, software company DSX Ltd and many more. It is the energy, drive and commitment shown by these companies which will drive Ireland’s Smart Economy forward with successes such as; Netfort Technologies increased profitability in 2009, Learn Skills launching SEEK Academy, RealSim awarded High Potential Start Up status by Enterprise Ireland, Zerusa recently received both the CE mark and FDA clearance for its innovative Next Generation Guardian II Hemostasis Valve and SwiftAccounts.ie on target to go live this summer

Shane Hayes from DSX Ltd, which has been based at the University since its inception in 2006: “NUI Galway Business Innovation Centre is a great place to do business, because of the workspace suitability for start-ups, the technical infrastructure, as well as having research and industry located together”.

For more information on our Business Information Centre and our existing client companies please visit our website on: <http://www.nuigalway.ie/tto/centre/index.html>



Ignite TTO Innovation Centre, NUI Galway

## Information Start-Ups need to know.

### Directors Duties

With corporate governance standards under ongoing review and a heightened regulation of corporate compliance, the company director, now more than ever, plays a crucial role in monitoring and ensuring corporate compliance. Whether you are contemplating a start-up company, or you have already been appointed or act as a company director, it is essential to be aware of, and indeed fulfil, the legal duties and responsibilities attached to such an important role.



Laura Myles

Remember, the directors have, in the first instance, a fiduciary duty to the Company and not to its individual members (shareholders) or creditors. The directors must act in good faith and at all times in the best interests of the Company as a whole, and not for their own secret or personal gain. This means carrying out their functions with diligence, skill and due care. It also involves avoiding conflicts of interest and making all necessary (and full) disclosures of interests to the Company. Typically, executive directors are expected to devote all of their working time to the Company.

Other important duties include, but are not limited to:

- keeping proper books of account and records;
- preparing and timely filing annual accounts and attending to all other filing requirements (e.g., Companies Registration Office);
- conducting an annual financial audit;
- convening or participation in board meetings;
- convening annual and extraordinary general meetings of the Company;
- maintaining a Company register of members;
- ensuring compliance by the Company with its obligations under the Companies Acts.

This list is merely illustrative and is not exhaustive. The duties and responsibilities of a Company director are enshrined in law, both at common law and under statute. With regard to each Company, the Company delegates certain powers and duties to its directors. These are dealt with under the Company's Memorandum and Articles of Association and any separate management service agreement that may exist between the Company and the directors concerned. Where a director also acts as the Company secretary, as is often the case, additional duties and responsibilities would also apply for the fulfilment of this function.

With the financial crisis focusing attention strongly on corporate compliance matters and the severe penalties for noncompliance, clearly, this emphasises the importance of all directors (even nonexecutive directors) keeping themselves informed about their Company's business and their duties as directors of that Company. Recent court decisions have also expressed this view.

For more information or advice on this topic, please contact TradeSecrets Limited (TSL) at [law@tsl.ie](mailto:law@tsl.ie), or 091 790330. © June 2010 TSL.

## Technology Snippets: Calling all Bio Companies - are you interested?

### RiboTech – a platform molecular diagnostic assay for the detection of microorganisms

NUI Galway have developed a novel platform Nucleic Acid-based diagnostic assay based around a novel gene sequence LepA. This novel gene sequence allows for the precise identification of bacterial species, and has been shown to identify specific organisms from closely related species. It is also highly sensitive detecting single figure copies of an organism present in a sample. RiboTech has been developed by our Molecular Diagnostics Research group (MDRG) who have successfully commercialized diagnostic assays to 3 of the World's 6 largest Diagnostic companies. This technology which is subject to a patent application, is available for license or collaborative co-development.

For further details check out:  
<http://www.nuigalway.ie/tto>



### Novel miRNA targets for the treatment of Cardiovascular Diseases

miRNAs represent a new and exciting class of novel therapeutic for a host of human diseases. This technology, developed by Prof Afshin Samali, describes a range of novel miRNAs and their protein target which can be utilized as a Cardiovascular Disease therapeutic. This technology which is subject to a patent application, is available for license or collaborative co-development.

For further details check out:  
<http://www.nuigalway.ie/tto>

## The Services Offered by the TTO:

**Manage University IP** – protection commercialization and enterprise development.

**Encourage** the establishment of spin-off companies and support a campus company programme (CCP) and start up programme (SUS).

**Establish Partnerships with Industry** and facilitate collaborative research projects.

**Manage the Campus Business Innovation Centre** and Bio-incubation facility (24 companies and 6 hot desks).

**Deliver Policy, processes, guidelines and skills development** for researchers and stakeholders.

**Build on new business partnerships** of investors, business angels and management for NUI Galway.