

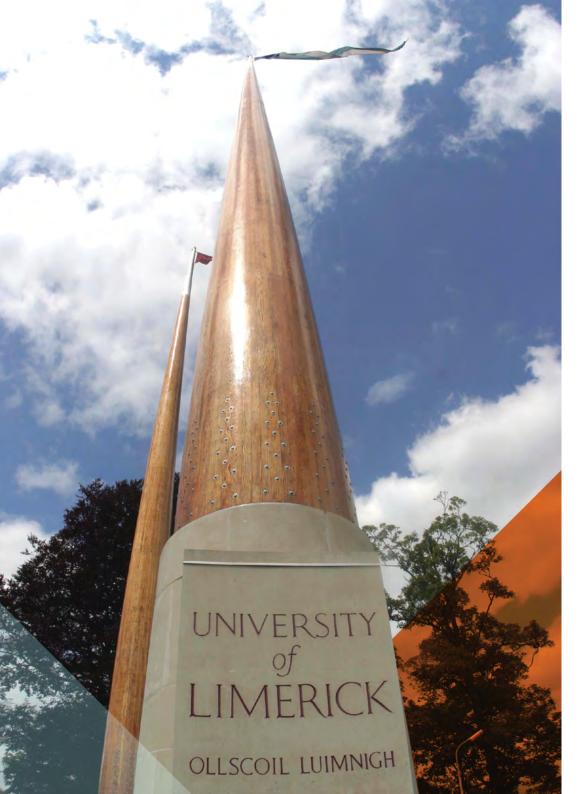
# Health Research Institute **Strategy 2023–2028**





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With a primary role of fostering and delivering health research in areas of academia, hospital care and community healthcare, the **Health Research Institute** (HRI) at University of Limerick (UL) flourished over the last ten years.

Today and together with the mission, vision and core values of the new HRI five-year strategy, we stand on the precipice of an exciting and transformative journey, one that underscores the importance of fostering and delivering health research that reaches far beyond the confines of our academic institutions and resonates deeply within our communities and healthcare settings.

At University of Limerick, we take immense pride in our commitment to excellence in research, education, and innovation. We understand that the health of our society is not solely defined by the absence of disease but by the presence of well-being, equitable access to healthcare, and the constant pursuit of new knowledge that can enhance the lives of individuals and communities.

It is within this ethos that the Health Research Institute (HRI) operates, with an unwavering dedication to advancing the boundaries of inquiries into health and wellbeing through a unique transdisciplinary approach.

This new strategy marks a significant milestone in our journey to redefine the role of academia in health research and we recognise that the challenges and opportunities of the modern healthcare landscape demand a departure from traditional silos and a new level of collaboration. The HRI embodies this shift, bringing together experts from diverse fields—ranging from medicine and nursing to engineering, social sciences, and beyond—to work in unison towards a common goal: improving the health and well-being of our society.



The transdisciplinary approach championed by the HRI is not a mere buzzword; it is a fundamental shift in our research paradigm. It acknowledges that complex health challenges require multifaceted solutions, and it encourages the free flow of ideas across disciplinary boundaries. By doing so, we unlock the full potential of our collective expertise, fostering innovation and creativity that can drive meaningful change in healthcare practice.

Moreover, what truly sets the HRI apart is its unwavering commitment to translational research. We firmly believe that the value of research lies not just in the generation of knowledge but in its translation into real-world applications that directly benefit our communities. Translational research is the bridge between discovery and practice, and the HRI is dedicated to ensuring that this bridge is robust, accessible, and well-travelled.

With sustainability at the core of this University and through the lens of this new HRI five-year strategy, we do so with a clear vision in mind: a vision where our research findings do not remain confined to the pages of academic journals but are integrated into healthcare practice, where innovation is not an abstract concept but a tangible reality, and where the health and well-being of our citizens are at the forefront of everything we do.

