



UNIVERSITY OF  
**LIMERICK**  
OLLSCOIL LUMNIGH

# WISDOM FOR ACTION

**RESEARCH STRATEGY** 2022-2027



# OUR MISSION

Build a vibrant community where **research excellence** is valued, supported and central to all facets of our organisation



Xiang-Jing Kong is part of the crystal engineering group at Bernal Institute, UL who have developed a new porous material capable of capturing trace amounts of benzene from the air.

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# WISDOM FOR ACTION

UNIVERSITY OF LIMERICK

## Wisdom for Action Eagna Chun Gnímh

University of Limerick (UL) is a research-led, energetic and enterprising institution with a proud record of innovation and excellence in education and scholarship. We value creativity, curiosity and excellence in our inclusive community which is **committed to social good**.

Renowned for providing an outstanding student experience and conducting leading edge research, we now host more than 17,000 students. UL has an exemplary record in attracting world-leading researchers with success in national and EU programmes, in particular European Research Council (ERC), Marie Skłodowska-Curie Actions (MSCA), Science Foundation Ireland and Enterprise Ireland programmes and the Shared Ireland North South Research Fund.

We are committed to the development and implementation of a holistic approach to sustainable development, in partnership with the communities we serve, locally and regionally and through our national and international alliances. Our aim is to enable our students, graduates and staff to be 'active citizens' who contribute to the well-being and future of our planet.



**Professor Norelee Kennedy**  
Vice President Research



UL research is addressing a number of global challenges including affordable and clean energy, sustainable cities and communities, climate action and public health. By working together across disciplines, our community is achieving fundamental breakthroughs whilst ensuring research is rapidly translated into economic and social impacts for Ireland and beyond.

Our research addresses areas of importance to our society such as **education, languages, creativity, healthcare, complexity in contemporary and historical contexts**, and **social inclusion** and has significant impact on sectors that are vital to our economy such as pharmaceuticals, manufacturing, software, med-tech, food, communications, energy, finance and the public sector.

Our research community were courageous in their response to the global pandemic, as UL staff and students took on new challenges and adapted swiftly in this period of crisis and rapid societal change. We have learned a lot from this experience which highlighted the importance of a robust evidence-based strategy which is implemented with courage and conviction as we continue to face challenges into the future.

# ECONOMIC & SOCIAL IMPACTS



## Strong Foundations

The global pandemic brought into sharp focus the importance of strong academic disciplines in delivering new discoveries and contributing to greater understanding of our ever-changing world. Ireland is intensifying its commitment to building a knowledge-based economy in the competitive global environment. A world-leading research environment generates and attracts talent, produces research which addresses grand challenges, supports resilience in our economy, enables greater mobility and fosters a culture where there is shared appreciation of the contribution research and innovation has for nearly every aspect of our lives. The importance of strong foundations of research excellence is a focus of this strategy as we seek to build for the future.



## People – our catalysts for change

Our staff and students have ambition and passion for research, and this has been evident throughout the development of this strategy. This ambition is not just for ourselves and our disciplines, but for the communities we serve. In consulting with our community, we have a clear mandate to take on current challenges and ensure future growth. Leadership comes in many forms, and at UL, we pride ourselves in our role as champions for diversity, equality and inclusivity. We are attracting and developing a diverse and highly motivated community of research leaders who strive for excellence in their fields.



## Research excellence and impact – our future focus

University of Limerick has a rich history and an exciting future. We are now at a crossroads where key decisions are required to ensure research is at the very heart of our organisation. Our research performance will become the defining factor of UL in the next 20 years. Success in research-led universities is underpinned by an international reputation for research excellence. In our *Research Excellence and Impact Strategy* we have set clear goals to support research excellence across all disciplines. This strategy outlines the pathway to bolster our strengths while creating a culture which enables talent to flourish. Achieving this will require collaboration, innovation and a firm commitment to the importance research holds for our future. Everyone at the University of Limerick has a part to play in supporting research excellence as a point of pride and to enhance our reputation.

**Professor Norelee Kennedy**  
Vice President Research



# OUR VISION, MISSION & PRINCIPLES

## VISION

Wisdom for Action / Eagna Chun Gnímh

University of Limerick contributes to the discovery of new knowledge for a better world

Fifty years on, our founding motto, *eagna chun gnímh*, translated as “wisdom for action”, still rings true. At the very core of UL is an instinctive drive to create knowledge for a better world. It is this orientation which leads us naturally to align ourselves to the UN Sustainable Development Goal (SDGs). As a young university, our very existence is due to the vision and determination of the community around us and as such we feel that we are an integral part of our city/region and its future.

