Innovation and Industry Engagement

Trinity has placed innovation and entrepreneurship at the heart of its strategy – from planning the development of the Grand Canal Innovation District, to the establishment of a University Bridge venture fund to enable investment in new start-up companies, to the creation of Tangent, Trinity’s Ideas Workspace, to enable student and graduate entrepreneurship.

Tangent, an exciting new initiative for the college supported by the Bank of Ireland, will provide cutting-edge innovation and entrepreneurship education, start-up company acceleration programmes, community events and supports for fledgling to mature entrepreneurs across Ireland and beyond. Examples of new programmes Tangent will run include the first ever undergraduate certificate in innovation and entrepreneurship, a national roll-out of postgraduate courses, and pan-European early-stage business accelerator programmes.

Tangent brings together Trinity’s existing programmes and initiatives including LaunchBox, Tangent’s Student Accelerator Programme, Blackstone LaunchPad, the EIT Knowledge Innovation Communities, the Innovation Academy, and the Women Who Wow mentorship programme; and it introduces new ventures: Tangent Pioneers, an international accelerator, and Entrepreneurs in the Arts, a mentorship programme for Trinity’s Arts & Humanities students.

At a time when two thirds of all new jobs are being created by companies less than five years old and new technologies are disrupting mature businesses it is critical we empower staff, students and graduates with the skills and understanding to succeed in this changing world.
For the fourth year running, Trinity is ranked 1st in Europe for producing entrepreneurs, according to The Universities Report published September 2018 by private equity and venture-focused research firm, Pitchbook. Trinity graduates have raised US $3.26 billion in funding across 212 companies between 2006-18. Trinity is the only European university in Pitchbook’s Top 50 for producing venture-backed entrepreneurs from its undergraduate programmes.

Trinity interacts with 400+ industry partners annually, ranging from multi nationals like Huawei to student start-ups such as Foodcloud. Trinity’s collaborators in 2017/18 include multinationals Nokia, GSK, Intel, DePuy, AbbVie and Pfizer, and Irish SME’s Kastus Technologies, Ceramicx, Inflection Biosciences and Kora. Trinity approved the formation of five new campus companies this year, Volograms, DataChemist, Junction Therapeutics, CroiValve and DANALTO.

Trinity was successful in the SFI Industry Fellowship Programme calls for joint projects with companies including Kastus Technologies, AbbVie Pharmaceuticals, Boston Scientific, DePuy Synthes, Nokia Bell Labs, and Glanbia. SFI research and IDA/El technology centre awards represent significant state investments in industry collaborative research. With international peer review, they provide clear validation that Trinity research is world-class and directly impacts industry.

There were six Enterprise Ireland Innovation Partnership agreements signed, seven Technology Innovation Development Awards awarded, and 15 Enterprise Ireland Innovation Vouchers completed.

Trinity interacts with all 12 SFI research centres and leads three of these centres (AMBER, CONNECT and ADAPT). It also hosts the Learnovate EI/IDA technology centre, participates in iCRAG (Centre for Research in Applied Geosciences), LERO (The Irish Software Research Centre) and CÚRAM (Centre for Research in Applied Geosciences), LERO (The Irish Software Research Centre) and CÚRAM (Centre for Research in Applied Geosciences), LERO (The Irish Software Research Centre) and CÚRAM (Centre for Research in Medical Devices).

ENABLE, a new €14.5 million SFI research programme led by Trinity was launched this year and will examine how the Internet of Things can improve the quality of life for citizens living in urban environments.

A new research partnership with global ICT leader Huawei was announced in December as part of its growing R&D footprint in Ireland. This will focus on Video Intelligence and the potential impact of artificial intelligence on society.

Staff innovation
Trinity’s success with innovation and entrepreneurship is inextricable from its success in research. Last year Trinity won €100.6 million euro in research funding, an increase of €26 million in just four years.

AMBER, the SFI-funded materials science institute headquartered at Trinity, launched ‘TRANSITION’, a five year research collaboration with DePuy Ireland Unlimited Company and Johnson & Johnson Services, Inc. The collaboration, led by Professor Danny Kelly, involves academics from Trinity, RCSI, DCU and UCD and aims to develop a new class of 3D-printed biological implants that will regenerate diseased joints.

Trinity won a major prize at the 2017 Knowledge Transfer Ireland Awards when Dr Emily Vereker, Senior Patents and Licensing Manager and Technology Transfer Case Manager for Life Sciences, Trinity Research & Innovation, was honoured with the ‘Knowledge Transfer Achiever Award’. Trinity was also nominated in another category, the “Licence2Market Impact Award” for a genetic testing patent licence in collaboration with UCD for equine performance company, Plusvital Limited.

