



Queen's University Belfast Social Charter Newsletter

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Researchers work on £11.2m project to develop next generation of hydrogen buses

World-leading researchers at Queen's are collaborating with industry experts to develop the next generation of single and double deck hydrogen buses, helping in the global fight against climate change.

If the UK bus sector moved to zero emission technologies, there is the potential to prevent the release of 3.2 million tonnes of CO₂ and avoid nearly 4,000 million litres of diesel imports over the next ten years. The adoption of hydrogen technologies will be a key part of achieving these goals.

The Queen's researchers, based in the Bamford Technology and Engineering Centre (WTECH) Research Centre and the School of Mechanical and Aerospace Engineering, are part of an international team who are working on the £11.2m project, partly funded by the Advanced Propulsion Centre, to help come up with the necessary technology to help make this happen.

The project will create high value research jobs, cementing Queen's position as a world-leading research centre for heavy duty hydrogen powertrain technologies. Longer term the project will lead to the development of a Centre of Excellence in Zero-Emissions Hydrogen Technology in Ballymena, as well as generating new jobs and supporting the development of skills for industry partners Wrightbus, Ryse Hydrogen, Grayson Thermal Systems and Translink.



Research with Impact:

Queen's leading major research project measuring COVID-19 antibody levels

A Queen's University Belfast research team is leading an international study on COVID-19 Antibody Response in Cystic Fibrosis (CAR-CF).

The study is to be carried out by a team of researchers from the university's Wellcome-Wolfson Institute for Experimental Medicine (WWIEM).

It will measure COVID-19 antibody levels in thousands of people with cystic fibrosis across 17 European countries and is funded by a \$1.5m grant from the CF Foundation (US) over a two-year period. The project will also run in Canada and the US, making the research the largest prospective study in cystic fibrosis (CF) to have been carried out to date.

There is currently little information about how COVID-19 has impacted people living with CF, however, they may be at particular risk from this new respiratory virus and the various strains.

"This new research project will explore infection and vaccination rates in those with CF and link to important clinical information over time. We can then understand how COVID-19 has impacted this vulnerable population, how long the antibodies last and the risk of future infections."

Dr Damian Downey, Wellcome-Wolfson Institute for Experimental Medicine Queen's University Belfast

ARK report stresses the need for a public awareness campaign on coercive control

A research study on public understanding of coercive control has been released by ARK – a joint initiative between Queen's University Belfast and Ulster University.

Coercive control is a form of domestic abuse also known as emotional or psychological abuse; indirect abuse; or emotional torture. New legislation in Northern Ireland means that coercive control will be an offence, and brings Northern Ireland in line with the rest of the UK and Ireland.

The report entitled 'Public Understanding of Coercive Control' used data from the 2020 Northern Ireland Life and Times (NILT) Survey.

"During 2020, there were 31,848 domestic abuse incidents recorded by the Police Service of Northern Ireland (PSNI). It is important that the introduction of the coercive control as a criminal offence should be accompanied with a public awareness campaign focusing on what coercive control means and signposting victims and their friends and family to appropriate courses of action and sources of support. Policy and advocacy services should also receive specialist training."

Dr Julie-Ann Jordan, report co-author, Research Psychologist at the Northern Health and Social Care Trust

Civic Culture and Intercultural Dialogue: 'Leading and Leadership in an Era of Grand Challenges'

The Centre for Leadership, Ethics and Organisation welcome you to attend the official launch of the research centre with a keynote address from the Former President of Ireland and Adjunct Professor of Climate Justice, Trinity College Dublin, Professor Mary Robinson.

The event will take place on **Wednesday 23rd June 2021 at 16.30 BST.**

Professor Robinson will speak on 'Leading and Leadership in an era of Grand Challenges and will be welcomed by QUB President and Vice-Chancellor Professor Ian Greer and hosted by Dr Joanne Murphy and Dr Shirley Ann Hazlett.

