Innovation and Enterprise

For the third year running, Trinity is ranked 1st in Europe for producing entrepreneurs, according to The Universities Report published September 2017 by private equity and venture-focused research firm, Pitchbook.

Trinity graduates have raised $2.372 billion in funding across 201 companies in the last decade. This is a testament to the quality of a Trinity education, the competitiveness of the Dublin innovation ecosystem, and Trinity’s role in enabling entrepreneurship talent.

Trinity is the only European university in Pitchbook’s Top 50 for producing venture-backed entrepreneurs from its undergraduate programmes. Specific success stories over the past year include Inflazome, co-founded by Trinity alumnus and Professor in Biochemistry, Luke O’Neill, which raised €15 million in September 2017, and Plynk, a FinTech company co-founded by alumnus Charles Dowd, which raised €25 million in Series A funding in June 2017.

This year saw the appointment of Trinity’s first Chief Innovation and Enterprise Officer, Dr Diarmuid O’Brien, who will coordinate and promote a culture of entrepreneurship in the University and head the future development of the technology campus, TTech, in Grand Canal Dock. Trinity interacts with 400+ industry partners annually, ranging from large-scale multi nationals such as Google to student start-ups such as iDly. In 2016/17, Trinity collaborated with multinational companies including Huawei, Intel, AbbVie, and ALU, and Irish SME’s such as Ceramicx, Sigmoid Pharma and Ecocem Ireland. Trinity approved the formation of two new campus companies this year, Inflazome and Proverum, and in April, the Trinity Business School announced a new position: the Ryanair Professor of Entrepreneurship.
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Endowed by the Ryanair Foundation, the new professorship will teach and research in the field of entrepreneurship and innovation at the Trinity Business School, and promote entrepreneurship across the University.

Trinity was successful in the SFI Industry fellowship programme calls for joint projects with companies including Aylien, Nokia Bell Labs, Trinity Green Energies, DePuy, Logitech, Transitions Optical Ltd and Glanbia. Irish funding agencies are increasingly promoting awards to complement or precede industry funded or co-funded collaborations. SFI research and IDA/EI 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.

**Staff Innovation**

Trinity won two major prizes at the 2017 Knowledge Transfer Ireland Awards: the ‘Initiative of the Year Award’ for the University Bridge Fund, a joint collaboration with UCD, and the ‘Collaborative Research Impact Award’ along with Ceramicix Ireland Ltd. Trinity was nominated in two other categories, the ‘Licence2Market Impact Award’ with iDly Systems Ltd and the ‘Mature Spin-out Company Impact Award’ with Solvotrin Therapeutics.

Trinity and its researchers continue to excel in attracting EU funds for innovative research, securing over €65 million in project funding from Horizon 2020 between 2014 and June 2017. Trinity is ranked first in Ireland for success in Horizon 2020 funding and 25th in Europe across all higher education institutions.

CONNECT, the SFI Research Centre for Future Networks at Trinity, partnered with Smart Dublin - an initiative of Dublin City Council, other Dublin local authorities, and INTEL - to deploy low-cost sensors across the capital monitoring rainfall, weather conditions and river levels. The sensors will use CONNECT’s Internet of Things network, ‘Pervasive Nation’, to provide authorities with an early warning of potential flooding.

AMBER, the SFI-funded materials science institute headquartered at Trinity, extended their partnership with Nokia Bell Labs into 2020 with a €1.1 million commitment. This includes a number of Nokia Bell Labs researchers-in-residence based at AMBER. SFI is contributing a further €1.2 million (bringing total collaboration to €2.3 million). The research focus is on novel energy storage technologies and advanced thermal management systems to enable extreme integration of optoelectronics devices.

Trinity spinout and healthcare company, Solvotrin, raised an additional $8 million in financing and successfully launched ‘Active Iron’, an oral iron supplement in partnership with Boots Pharmacy in Ireland and the UK, with planned global sales including to Germany, China, Australia/NZ, and USA.

Trinity researchers led the development of a prototype social media monitoring system to aid disaster response, as
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well as a world-first model licence agreement. The Slándáil Emergency Management System aids emergency services and disaster response agencies to respond more rapidly, while the licence agreement can be used to pull data from social media.

The hugely successful incubator programme LaunchBox, supported by Bank of Ireland has created 50 startups that have gone on to raise €6.1 million in investment since the programme’s inception in 2013.

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 Equine Medirecord and Ekho— have already moved on to next-stage entrepreneur development programmes and have kick-started operations with paying customers.

Equine MediRecord - an app aimed at resolving complications in documenting medical administration for racehorses - has received funding from Bank of Ireland, Naas Local Enterprise Office, and Enterprise Ireland and it won awards at the Dun Laoghaire Rathdown Chamber of Commerce Business Awards 2017 and the One Zero Startup Competition 2017, one of the largest sport-tech competitions in Europe. Ekho, which provides integrated solutions that decrease costs and increase visitor engagement for cultural sites, has been accepted into phase two of EI’s New Frontiers programme, and has signed its first pilot programme with Science Gallery Dublin and with Trinity.

LaunchBox is just one avenue through which Trinity students can nurture their entrepreneurial skills. The Blackstone LaunchPad campus entrepreneurship programme operates from the Berkeley Library, and fosters student entrepreneurs, connecting them with the startup ecosystem. Over 150 student startups have registered since LaunchPad opened in 2016 and more than 30 student startups have progressed on to early stage funding.

The Innovation Academy, an initiative of Trinity, UCD and Queen's University Belfast, continues to offer innovation and entrepreneurial training to postgraduates. This year it conducted the first in a series of Postdoc Bootcamps to be rolled out over the next three years.

Together with the School of Chemistry, the Innovation Academy was awarded substantial European funding for three new educational projects to start in 2018, under the European Institute of Innovation and Technology (EIT) Raw Materials KIC. The funding enables the Innovation Academy to provide 20 scholarships for Trinity’s Postgraduate Certificate in Innovation and Entrepreneurship, and to contribute to a pan-European Masters for Maintenance Engineering, led by Technische Universität Bergakademie Freiberg in Germany.

Engineering graduates, Talita Holzer Saad (26) and Robbie Fryers (24), won the Irish 2017 James Dyson Award for inventing a new software solution that helps people with intellectual disabilities navigate independently. waytoB is a smartphone and smartwatch solution allowing carers to pre-programme set routes which users can easily follow.

Trinity student Shauna Quinn and her team won a citizen science competition at the League of European Research Universities (LERU) Doctoral Summer School after proposing ‘Letswakeapp’, a project to select the right alarm tone on an individual basis so as to ensure a good wake-up experience.

Trinity student innovators, completing the 4E5 innovation module in engineering, joined with peers from Pontificia Universidad Javeriana (PUJ) in Colombia, the University of Sao Paulo in Brazil, and the Karlsruhe Institute of Technology in Germany to work on collaborative eight-month projects that paired them with industrial partners. The students showcased next-generation prototype vehicle and robotic solutions, delivering Dragons Den-style pitches in July to packed audiences of investors and industry partners.
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