Our commitment extends beyond the walls of our university. We recognize that true impact can only be achieved through collaboration with our partners in the healthcare sector, from hospitals and clinics to community healthcare providers. It is through these partnerships that we can bring our research to life, test its applicability, and refine it to address the ever—evolving needs of our society.

The institute's membership of dedicated researchers: clinicians, and professionals, who have tirelessly contributed to the development of this strategy, and their unwavering commitment to the pursuit of excellence in health research, is the driving force behind the HRI's success.

Through steadfast determination and together, with our partners in academia, healthcare, and the community, we can forge a future where health research transcends boundaries, impacts practice, and ultimately transforms lives.

**Professor Kerstin Mey**President, University of Limerick





The right to a healthy life does not start or end at a specific age. Enabling all people to live a **long and healthy life** requires a multidisciplinary and multisectoral approach.

The Health Research Institute (HRI) at the University of Limerick (UL) was established to align researchers from different disciplines around common research goals with a focus on health across the lifespan and healthy ageing. We use an evidence-based approach to innovation and intervention and leverage digital technology to support the achievement of our goals. Key to this effort is the participation of patients and the public in our research.

From initial small beginnings, the HRI has grown to be a major research institute, spanning UL and the University of Limerick Hospitals Group (ULHG) and interacting increasingly with the Mid-West Community Healthcare Organisation (CHO3). In the past four years, research clusters have helped vibrant research areas to grow and flourish; each cluster is associated with its own strong programme of research, leadership structure and planning process.

The HRI's response to the global pandemic reaffirmed that the multidisciplinary and collaborative nature of our Institute can provide an adaptive and resilient response to new societal research challenges. This agility and diligence of the HRI community enabled new research studies to address the causes and consequences of the pandemic.

The next five years offer an opportunity to build on the foundations laid in the development of the HRI. The Institute will maintain its resilient, multidisciplinary approach to research but will focus its efforts on identified research strengths that contribute to improved health across the lifespan. Focusing on these strengths will enhance research excellence, leading to more impactful research outputs and a greater reach, both nationally and internationally, for our researchers.

Direct alignment with the United Nations Sustainable Development Goals (UN SDGs), particularly Goal 3 (Good Health and Wellbeing: Ensure healthy lives and promote wellbeing for all at all ages), will continue to make our research timely and internationally relevant.

Importantly, our plan involves working closely with valued partners, including ULHG, CHO3, NGOs, companies, charities, funders and other academic institutions. Our work will continue to be collaborative with, and of value to, healthcare providers. Our new strategic plan will cement relationships with these bodies, thereby providing greater synergy and further opportunities for partnerships as well as having greater impact on these organisations. Moreover, we believe that working closely with other UL research institutes and centres, where relevant, is key to our success. Our members have excelled at developing international research networks, and we will strive to reinforce and enable these, thereby ensuring that international research funding and collaboration on outputs continue to expand and that the reach, significance and influence of the HRI is further enhanced.

An integral element of the HRI's strategy will be to ensure that all activity is underpinned by equality, diversity and inclusion in accordance with UL's Equality and Human Rights Strategy.

We look forward to supporting the HRI community and UL in realising the HRI vision for good health and wellbeing over the next five years, and in so doing, bringing tangible health and wellbeing benefits to the people of the Mid-West and further afield.

## **Professor Alan Donnelly** *HRI Director*





The Health Research Institute (HRI) was founded in 2014 to support, represent and promote health research at UL and to facilitate collaboration with the affiliated University of Limerick Hospitals Group (ULHG) and the Mid-West Community Healthcare Organisation (CHO3).

ULHG comprises six hospitals operating as a single hospital system, and CHO3 provides community health and social services. Both bodies currently serve a population of 385,000+ in Limerick, Clare and Tipperary\*.

The foundation of the HRI was based upon the unique blend of research disciplines that emerged during the development of health-related teaching and activity across UL. The initial emphasis on research was defined by distinct research themes that provided direction and optimal collaborative opportunities. This emphasis was useful in the development phase of the HRI. As we progress and narrow our focus, these broad research themes will be replaced by a concentration on more specific priority research areas with critical, underpinning areas of excellence that have emerged naturally as a response to evolving societal needs and distinctive research expertise.