To register for the event, please click on the image below.



Education with Social Purpose: 'Learn About Parkinson's' Podcast

Learn about Parkinson's is a free podcast that shares lived experiences from a person with Parkinson's, a carer and a Parkinson's nurse.

The podcast was made possible through a collaboration between Queens University and Parkinson's UK, as a learning resource for student nurses and other professionals.

It hopes to raise awareness and increase understanding of Parkinson's through stories told by experts living with, and experiencing life with Parkinson's, and interviews with student nurses.

To learn more, and to listen in, click on the text below.

PODCAST: LEARN ABOUT PARKINSON'S

Breaking Boundaries to Produce New Knowledge:

Engineers develop device that could radically reduce risks of treating coronary heart disease

A plastic device that could radically reduce the risks and complications of treating coronary heart disease, is being co-developed by scientists at Queen's University Belfast.

The researchers are working as part of a national project, which is being led by the University of St Andrews, and also includes experts from the University of the Highlands and Islands, the Manufacturing Technology Centre and 5D Health Protection Group. The team has been awarded funding of nearly £1m by the Engineering and Physical Sciences Research Council (EPSRC).

The device, which looks just like the inside tube of a pen, contains an additive which releases nitric oxide (NO) into the body and relaxes the arteries. This can help to prevent problems such as blood clotting and spasm which often occur when medical devices are inserted into arteries – one of the biggest complications in treating the condition.

Sustainability:

'Engineering our Sustainable Future'

Queen's University Belfast is delighted to announce their third digital TEDx event to be broadcast online on **Thursday 24th June 2021 at 12.30pm BST**.

TEDxQueensUniversityBelfast 'Engineering our Sustainable Future' will showcase our community - the staff, students and alumni of the Faculty of Engineering and Physical Sciences.

Engineers and scientists are at the heart of creating a sustainable future for the benefit of current and future inhabitants of our precious planet. The Faculty of Engineering and Physical Sciences wants to share, with the rest of the world, the exciting research, and ideas that we are developing in pursuit of this goal.

To register for the event, click on the image below.



The poster features the TEDx logo in red and white, with 'QueensUniversityBelfast' below it. A small text below the logo reads 'x = independently organized TED event'. On the right is the Queen's University Belfast crest and name. A central row of eight small, tilted photographs shows various individuals. At the bottom, the event title 'ENGINEERING OUR SUSTAINABLE FUTURE' is written in large, bold, white and red letters. Below the title, it says 'ONLINE | 24 JUNE 2021'. In the bottom left corner, there is a Twitter icon followed by '@TEDxQUB'.

Equality and Excellence: Refugee Week 2021

Throughout Refugee Week 2021, the University's Widening Participation Unit has been promoting #simpleacts as part of the 'We Cannot Walk Alone' theme. Refugee Week is an opportunity to reach out; to listen, to exchange and connect.

Across the University, staff and colleagues are engaged in activities to engage with and undertake research on minority issues. The 'Queen's On Ethnic Minorities In Northern Ireland' webpage, developed in partnership with the Migrant and Minority Ethnic Council NI, provides details of the range of activities, networks, partnerships and research ongoing in this space.

For further information, click on the image.