## MISSION

Our mission is to build a vibrant community where research excellence is valued, supported and central to all facets of our organisation.

At the core of this strategy are 8 key principles for research. Our principles underpin our four strategic goals and key actions central to our research vision for UL. At the heart of this strategy is a culture that supports our people to undertake the best research, to seek new directions in their research, to be innovative and if need be disruptive, and to collaborate in new and exciting ways to address the challenges of our time and those that will emerge in our future.



## PRINCIPLES

### Our Research Principles

*Put research at the heart of UL*

*Be creative, innovative, supportive and responsive in our approach to advancing research*

*Champion and celebrate the pursuit of research excellence*

*Embrace a spirit of openness and discovery*

*Proactively collaborate to make a difference*

*Build sustainability and resilience in our world.*

*Attract and nurture research talent to create our future leaders*

*Be a leader for equality, diversity and inclusivity*

### Strategic Goals

#### Research Culture:

Embed research into the **UL culture** to create an immersive research environment.

#### Excellence:

Champion **excellent research** and contribute towards global challenges.

#### Impact & Partnership:

Build a **change-making UL research community who partner globally** and locally to create and challenge

#### Talent:

Focus on **research talent** as our greatest resource and organisational priority



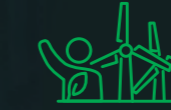
# OUR STRATEGIC MISSION-ORIENTATED CHALLENGES

At the core of UL's research are strong academic disciplines which through collaboration and innovation have impact across society.

We have set out four strategic mission-orientated challenges in which research across disciplines at UL, is and will continue to make an impact.



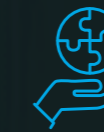
Dr Ibrahim Saana Aminu, Marie Curie Alumna and currently an SFI Industry RD&I Fellow with Analog Devices. Dr Aminu's research focuses on the area of battery technology



## Sustainable Society

**Sustainability at the heart of everything we do.**

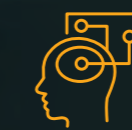
Our discoveries in materials science, energy and environment, circular economy and food security are critical to supporting a more sustainable future for all communities.



## Inclusive Society

**We pride ourselves in our role as champions for a more diverse, equal and inclusive society.**

Our research community are providing insights to the complexities of this vision across many areas including education, justice and social inclusion and the future of work.



## Smart Society

**How do we ensure a virtuous circle where the evolution of technology and connected devices can benefit all citizens?**

To address this, we are answering questions using artificial intelligence, advances in software and manufacturing, harnessing of big data and the opportunities of digital humanities.



## Healthy Society

**The health and wellbeing of our global community has never been more critical.**

We are developing strategies for more person-centred and integrated healthcare, working to support our ageing society and innovating across materials science and digital technology for health.



