



Collaborate with
**University of
Limerick**

A Guide for Research,
Development & Innovation

UNIVERSITY
of
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OLLSCOIL LUIMNIGH



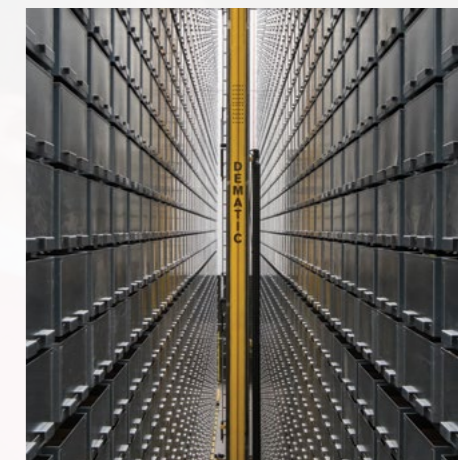
UNIVERSITY OF
LIMERICK
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Technology
Transfer
Office

Research, Development & Innovation with University of Limerick



Research, Development & Innovation (R,D&I) is a key driver of innovation and is critical to the success of any company. Innovation enables companies to create new products and services that meet the changing needs of their customers.



By investing in R,D&I, companies can develop new technologies, improve production processes and efficiency, and enhance their products and services. This, in turn, can help companies improve their market position, increase revenue, and drive potential long-term growth. With technological advances disrupting all industries, companies must innovate to stay relevant and not be left behind.

University of Limerick (UL), located in Limerick, Ireland, is a research-intensive university. It has a strong reputation for its research capabilities and collaboration with industry. UL actively engages in collaborative and contract research projects with industry, society, and government agencies to address specific challenges, develop new technologies/capabilities, and provide innovative solutions.

Collaborating with UL offers companies a unique opportunity to leverage external expertise, resources, specialist research facilities, and different perspectives. Collaborations not only lead to breakthroughs but also provide companies with a stronger competitive position.

Industry Sectors

UL's research and knowledge transfer activities span all its faculties and disciplines. The Technology Transfer Office (TTO) at UL ensures the university's R&D activities can contribute to industry in its region and globally through UL's multi-faceted approach.



Diagram 1: The industry sectoral research provided at UL.

The TTO is deeply committed to working with small and medium-sized enterprises (SMEs) and multinational corporations (MNCs) both in Ireland and internationally across a range of diverse sectors.

Why Work with UL

The cornerstone of working with a university is accessing the knowledge and talent, to drive a culture of innovation. The secret to successful UL collaborations lies in leveraging the strengths and synergies of both academia and industry to create economic value and address societal needs. This is achieved through the establishment of a collaborative environment and a fostered shared vision. Companies who work with UL can harness potential benefits; the main ones are listed below.

Research Expertise

Companies can tap into technical and business expertise to address complex problems and explore new ideas.

Access to Resources

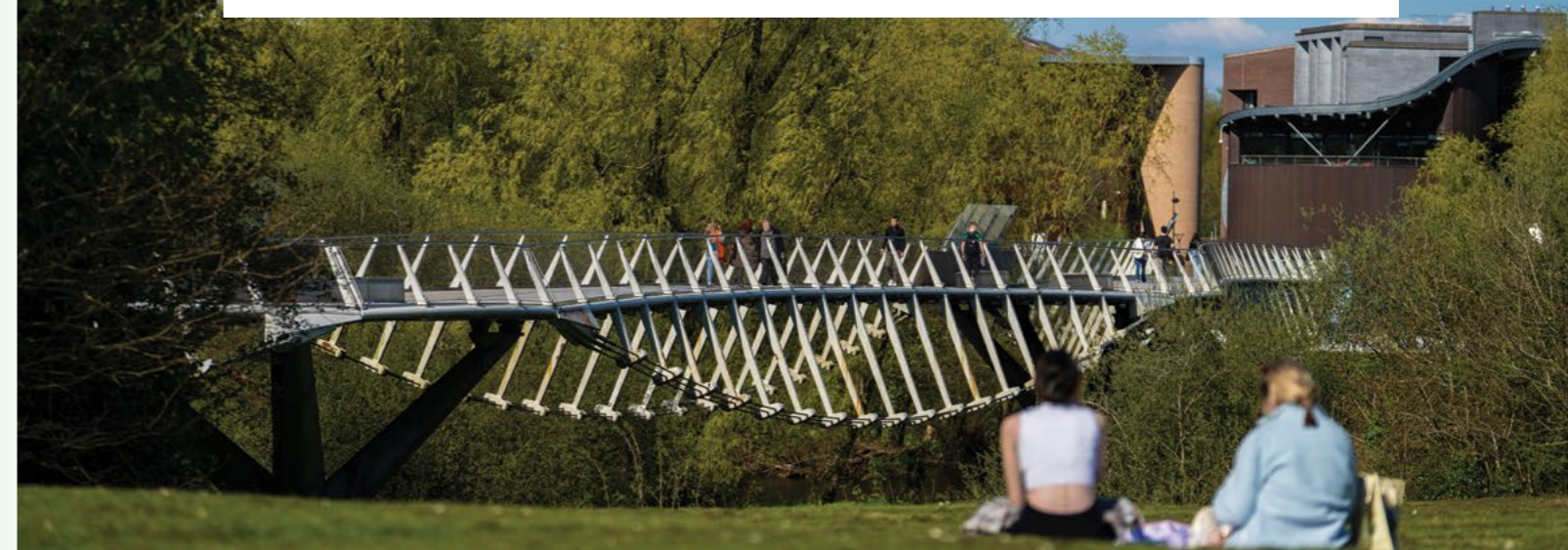
UL has state-of-the-art facilities, laboratories, and research infrastructure. Companies can leverage these resources to conduct experiments, tests, and analyses that may be beyond their current capabilities.