As a research institute that focuses on health, we have a keen sense of responsibility to respond to and concentrate our efforts on the significant global health challenges that threaten our world.

The identified priority and underpinning research areas (described below) are aligned with global and national strategies that seek to address such challenges. The HRI and UL now have an inspiring and exciting opportunity to respond to these issues and make a real difference by delivering excellence in research powered and enabled by digital technology and data driven analytics at every opportunity.



We understand that being interconnected, interdisciplinary, crossboundary, cross-cultural and entirely inclusive in our approach is what is required to address societal grand challenges. We cannot do this alone or by using antiquated norms

The <u>SDGs</u> were adopted by the United Nations in 2015 as a universal call to action by all countries to end poverty and other deprivations by, for example, improving health. Of the 17 integrated SDG goals, it is with SDG 3 – Good Health and Wellbeing: Ensure healthy lives and promote wellbeing for all at all ages – that the HRI focal areas of research are most closely associated.

We have proven success and capabilities in the health and wellbeing space, with recognised responsibilities and positive activity in gender equality and partnerships that provide the optimal platform for our five-year strategic plan. Our work supporting migrant communities' involvement in research also illustrates our serious intent regarding the SDGs.

As the HRI embraces its responsibility with respect to SDG achievement, it is imperative that we support the UL Mission-based Sustainability Framework 2030. Our alignment with the Sustainability Framework manifests most notably under Society-Thriving Communities, one of the four key areas of a sustainable university. As work on the framework progresses, we look forward to active participation that will help foster a true culture of connectedness, inspire research missions and, ultimately, manifest as real impact in society.

Our strategic direction was influenced by Horizon Europe, with Cluster 1: Health, addressing health throughout the life course and the improvement and protection of the health and wellbeing of citizens of all ages. Cluster 1 refers to health technologies and the promotion of good health and wellbeing. One of five EU Missions in Horizon Europe relates to cancer.



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On a national level, our focus and direction are fully informed by Impact 2030: Ireland's Research and Innovation Strategy from the Department of Further and Higher Education, Research, Innovation and Science. This comprehensive and visionary document fits well with our research ambition through its emphasis on, for example, Horizon Europe; the Creating our Future initiative; the National Grand Challenges Programme, which will fund mission-oriented challenges and deliver impacts for society; and the new Evidence for Policy Unit, which will link public policymakers and the public research system.

The National Development Plan 2021-2030 from the Department of Public Expenditure and Reform has also informed the HRI strategy, particularly NSO 10: Access to Quality Childcare, Education and Health Services. The latter refers to the expansion of primary and community care as per Sláintecare, the objectives of which relate closely to the HRI vision, mission and goals (specified later). Sláintecare is a 10-year programme that aims to reform the healthcare system in Ireland. The Sláintecare Implementation Strategy and Action Plan 2021-2023 places a particular emphasis on two prioritised Sláintecare reform programmes, one of which – Improving Safe, Timely Access to Care and Promoting Health & Wellbeing – shows how closely the HRI strategy matches the national healthcare agenda.

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The Healthy Ireland Framework 2019-2025 is the national framework for action to improve the health and wellbeing of people living in Ireland while the Healthy Ireland Strategic Action Plan 2021-2025 provides a roadmap for working together to improve the health of the nation. As Healthy Ireland is a key initiative of the Sláintecare strategic action plan, this further validates our reasoning for direction taken and our identification of the most relevant areas of research excellence in the context of good health and wellbeing for all.

The strategic ambition envisaged by the HRI cannot be achieved in isolation. The Institute's multidisciplinary and translational approach is an inherent and cultural strength that helps to promote collaboration amongst researchers, both from UL and partner organisations, and gives rise to research that has a meaningful and direct impact on people's health and wellbeing.