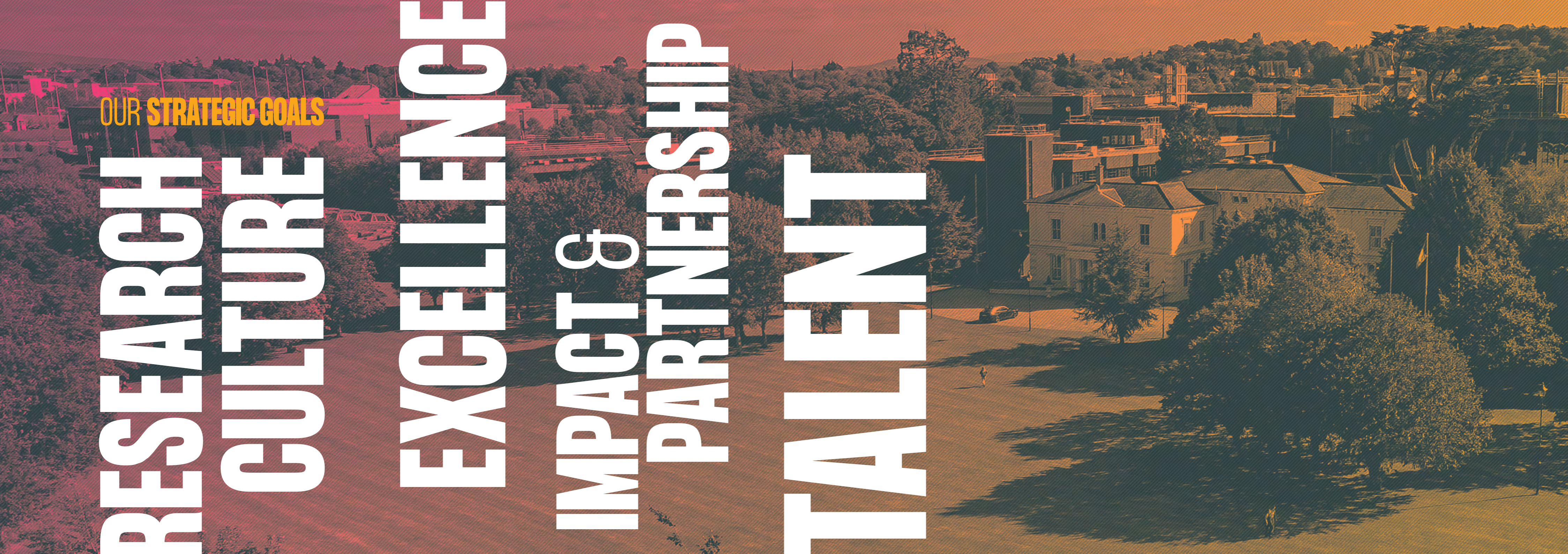
OUR STRATEGIC GOALS

RESEARCH  
CULTURE

EXCELLENCE

IMPACT &  
PARTNERSHIP

TALENT





# RESEARCH CULTURE

Embed research into the UL culture to create an **immersive research environment**

*Put research at the heart of UL*

*Be creative, innovative, supportive and responsive in our approach to advancing research*

## Context:

By this we mean to realise our vision as a research-led organisation. To achieve this goal, research is embedded in all our decision-making, and integrated into all of our activities including education and outreach. In addition, by embedding research into our student journey we will foster a research ethos that provides an outstanding student learning experience and is globally connected in addressing societal and economic challenges. We are committed to building a culture of research excellence that pervades all aspects of our organisation. In this environment, innovation is encouraged as we build a responsive and supportive research ecosystem which attracts and supports talented individuals and groups to excel in their fields.

## Objectives:

- Exploit the synergy between education and research to establish a research-led culture which protects time for research.
- Build on our responsiveness and agility to grow funding, research activity, and increase doctoral studentships.
- Invest in an excellent, agile, responsive and efficient research support ecosystem which sits at the core of UL activity to deliver our research-led ambitions.
- Celebrate research excellence and establish research at the heart of UL's communications strategy.

## Key Actions:

- Establish externally benchmarked discipline-specific indicators of esteem which are embedded into UL's promotions and incentivisation systems.
- Protect and facilitate time for research by implementing a work-load allocation model and academic timetable that prioritises research performance.
- Incentivise and reward research performance in a clear and comprehensive manner. Establish an incentivisation programme which supports researchers and strategic investments for research. This will be enabled by a revised research overheads model.
- Establish an external university scientific advisory committee to inform our research ambitions.
- Identify professional supports for research and build into workforce planning as part of annual budgeting process.
  - Review and optimise faculty-based supports for research.
  - Enhance our research support functions across post-award, pre-award, compliance, communications, business development, research impact, Open Science, research IT and faculty supports.
- Invest in and streamline systems to enhance processes that support research.
- Embed the concept of supporting research performance into the review of divisional policies and processes.
- Resource research communications and embed research as a pillar of the UL marketing, communications and public affairs strategy.
- Enhance our external engagement reach with a greater focus on digital first channels and European networks to disseminate high profile research.
- Invest in communications training for our community with a particular focus on early career researchers and academics.



**Top:** Minister for Further and Higher Education, Research, Innovation and Science, Simon Harris meets with the Battery Laboratory group, Bernal institute where researchers are working on developing low-cost, high performance sodium-ion smart battery systems for residential energy storage

**Below:** SSPC, the UL hosted Science Foundation Ireland Research Centre for Pharmaceuticals, celebrated on the double by taking home the awards for Pharma Research Centre of the Year and Innovation of the Year at the Irish Pharma Industry Awards.



## Spotlight: Taking on grand challenges to improve people's lives.

Funded by Department of Justice, a UL project - the Greentown study of criminal networks in Ireland, aims to reduce the influence that crime gangs hold over children and families in the neighbourhoods that they operate. The project seeks to provide a practical route out of a crime gang for children already embedded or caught up in criminal activity.