Trinity spin-out and Augmented Reality-Virtual Reality (AR and VR) company, Volograms Ltd, secured seed investment of c.€600,000. The funding round, led by Atlantic Bridge and the University Bridge Fund will enable further commercialisation development in order to bring ‘Volograms’ next generation technology to market.

DataChemist, a Trinity campus company that uses semantic AI techniques to transform enterprise data into valuable intelligence, was officially launched by Tánaiste and Minister for Foreign Affairs and Trade, Simon Coveney, TD in August. The company raised c.€900,000 of seed funding led by Atlantic Bridge with support from Enterprise Ireland enabling them to expand their team and further develop their platform.

Trinity spin-out and medical device company ProVerum raised c.€3.5 million in series A funding. ProVerum has developed a novel, minimally invasive treatment for patients with symptomatic Benign Prostatic Hyperplasia (BPH) as an alternative to invasive surgery. This successful funding round has enabled their first human trials to start and brings their total funding since being established in 2015 to €4.6 million.

In June, an inaugural event that brought alumni and leading Trinity researchers and entrepreneurs together to showcase current work, discuss future trends and explore opportunities for engagement and collaboration was curated by Trinity’s Research and Innovation unit and Trinity Development and Alumni. Life Sciences was its focus during which panellists Dr Conor Harkin of ProVerum, Dr Lucy O Keffe of CroiValve, an early stage medical device company focused on developing a minimally invasive device for the treatment of a heart condition, and Dr Matthew Campbell, PI and entrepreneur at the Smurfit Institute of Genetics were interviewed by Professor Luke O Neill.

At this year’s Trinity Innovation Awards, Professor of Biochemistry, Luke O’Neill won the highest accolade, the
Provost Innovation Award for his outstanding contribution to innovation throughout his career. He was joined by eight other winners:

— Professor of Engineering and Arts, Linda Doyle, Professor of Medical Gerontology Rose Anne Kenny, and Dr Sabina Brennan, Principal Investigator in E-Health at ADAPT all won awards for innovative research of significant societal impact;

— Professor in Genetics Jane Farrar and Adjunct Professor Frank Boland were recognised for innovative research of significant socio-economic and commercial impact;

— Dr Matthew Campbell, Research Fellow at the School of Genetics and Microbiology and Dr Parvaneh Mokarian, Senior research fellow at the School of Chemistry and AMBER were awarded prizes in the ‘ones-2-watch’ category;

— The Lifetime Achievement Award went to Fellow Emeritus, Professor Tim Foster at the School of Genetics and Microbiology.

Student innovation
Since its inception in 2013, the hugely successful student incubator programme LaunchBox, Tangent’s Student Accelerator has created 70 startups that have gone on to raise over €9 million in funding and investment.

Ten student-led start-up teams were selected for LaunchBox this year – benefitting from coaching, expert advice, seed funding and access to incubator space and facilities. Some of the teams – including Change Donations and Work Smarter - have moved on to next-stage entrepreneur development programmes and kick-started operations with paying customers.

Change Donations is creating a platform that allows users to donate to the charity of their choice efficiently and conveniently by rounding up payments made on your debit card. Since leaving LaunchBox, Change Donations have become Dogpatch Labs residents, been accepted on to the Prince’s Trust Enterprise Programme and placed as one of just three Best Early-Stage Concepts for the Responsible Innovation Summit.

Work Smarter, which combats late payments in the construction and freelance industries, offers a comprehensive toolbox for small business owners and freelancers that combines work management tools and a unique escrow payment solution. Since finishing LaunchBox they have been accepted on the Huckletree Alpha programme, and are beta testing their platform.

LaunchBox is just one avenue through which Trinity students nurture entrepreneurial skills. The Blackstone LaunchPad campus entrepreneurship programme operates from the Berkeley Library, connecting student entrepreneurs with the startup ecosystem. Over 230 student startups have registered since LaunchPad opened in 2016, and more than 40 student startups have progressed on to early-stage funding.

The Innovation Academy, an initiative of Trinity, UCD and Queen’s University Belfast, offers innovation and entrepreneurial training to postgraduates. It won this year’s GradIreland Postgraduate Course of the Year for Design and Innovation for the Postgraduate Certificate in Innovation & Entrepreneurship.

Computer Science and Statistics Masters students, Team Imbibe, won the Dragon’s Den final of Citi’s upStart Student Entrepreneurship Programme. Team Imbibe’s start-up idea for digitized interactive psychotherapies delivered over web and mobile enabled by Amazon-Alexa won out against seven other finalist teams from innovation courses across Ireland.

The University Bridge Fund
The University Bridge Fund, a €60m fund which is exclusively focused on investing in research and intellectual property coming out of Irish Higher Education Institutions invested in three Trinity companies this year - ProVerum, Volograms & DataChemist
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