



Queen's University Belfast Social Charter Newsletter

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Queen's University ranked #1 in the Entrepreneurial Impact Ranking of UK universities

For the second year running, Queen's University Belfast has claimed the top position in an Entrepreneurial Impact report published recently by Octopus Ventures.

The ranking measures UK universities' effectiveness in terms of their production of intellectual property, creation of spinout companies, and successful exits from such spinout companies, relative to their total funding.

Queen's has spun-out over 90 companies with support from QUBIS, creating over 2700 jobs. Queen's maintained its top spot for the second year running, being noted for its highly effective approach to developing spinouts, with a key focus on 'customer discovery'.

1. Queen's University Belfast
2. University of Cambridge
3. Cardiff University
4. Queen Mary University of London
5. University of Dundee
6. University of Leeds
7. University of Oxford
8. University of Nottingham
9. University of York
10. King's College London

Research with Impact:

Queen's University launches asymptomatic testing programme

Queen's has joined a government-backed programme to test significant numbers of asymptomatic students and staff for Covid-19.

The University is the first place in Northern Ireland to conduct asymptomatic testing using new test devices on a large scale, and the third university in the UK to participate in a programme of New Testing Interventions (NTIs) at a population level.

The project is being funded through DHSC as a four nation programme. The tests are being conducted using Lateral Flow Devices that provide results to those tested within an hour. Mass testing is considered vitally important, with NTIs being rolled out across the UK in the coming weeks and months.

Universities have been identified as important settings for implementation and wider roll-out of the NTIs. Queen's University has invested a significant amount of time and resource to launch this NTI, working in close collaboration with the Department of Health, the Public Health Agency and other stakeholders.

"Throughout the pandemic, the University has shown leadership and innovation in meeting this great societal challenge through our research as well as our innovative approaches to teaching. We hope that the programme will help the health authorities to develop the best approach to mass testing, whilst at the same time helping us to drive down instances of the virus in our campus community and keeping it safe for our staff and students."

Professor Ian Greer, President and Vice-Chancellor, Queen's University Belfast

Education with Social Purpose:

SWOT fundraising efforts continue online



Students Working Overseas Trust (SWOT) is a student led medical society and one of the University's 19 Social Charter Signature Projects. SWOT is built on the enthusiasm and determination of Medical Students to help those that need it most.

Annually SWOT raises in the region of £50,000 which fourth year students bring on their elective to support the purchase of essential medical equipment and medicines, and to promote health care education in developing countries.

SWOT's fundraising efforts have continued during the COVID-19 pandemic, and as early as March this year, the annual Fashion Show moved online as restrictions came into effect.

Now, to get in the Christmas spirit, SWOT, supported by MDU, is holding a zoom Christmas Talent Show! To showcase the best talent in medicine, SWOT will showcase staff and student performances, culminating in the final on 16th December.

Breaking Boundaries to Produce New Knowledge:

New link between cell damage in astronauts and geriatric-type health problems observed in space

Damage caused to human cells during spaceflight appears to be the underlying cause of health issues observed in astronauts, it has been discovered by researchers from the Institute for Global Food Security (IGFS) and School of Biological Sciences.

Exposure to space radiation and micro-gravity during longer space missions is known to stress human physiology and can lead to serious health problems. Astronauts returning from missions on the International Space Station (ISS) have presented with geriatric-type symptoms including bone and muscle-mass loss, immune dysfunctions, cardiovascular health risks, liver dysfunction and central-nervous-system-related issues.

To date, very little has been known about why these changes occur. The IGFS researchers believe they're the first to establish a probable cause-and-effect link between damage to 'mitochondria' - the structures within human cells that produce energy – and the above health problems.

Working in partnership with an international team, their findings have been published in Cell.



"This work has provided a missing jigsaw piece which could open up a whole new arena of space-biology research and therapeutics. It's timely as the world is on the brink of a new era for space exploration, with a commitment to return to the Moon and a planned manned mission to Mars."

Dr Willian da Silveira, IGFS Research Fellow, Queen's University Belfast



Sustainability:

Iconic Dinosaur's injuries come to light through Queen's-led research

The first *Parasaurolophus* discovered – the same species which features in the popular Netflix series *Jurassic World: Camp Cretaceous* – is likely to have been injured by a falling tree, a study led by a researcher from Queen's has discovered.

Filippo Bertozzo, a PhD student from the School of Natural and Built Environment at Queen's University Belfast, examined the skeleton of the *Parasaurolophus* which has been on display at the Royal Ontario Museum, since being discovered in Alberta, Canada in 1920.