Sean Redmond, Adjunct Professor of Youth Justice and Karl Ducque, Project Leader, Target Response in Youth (TRY) which supports vulnerable young people aged 14 to 26 years.

UL is home to the European Centre for the Study of Hate which has been tackling the national and European policy issue of state responses to hate crime, the centre has been transformative in both a legal and civil society context. Through their internationally relevant empirical scholarship the Centre scientifically refuted the assertion of the State, showing that, not only is hate crime a serious issue in Ireland, but that the criminal justice process is ill-equipped to address it. Legislation has now been introduced by the government.



Professor Amanda Haynes, Dr Sindy Joyce, Lecturer in Traveller Studies both from UL's Department of Sociology, Olive O'Reilly and Margaret O'Brien, Assistant Researchers and Professor Jennifer Scheppe, School of Law at the launch of a landmark study by Irish Travellers' Access to Justice project examining Travellers' relationship with judiciary and Gardaí.



Left: Science Week at UL.

Above: Doctoral student Rebecca Tumwebaze, Kemmy Business School, a finalist in the Thesis in 3 and Picture This research image competitions at Research Week, UL. Rebecca's research examines sustainable agriculture practices in Uganda.

Below: Centre for Social Issues Research team led by Professor Orla Muldoon, European Research Council Advanced Grant holder were the winners of the President's Research Excellence and Impact Award for Outstanding Research Collaboration for their work in tackling the impact of Covid-19 on society.





# EXCELLENCE

Champion excellent research and **contribute towards global challenges**

*Champion and celebrate the pursuit of research excellence*

*Embrace the spirit of openness and discovery*

## Context:

Researchers are intrinsically motivated to find answers to some of the world's greatest challenges. In order to find these answers, it is essential to preserve a spirit of curiosity and openness underpinned by rigour.

UL's strategic approach is to embed the UN Sustainable Development Goals across every facet of University life, to ensure deep and meaningful engagement and alignment across the entire organisation.

In responding to grand challenges, we have seen new research areas within and across disciplines emerge to make significant contributions for social good such as psychology, energy, data science and advanced materials. Our strong academic disciplines provide the foundations upon which these contributions are made. By embracing a mission-orientated approach we seek to enhance our foundations and harness our collective creativity towards building a sustainable society, a more resilient society, a healthy society and a smart society.



**Top:** European Research Council Proof of Concept grant awardee Professor Mike Quayle, Department of Psychology, holds a European Research Council award to investigate the dynamics of social influence in digital societies.

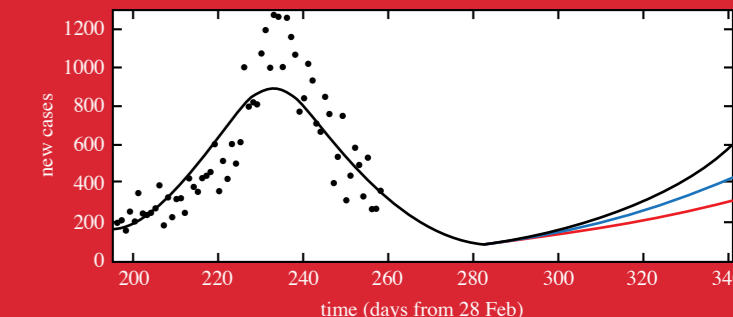
**Below:** European Research Council Starting investigators, Dr Eoghan Cunnane whose research examines male infertility and Dr Sarah Guerin who is focused on piezoelectric biomolecules for energy efficient electronics.

## Objectives:

- Champion research excellence across disciplines and focus on investments which complement and amplify our strengths.
- Build our interdisciplinary capacity to better position UL to respond to global challenges.
- Diversifying our research funding income to support resilience, growth and excellence including a focus on growing EU and non-exchequer funding
- Establish internal funding mechanisms aligned to support research excellence.
- Enhancing our research capacity through strategic investment into research infrastructure.

## Key Actions:

- Build on existing areas of excellence to develop interdisciplinary initiatives that address global challenges.
- Enhance UL's research portfolio through the establishment of a new Institute for Humanities and Social Sciences.
- Scale and enhance our health research portfolio to solidify our leadership of keys areas of digital health and integrated care and build our partnerships with our clinical partners including University of Limerick Hospitals Group and Community Health Organisation for the Mid-West.
- Incorporate research infrastructure needs (capital and digital) into the new UL Capital Development Plan.
- Develop the business case and generate investment to establish the Science Quadrangle accommodating growth across interdisciplinary research areas.
- Identify gaps and further expand other research areas as part of the performance and review of institutes and centres.
- Continue to champion good research practice and progress Open Science initiatives supported in the development of policy, resources and systems.