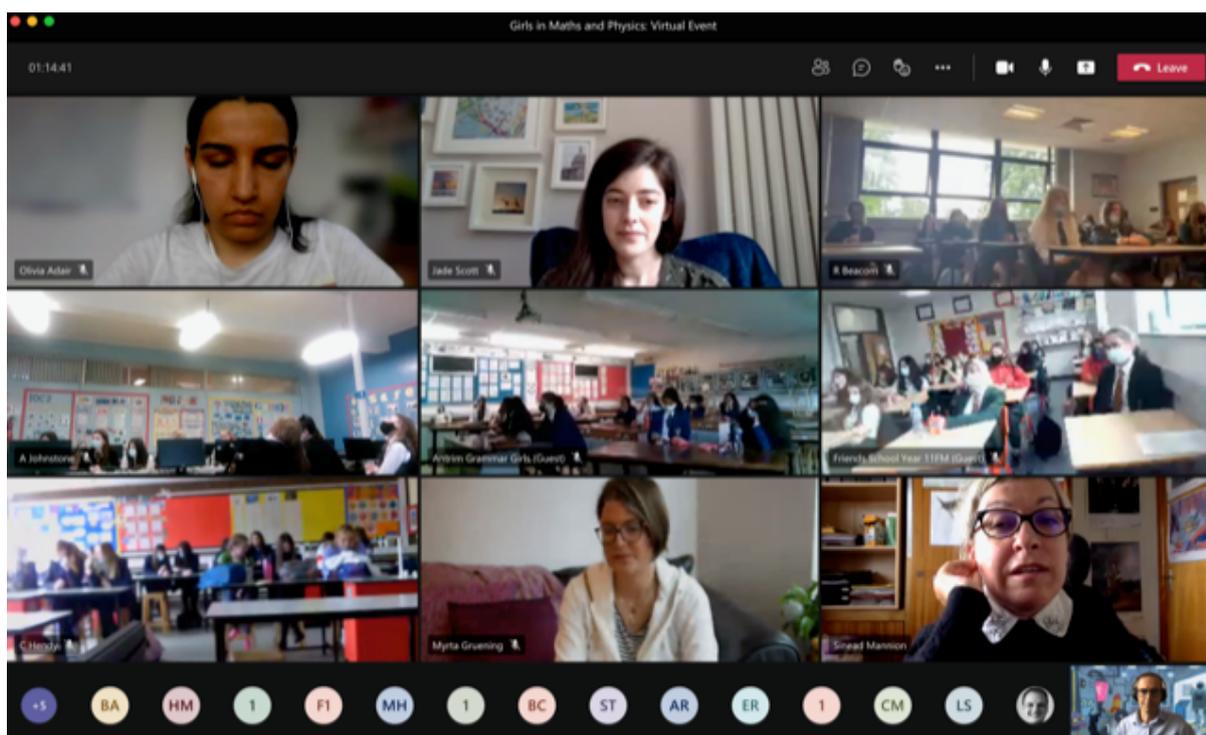


Girls in Maths and Physics

Queen's School of Mathematics and Physics hosted 'Girls in Maths and Physics', online on 10 June 2021.

The event, aimed at encouraging and inspiring young females, involved pupils from more than 15 schools from all over Northern Ireland.

Each year the school holds a number of events to help school pupils understand the importance and excitement of Physics and Mathematics.



Recognising and Rewarding Contributions from Staff and Students: QUB Film Studies: End of Year Showcase 2021

QFT Player is delighted to host the 2021 End of Year Showcase for students completing their BA in Film Studies and Production at Queen's University, Belfast.

This showcase of 13 films reflects the students' talent and expertise, and highlights how the 2021 crop of directors, producers, screenwriters, cinematographers, film editors and crews have raised the bar.

The Film Studies and Production degree at Queen's balances critical thinking and filmmaking. Students will acquire advanced knowledge and skills in digital production, screenwriting, directing, cinematography and editing, as well as developing their understanding of film and moving image and broader film culture.

Classes take place at the Queen's Film Theatre, while practice classes are taught in our dedicated Film Studio with full broadcast-quality LED lighting and green screen.



Enterprise SU

Enterprise SU is a department within Queen's Students' Union which helps students gain entrepreneurial skills so that they are equipped for their future career – whether that be to enhance their CV or to help them start a business.

Enterprise SU, a signature project of the Social Charter, supports all undergraduate and postgraduate students, during their time at Queen's and two years post-graduation.

Despite the challenges of the past year, Enterprise SU have supported our students in securing almost £100k in funding for their startups this year across various grants and competitions.

Well done to the Enterprise SU team, and our wonderful students!