He and his research collaborators from institutions in Canada, Italy and Liverpool found that the duck-billed dinosaur – known as ROM 768 – suffered several major injuries before its death.

The shape of the dinosaur's neck has been a source of intrigue to palaeo-artists, who attempt to depict prehistoric life according to scientific evidence, over the decades.



"The ROM 768 suffered numerous injuries which suggest a major incident of trauma before its death and we think a heavy object such as a tree may have fallen on top of the animal, perhaps during a storm. Damage to the muscles resulted in a disc-shaped overgrowth on the tip on the bony part of one its vertebrae in its neck."

Filippo Bertozzo, PhD student, School of Natural and Built Environment, Queen's University Belfast

New research shows noise pollution is hampering communication of a number of different species

Research led by Queen's University Belfast has found that man-made noise changes the signals of animals, hampering their communication with each other.

The meta-analysis study found animals exposed to human-made noise had to adjust their acoustic signals when competing for mate attraction, to repel rivals and parent-offspring communication, all of which have a crucial role in their survival.

The World Health Organisation has said man-made noise is one of the most hazardous forms of pollution.

Civic Culture and Intercultural Dialogue: **Reflections on the Centenary of the Government of Ireland Act**

Queen's University, with the support of both the UK and Irish Governments, is pleased to host an event on **Thursday 10th December at 12.30pm**, marking the centenary of the Government of Ireland Act.

The anniversary of this profoundly significant event represents a key moment in the Decade of Centenaries and provides an opportunity to reflect on the shared history of these islands, as well as to consider the progress made since the Belfast/Good Friday Agreement.

This event is open to all, and will be streamed to a virtual audience. It will include contributions from UK and Irish politicians and historians.

For more information and to register click [here](#)

Equality and Excellence: **The Annual Queen's University Belfast Equality & Diversity Lecture**

The annual Queen's University Belfast Equality & Diversity Lecture will feature Educator and Disability Advocate Sinéad Burke.

'**Tilting the Lens: A New Perspective**' takes place online on **Wednesday 9th December at 1.00pm**

Sinéad Burke is a teacher, writer and advocate. Through her company, 'Tilting the Lens', Sinéad works towards accelerating systemic change within the domains of education and design, by focusing on accessibility as a vehicle for creativity, innovation and social justice.

The Queen's University Equality and Diversity Lecture was established in 2018, with Conor McGinn MP giving the inaugural lecture to a packed live audience in the Emeleus Lecture Theatre.



THE ANNUAL QUEEN'S UNIVERSITY BELFAST
EQUALITY AND DIVERSITY LECTURE

'TILTING THE LENS: A NEW PERSPECTIVE'

with Sinéad Burke
Educator and Disability Advocate

ONLINE LECTURE AND Q&A
presented by Public Engagement in association
with The Chief Executives' Club at Queen's

Hosted by Professor Karen McCloskey,
Director, Queen's Gender Initiative

WEDNESDAY 09 DECEMBER 2020 | 1.00-2.30PM

[Register online via Eventbrite](#)

Recognising and Rewarding Contributions from Staff and Students: TEDxQueensUniversityBelfast to host second digital conference 'Give Back | Move Forward'

Queen's – with corporate sponsor Aflac Northern Ireland - will host its second digital, independently organised TEDx conference on Thursday 28 January 2021.

The event is entitled 'Give Back | Move Forward'.

This series of TEDxQueensUniversityBelfast talks will showcase our community - the staff, students and alumni of Queen's University Belfast - who as they move forward with their own work, study, research and life are, in a wide range of ways, giving back and making a meaningful and positive contribution to society, locally and globally.

The confirmed speakers, so far, include:

- **Sheree Atcheson**, award-winning global diversity, equity and inclusion champion, author of 'Demanding More', and Queen's Graduate of the Year 2019
- **Nathalie Trott**, Director of Development and Alumni Relations
- **Georgia Stewart and Rebekah Mercer**, medical students – President and Vice-President of SWOT (Students Working Overseas Trust)
- **Professor Chris Johnson**, Pro Vice-Chancellor for the Faculty of Engineering and Physical Sciences
- **Professor Fionnuala Ni Aolain**, from the School of Law
- **Simon Hamilton**, Belfast Chamber
- And the **Monaghan Sisters**, who will deliver a special singing performance

The event will be compèred by BBC Northern Ireland broadcaster, **William Crawley**.