**Above:** A research team lead by Prof James Gleeson, UL described the calculations behind the main model used to guide the Irish Government in its response to COVID-19. Figure shows daily new cases of Covid-19 from 11 November (day 257) until 2 December (day 278). The black curve is from the model of equations (2.1)–(2.11), with no vaccinations. Gleeson et al (2021).

**Below:** Professor Calvin Coffey, Foundation Chair of Surgery, UL and UHL is progressing research on the makeup and structure of the abdomen - and what it means for improving diagnostics, surgery & treatment.



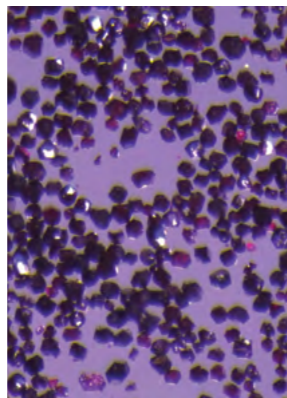


## Spotlight: Materials for sustainability and creating a positive energy city.

Researchers at UL have developed a new material that has the ability to capture toxic chemicals from the air. Professor Michael Zaworotko and Dr Xiang-Jing Kong, Department of Chemical Sciences and Bernal Institute, along with colleagues from leading universities in China, developed the new porous material capable of capturing trace amounts of benzene from the air. The sponge-like porous material could revolutionise the search for clean air and have a significant impact in the battle against climate change.

A UL research team are focused on next generation biomaterials. The LIBRE project team, led by Professor Maurice Collins, have produced carbon fibre from sustainable bio-resources. The team have converted organic waste from forestry into carbon fibres which have already shown enormous potential in terms of performance in automotive, aerospace and wind-turbine demonstrator tests.

In partnership with Limerick City and County Council, UL leads +CityxChange, a €20 million project putting Limerick and Trondheim in Norway at the forefront of clean technology delivery in Europe. This 3D image showing energy demand distribution in Limerick city centre. This digital twin of the city was developed through the +CityxChange project to enable the co-creation and replication of positive energy blocks and districts and is in use by Limerick City and County Council to plan how the city can decarbonise.



**Top Left:** New material Co(BDP) developed at Bernal institute which has the ability to capture toxic chemicals from the air.

**Top Right:** Prof Maurice Collins is developing solutions for next generational biomaterials

**Bottom:** The Limerick Energy Model, a Decision Support Tool and Digital Twin developed by IES R&D through +CityxChange, accessible to people in Limerick through the Citizen Innovation Lab space and digital platform citizeninnovationlab.ie

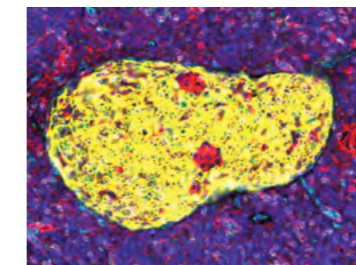
## Spotlight: Data, technology and our health

Cancer is the second leading cause of death resulting in 1 in 6 deaths globally. Research teams at UL are taking on the many challenges treatment of this disease pose. UL is home to the Limerick Digital Cancer Research Centre (LDCRC) - a multidisciplinary centre are dedicated to improving our understanding of the fundamental biology of cancer and using this new knowledge to find better ways to prevent, diagnose and treat the disease. LDCRC is led by Professor of Cancer Genomics, Aedin Culhane, who in collaboration with Queens University Belfast is leading the All Island eHealth Hub for Cancer, funded by the Shared Ireland North South Research Fund.

In the area of sensor technology, the European Commission-funded "ORIGIN" project team are developing an optical fibre dose imaging platform for adaptive brachytherapy. The project involved partners in Belgium, Italy, Germany, Northern Ireland and is led by Royal Society – Science Foundation Ireland University Research Fellow Dr Sinead O’Keeffe.



ORIGIN project team.



Protein staining of head & neck cancer performed at the Limerick Digital Cancer Research Centre



Building a  
healthy society



# IMPACT & PARTNERSHIP

Build a change-making UL research community who partner globally and locally **to create and challenge**.