Access to Talent

UL is home to talented researchers who can contribute fresh perspectives and enthusiasm to research projects. UL also has a steady talent pipeline of highly innovative students who will be looking for employment during their placements and after they graduate.

Training & Workshops

UL offers industry-focused training programmes, workshops, and seminars that expose companies to new ideas and methodologies. This can help employees think differently and adopt innovative approaches to problem-solving.



What types of research can be carried out?

There are two main research categories that most research types can be traced back to, **applied research** and **blue-skies research**.

A) Applied Research

Applied Research is used to answer a specific question that has direct application. It seeks to find practical solutions for existing problems. These can include challenges in the workplace, education, and society. This research type uses empirical methodologies, such as experiments, to collect further data in an area of study. The findings help to develop new technologies and improve existing systems. Organisations in all sectors can benefit from the insights this type of research provides. It works best when one has a specific question and is seeking answers to that question.

B) Blue-skies Research

Blue-skies Research also known as Fundamental Research or Basic Research is driven by a desire to further our scientific understanding without necessarily considering specific real-world applications.

Blue-skies Research plays an important role in increasing public interest and understanding of science and technology. Notable examples are the Big Bang theory, the Higgs Boson particle, ancient fossils, and space exploration.

When choosing what type of research to use, consideration should be given to whether one is looking to expand existing knowledge or hoping to find completely new knowledge to solve a problem. In summary, while fundamental research seeks to understand the fundamental nature of phenomena, applied research aims to harness that understanding for tangible benefits.

Collaborative Research, Contract Research & Consultancy

Collaborative Research is a partnership between two or more parties who work together to achieve common goals. Ireland's framework for research commercialisation is directed by **Knowledge Transfer Ireland (KTI)** - www.knowledgetransferireland.com. KTI is a national organisation established to drive and facilitate the commercialisation of research from Irish RROs. KTI plays a pivotal role in fostering collaboration between academia and industry to maximise the economic and societal impact of research.

Contract Research allows private, public, and third-sector organisations to commission specific research to gain new knowledge and insight.

Consultancy Research involves the application of existing knowledge to solve a particular challenge or help organisations meet their objectives.

The TTO team at UL can help you identify the expertise that can benefit you the most, connect you with relevant academic researchers, and help in specific phases or aspects of the project as required.



Funding Supports & Costs

Access to funds allows companies to seize growth opportunities and remain competitive in their industry. Companies that secure funding have a greater number of resources with which to expand, operate, and drive R,D&I.

Support is available in many forms - from research capability, subject matter expertise, and specialised equipment to finance. There is a myriad of them available but it takes time to select what might suit your business and needs best.

Agency	Programme	Focus
 Enterprise Ireland	Innovation Vouchers	Consultancy
	Innovation Partnerships	Research Collaboration 1-2-1
	Disruptive Technology Innovative Fund	Research Collaboration 1-2-many
	Technology Centres	Research Collaboration 1-2-many
	Commercialisation Grants	Commercialisation/Start-up support
	New Frontiers	Start-up support
Taighde Éireann (the merging of Science Foundation Ireland and Irish Research Council)  	Research Centres	Research Collaboration 1-2-many
	ARC Hubs	Commercialisation
	Centres for Research Training	Talent development
	Industry Fellows	Talent development
	Strategic Partnership Programme	Strategic collaborations
Horizon Europe  	Research & Innovation	Research Collaboration 1-2-many
	Marie Skłodowska-Curie Actions	Talent development
	European Innovation Council (EIC)	Commercialisation/Start-up support
Other	Department of Agriculture, Food & Marine	Research Collaboration