*Proactively collaborate to make a difference*

*Build sustainability and resilience in our world.*

## Context:

Proactive collaboration is part of our DNA and a point of pride for UL. Our history demonstrates a long-standing orientation towards Europe supported by firm foundations with our regional partners. Our network of research institutes and centres demonstrate an impressive footprint of collaboration at an all-island, European and global level. Lero, SSPC, DPTC and PMTC have already received multiple phases of funding, while UL's Bernal Institute has established itself as a leading R&D partner with research strengths to tackle energy and climate action. Bernal Institute is an active partner in the Shannon Estuary Economic Taskforce which seeks to address Ireland's green energy opportunity through the immense untapped opportunities in the region.

A national leader in the research impact agenda, UL's Research Impact programme is in line with international best practice. Through this programme we have established the President's Research Excellence and Impact Awards which recognise outstanding research collaborations and early career researchers. These awards and the wider Research Impact programme are an important focal point to highlight the contribution of the scientific community and their research collaborators within the public and private sectors.

In our role as agents for change we seek to provide a voice for those who are marginalised and affected by conflict around the world. UL is a proud member of Ireland's Scholars at Risk programme. We plan to expand this initiative to provide refuge for threatened scholars while also raising awareness of the need to protect academic freedom around the world.

## Objectives:

- Harness and develop our strategic research partnerships and maintain our excellent reputation with stakeholders as UL broadens its research portfolio.
- Expand our spinout ecosystem and stimulate a culture of innovation and entrepreneurship, equipping our staff and students with the expertise to translate their findings into impactful solutions.
- Deepen our existing partnerships by taking a more strategic approach to our engagement strategy across policy-makers, NGOs, and industry by enhancing our business engagement capabilities.

## Key Actions

- Partner with public and private sector to scale research and innovation partnerships aligned to our strengths and utilising our campus as a test-bed facility.
- Explore opportunities for research enterprise engagement with R&D active companies, including opportunity for implant R&D at UL.
- Establish a UL Scholars at Risk visiting scholars programme.
- Resource and scale UL's Research Impact programme to incorporate greater opportunity for early and mid-career staff, external engagement activities while building our portfolio of research impact case studies.
- Revise and launch a new researcher entrepreneurship training programme.
- Establish networking, collaboration and sharing of best practice across research centres and institutes. Align frameworks, compliance and supports for greater efficiency and reduced bureaucracy to enable research.
- Enhance our knowledge transfer supports by regularly obtaining feedback from companies, investors and founders to improve the quality, consistency and agility of support services.



**Proactive  
collaboration**



## Spotlight: Entrepreneurial Campus

University of Limerick has a dynamic ecosystem of entrepreneurial supports. Nexus Innovation Centre is our dedicated incubation space providing a start-up environment for entrepreneurs while in the heart of our city centre campus, Limerick's Citizen Innovation Lab is a place for observation, co-creation and experimentation where people can take part in activities to help shape a sustainable future for the city. The hub is a collaboration between Limerick City and County Council and the University of Limerick. In partnership with the Kemmy Business School, Nexus runs a number of programme for students and researchers. The Entrepreneurship & Creativity Camp helps students to develop their knowledge and skills in idea generation, design thinking, market validation and how to commercialise a new business idea. A dedicated programme 'From Research to Spin Out – the Role of Entrepreneurial and Innovative Thinking' engages researchers in the research commercialisation process demonstrating how research can be transformed into marketable products, services, processes and spin out companies.

**Top Left:** UL City Centre Campus opens to the public for Design at UL Exhibition.

**Top Right:** Stokes Bio was founded by UL researchers Professor Mark Davies and Dr Tara Dalton who pioneered micro-fluidic systems for genetic analysis. When the company sold for \$44million it marked the largest university spin out acquisitions in the history of the Irish State. Through their research, Professor Davies and Dr Dalton developed the technology to produce instrumentation delivering much higher genome data throughput at a lower cost and their work highlighted the strength and diversity of the growing indigenous biotechnology industry in Ireland.

**Below:** Dr Briga Hynes, Kemmy Business School pictured with second level students taking part in the Entrepreneurship & Innovation Bootcamp.



**Above:** SFI Director General, Professor Philip Nolan meeting Dr Kevin O'Sullivan and Dr Eoin O'Connell during his visit of Confirm, the SFI funded Research Centre for Smart Manufacturing, hosted by UL. CONFIRM is showcasing several ongoing fundamental and applied research projects in Smart Manufacturing. These include physical and cyber test environments for innovative manufacturing projects, digital twin modelling, factory in a box, modular manufacturing, several robotic work cells, autonomous guided vehicle solutions and supply chain optimisation through drone technology.



Focus on **research talent** as an organisational priority

*Attract and nurture research talent to create our future leaders*

*Be a leader for equality, diversity and inclusivity.*

## Context:

Achieving our ambitions in strengthening existing and growing new research areas depends on attracting and nurturing talented and highly motivated people. To achieve this, research excellence must be at the core of our recruitment and retention practices, sending a powerful signal that UL is a location of choice to establish a research career.

Programmes such as the HEA SALI Professorships have reinforced strengths in data science, biochemical and digital engineering and genomics, while success in European Research Council awards at all levels further demonstrates UL's research excellence across psychology, chemistry, bioscience, with applications in energy, society and public health. Our strategic emphasis on prestigious training grants such as Marie Skłodowska Curie Fellowships maintains a high success rate for UL. We host a wealth of research training programmes including Centre for Research Training in Foundations in Data Science and are partnering with the Centres for Research Training in Artificial Intelligence. We are also hosting 3 Marie Skłodowska Curie co-fund programmes aimed at providing world-class training and research opportunities to post-doctoral fellows in the area of smart manufacturing, software and process engineering.

In our strategic focus on attracting and nurturing talent, we embed the principles of inclusivity, equality and diversity. UL's role has been one of a changemaker in tackling equality with great strides made with 90% of academic departments in receipt of Athena Swan awards and representation of females in the Professoriate at 30%. We pride ourselves in our role as champions for inclusion, and we can do more as we seek to be recognised as an inclusive institution across all national and international benchmarks and best practice for equality, diversity and inclusion.

## Objectives:

- Foster talent and a high-performance research culture by ensuring our strategic recruitment is aligned to research excellence.
- Attract and retain prestigious research grant holders on our faculty.
- Develop our reputation as an international centre for doctoral education. Establish a doctoral college and grow flagship postgraduate research programmes that showcase our areas of strength and enhance our international reputation.

## Key Actions

- Embed our research-led ethos into our recruitment strategy and retention procedures.
- Design a long-term strategic recruitment investment programme to attract and retain excellent research talent in priority areas. This will incorporate opportunities for joint appointments with partners, adjunct positions and examine gaps across career stages.
- Establish a leadership training programme which addresses research leadership at all career stages.
- Establish central and more targeted communications of staff supports for research across career stages.
- Establish the University of Limerick Doctoral College and support a strategic focus on PhD recruitment.
- Full implementation of IUA Researcher Career Development and Employment Framework through a new, all-compassing UL Researcher Development Programme.
- Renewal of EU accreditation HR Strategy for Researchers (HRS4R) including new open, transparent, and merit-based recruitment (OTM-R) practices.



Nurturing  
our talent



## Spotlight: Nurturing Research Talent

Marie Skłodowska-Curie Fellowship success at UL has increased steadily with a total of 88 Marie Curie Fellows, funded here since 2014. The European Commission received more than 8,356 proposals in the latest round of applications and across Europe around 14% of the applications were successful. UL's success rate of 24% demonstrates the talent of UL's early career researchers, the contribution of their mentors and dedicated supports available at the University.

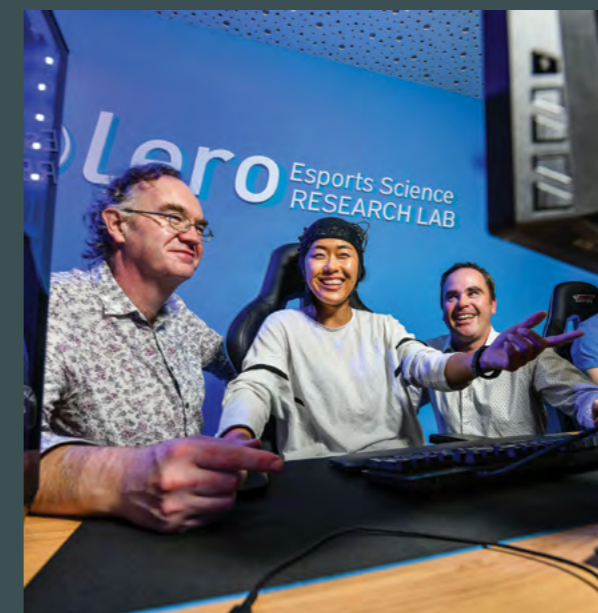
University of Limerick hosts the Centres for Research Training (CRT) in Foundations in Data Science, a doctoral training programme providing students with a world-class foundational understanding of applied mathematics, statistics, and machine learning. The programme is part of the largest ever investment in data science research in Ireland and is a collaborative initiative between Science Foundation Ireland, Skillnet Ireland, University of Limerick, Maynooth University and University College Dublin. UL is also a partner in the SFI Centre for Research Training in Artificial Intelligence.