Funding support will vary depending on the specific agency's funding programme and the organisation's size, i.e., a startup, SME, or MNC. The applicable principles for research for each whether they are; funded 100% by the State, industry, or partly funded by both are explained in [KTI Research Supports and Mechanisms](https://bit.ly/KTI_Supports_and_Mechanisms) (bit.ly/KTI_Supports_and_Mechanisms)

R&D Tax Credits

R&D tax credits are designed to stimulate economic growth by supporting companies engaged in R&D activities.

Monies spent with UL for research may be eligible for tax credit. Qualifying R&D expenditure can generate up to a 30% tax credit, which can be offset against corporate taxes. The credit operates by giving the company up to 30% of R&D expenditure (both revenue and capital) in a tax credit or cash, subject to certain conditions being met. A company may be eligible when carrying out the following:

- Developing a new product, process, system, or platform
- Working to reduce the environmental impact of the manufacturing process
- Working to improve existing products, methods, or processes
- Working to improve the next generation of an existing technology.

Therefore, R&D isn't just happening in a laboratory. Often, it is the work a company would consider as part of its day-to-day activities such as developing a new product, devising or making improvements to a production process, or trying out new materials to reduce costs. The list is extensive and, the benefits are significant, so it is worth checking if your company's activities meet the criteria by consulting with your finance department. Any expenditure funded directly by Irish State aid such as a grant will not qualify, but companies can claim tax relief on the balance of R&D spend. Companies often reinvest the tax credits for the next R&D project so that they have a rollover budget for their ongoing R,D&I activities. More information is at Revenue.ie [R&D Corporation Tax Credit](https://Revenue.ie) (bit.ly/Revenue_Tax_Credit).





Intellectual Property (IP) Ownership

One critical aspect of RPO-industry research is effectively managing IP rights e.g. patents, copyrights, etc., and other types of IP assets such as data, and know-how generated by the parties. Effective management of these IP rights will increase value-creation opportunities and social innovation.



Agreements and policies regarding ownership, licencing, and commercialisation of IP generated through collaborative projects are laid out at UL and are directly derived from the **National IP Protocol** (bit.ly/National_IP_Protocol). The **National IP Protocol Made Simple** (bit.ly/Protocol_Made_Simple) is a summary guide to the National IP Protocol policies and procedures which also cover arrangements for good planning, governance, and publication.

In 2019, the Department of Business, Enterprise, and Innovation set out a policy document framework for the underpinning of research collaboration and access to IP from State-funded research. For Irish state or EU-funded projects, the **EU Code of Practice on IP** (bit.ly/EU_Code_of_Practice) will be followed.

If the company wants to own the results output from the research, then the company needs to fund the full economic cost of the project and the university/company cannot avail of any State support. The commercialisation of UL's IP complies with the EU State aid rules plus any applicable funding agency grant terms and conditions.



Let UL power your
Innovation Journey

Formation of a Project

The UL Researcher/Expert in the field will work with the company to scope out and develop a mutually agreeable programme of work. If the work is Consultancy Research e.g. test analysis, or use of specialist research equipment, then by and large only UL will have tasks in the programme of work. If the work is Contract or Collaborative Research the obligations of all parties will be set out. As with any research project, several other factors will be discussed and agreed such as project planning, timelines, resources, risk management, clear communication etc.

Research Agreement

Each collaborative research project is subject to a formal agreement that is put in place before the commencement of the research. The agreement specifies the legal framework governing the project, along with a project plan and budget. UL offers a comprehensive range of template agreements designed to accommodate various forms of research collaborations. These templates are in alignment with **KTI Model-Agreements** (bit.ly/kti_model_agreements). For organisations that frequently collaborate with UL on research projects, a Framework Agreement is recommended. A Framework Agreement can incorporate pre-negotiated agreement terms that can be selected as appropriate for each collaboration. This structured approach streamlines the review and implementation of new collaborative research projects.

Research Institutes & Centres

UL has many research strengths, especially in the areas of Materials, Advanced Manufacturing, Software, Health, and Applied Mathematical Sciences. UL's research successes are enhanced by the ongoing development of interdisciplinary institutes, research centres, and collaboration with international academic and industrial partners. In addition to over twenty-five research centres at UL, it also hosts several national research centres which are externally funded by the government. UL plays a leading role in the national research centres of scale in the areas of pharmaceutical/ biopharmaceutical manufacturing, dairy manufacturing, and software. Research expertise can be accessed through UL and these research centres of scale. More information can be found at **UL Institutes and Centres** (bit.ly/Institutes_and_Centres).