**Top:** Marie Skłodowska-Curie Fellows and their supervisors at Plassey House.

**Right:** Data Science Students from Ireland and the UK meet for a 2 day data dive with food waste charity FareShare UK.



**Top Left:** Donal Ryan, Lecturer in Creative Writing and winner of the Jean Monnet Prize for European Literature pictured at the UL Creative Writing Festival.



**Top Right:** Lero esports science research lab in University of Limerick are, from left, software lead Professor Conor Ryan, postgraduate researcher Yueying Gong, and lab director Professor Mark Campbell.

**Below Left:** Panel discussion 'My journey in science – pursuing a career in research panel discussion involving early career researchers hosted by Confirm – SFI Centre for Advanced Manufacturing.

**Below Right:** Dr Sindy Joyce, who became the first Irish Traveller to obtain a doctorate from an Irish university. Dr Joyce is a human rights activist, sociologist and a member of the Council of State.





# MEASURES OF SUCCESS

The complex nature of our objectives and indeed reflecting the **value and contribution of all kinds of research** requires a broad-based and flexible approach to assessing performance.

A mix of quantitative and qualitative measures underpinned by a responsible approach to the use of metrics will be required. Within this, it is important to recognise the diversity of research output, the need to focus on quality over quantity and the importance of peer review as the most reliable measure of research quality. Many of the quantitative indicators currently in place are required by external actors including our HEA compact, funding agency reporting and the range of rankings agency submissions which focus on quality of research output.

Quantitative measures such as percentage of publications in top 10 percentile journals, research awards including EU and industry, PhD graduations will have targets assigned at Institute/Centres/ faculty and department level. At an institutional level field weighted citation impact (FWCI) will be monitored over a 5-year period together with commercialisation outputs such as spin-outs and invention disclosures. These measures require a number of actions to support and drive. Our research performance dashboard will be an essential tool in the monitoring of performance in line with our institutional strategic plan implementation.



Monitoring  
our **research**  
performance

Dr Shahrzad Daghighi, Postdoctoral researcher in composite materials.



# RESEARCH COLLABORATIONS AT UL

## Research Institutes

Bernal Institute  
Health Research Institute

## UL hosted Research Centres

Centre for Research Training (CRT) in Foundations of Data Science  
CONFIRM – SFI Research Centre in Smart Manufacturing.  
Dairy Processing Technology Centre (DPTC) – Enterprise Ireland.  
EPI\*STEM – National Centre for STEM Education  
Lero – SFI Research Centre for Software  
Pharmaceutical Manufacturing Technology Centre (PMTC) – Enterprise Ireland.  
Synthesis & Solid-State Pharmaceutical Centre (SSPC) – SFI Research Centre for Pharmaceuticals

Historian, Dr Richard Kirwan, Irish Research Council Laureate holder pictured at the Glucksman Library. The Glucksman library is home to a number of special collections and archives including the Bolton Library, Kate O'Brien papers, National Dance Archive of Ireland among others.

## Internal Research Centres

4i Centre for Interventions in Infection, Inflammation & Immunity  
Centre for Advancement of Mathematical Education in Technology  
Centre for Applied Language Studies  
Centre for Crime Justice & Victim Studies  
Centre for Early Modern Studies  
Centre for European Studies  
Centre for Irish-German Studies  
Centre for Social Issues Research  
Centre for the Study of Popular Music and Popular Culture  
Digital Media & Arts Research Centre  
Enterprise Research Centre  
Environmental Research Centre  
European Centre for the Study of Hate

Food Science Research Centre  
Interaction Design Centre  
Limerick Digital Cancer Research Centre  
Localisation Research Centre  
Mathematics Application Consortium for Science & Industry (MACSI)  
Mobile and Marine Robotics Research Centre  
National Centre for Tourism Policy Studies  
Optical Fibre Sensors Research Centre  
PE PAYS Ireland  
Ralahine Centre for Utopian Studies  
Research Centre for Education and Professional Practice  
Sport and Human Performance Research Centre  
Telecommunications Research Centre



PhD students from the Centre for Research Training (CRT) in Foundations of Data Science pictured at UL's Data Visualisation Lab, Glucksman Library.

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