Licencing University-Owned Inventions

Professors, researchers, and students generate a great number of inventive concepts through research for which patents have already been obtained by the university. UL has a portfolio of patented technologies for licencing. The list of patented technologies for licencing is constantly changing and existing available opportunities can be viewed at **UL Licencing Opportunities** (bit.ly/Licencing_Opportunities).

Other Ways to Work with UL

There are a multitude of ways to engage with UL which can be short-term transactional to relational which are more long-term, personal, and value oriented. There are many ways to engage in R&D, education, training, and upskilling activities as outlined in the diagram below.

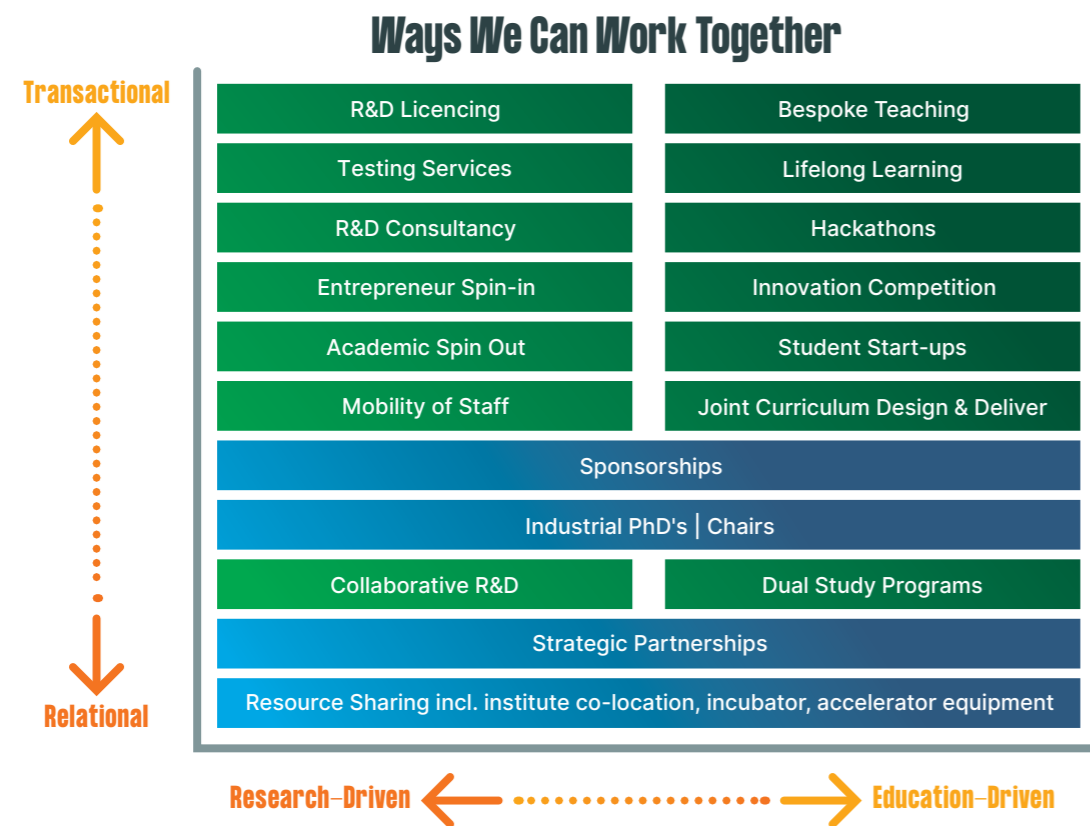


Diagram 2: Different ways to collaborate and work with UL.

Future Planning

When companies are developing their R&D roadmaps, it is an ideal time to engage with UL. Our hubs of innovation and research expertise can bring many advantages in introducing new technologies, improving production processes, and enhancing company's products and services. We welcome interest from companies whether that is to explore potential research opportunities or licencing our available technologies.

Innovation @ UL
Transforming ideas
into market success





Contact Us



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The **UL TTO** is supported by KT Boost, a programme co-funded by the Government of Ireland and the European Union through the ERDF Southern, Eastern & Midland Regional Programme 2021-27



Rialtas na hÉireann
Government of Ireland



Arna chomhchistiú ag
an Aontas Eorpach
Co-funded by the
European Union



Tionól Réigiúnach
an Deiscirt
Southern Regional
Assembly