The HRI strategy is closely aligned with the integrated care aim of the new Regional Health Areas within the HSE. It is envisaged that the creation and implementation of six new Regional Health Areas will be completed in 2024. These are areas with clearly defined populations that geographically align hospitals with community healthcare services at a regional level; Limerick, Clare and Tipperary comprise Regional Health Area E. This new areas model will improve the efficiency of healthcare delivery and help to drive an effective, person-centred, integrated system.

Health research in the HRI will continue to play a pivotal role in realising UL's strategic priorities by driving the translation of research discoveries and knowledge into new, innovative ways of treating populations; delivering person-centred and integrated healthcare; changing behaviour; incorporating digital technology; and improving health, health services delivery and quality of life in our ageing society. We have ensured that our strategy aligns with UL's Research Strategy 2022-2027, Wisdom for Action by concentrating in particular on the mission-orientated challenge of building a healthy society. As most of our members come from our host faculty, the Faculty of Education and Health Sciences (EHS), we have ensured that our respective strategies complement each other.

The refined research portfolio will be defined by research prowess and identified opportunities for impact in the four priority research areas of ageing, cancer, physical activity for health, and food, diet and nutrition, all of which will be underpinned by expertise in implementation science and participatory and arts-based research and by our emerging skillset in digital technology and advanced data analytics.

In terms of a talent pipeline, the HRI is cognisant of the vital role the next generation of researchers will play in future-proofing a vibrant, collaborative and relevant health research ecosystem at UL.

The development of this strategy was informed by and validated through robust consultation processes and reviews, including with an external advisory panel, a quality review group and key internal and external stakeholders.

As we approach the next phase of the HRI's evolution and as we place an emphasis on research that provides the greatest opportunity for societal impact, we will ensure that the support system is effective and adequate for all stakeholders. Our new governance and management structure (described later) will support the effective implementation of the strategy.

We look forward now to the next five years as we strive to realise our ambitions of **good health and wellbeing for all** at all ages and to truly make a difference in this global challenge.

## CLINICAL RESEARCH SUPPORT UNIT

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The HRI Clinical Research Support Unit (CRSU) was established in 2014. The CRSU is located within the Clinical Education and Research Centre (CERC), a building shared by UL and the Health Service Executive (HSE) on the University Hospital Limerick (UHL) campus.

The CRSU houses a highly skilled clinical research team, including a clinical research operations manager, clinical research nurse managers, quality and regulatory personnel, a biostatistician and administrative support. The CRSU provides a dedicated space for clinical research and offers first-class facilities in the form of clinical rooms, hot desks, board rooms and meeting rooms.

The CRSU supports HRI members in conducting clinical research projects and facilitates interaction with our healthcare partners. The Clinical Research Unit (CRU) was developed through our valued partnership with the HSE. This represents the CRSU team coming together with expert clinical research teams from the HSE to work collaboratively in the CERC to support externally funded clinical research studies in UHL and in satellite ULHG hospitals.

A critical element of the HRI strategy is to sustainably increase the number of clinical trials and studies conducted in the unit. This will be achieved through an ambitious but realistic plan that seeks to leverage the positive collaborative partnerships that already exist with ULHG clinician researchers. The CRSU link to CHO3 is strengthening, and we view this as a positive part of our work that needs to be nurtured. Industry links are crucial and will be expanded, again in collaboration with our ULHG partners and UL investigators and through the further development of our close working relationship with the Cancer Trials Unit, which is already highly active in the hospital.



Whilst the CRSU is a modest, maturing clinical research facility compared to more established facilities in, for example, Cork and Galway, we do not see these entities as a collective threat but rather as collaborative partner members of a national network of such facilities. This brings opportunities in terms of expertise and best practice sharing and, indeed, service provision in niche areas such as data management and medical technology. We ourselves will develop our own niche area of expertise and use this to inform our business model, all the while ensuring that our plan is linked to local capabilities, opportunities and infrastructure.

### The goals for the CRSU are to:

- support and drive the unit to achieve equal status with its peers;
- increase accessibility to trials for patients and healthy volunteers in the Mid-West, or the new Regional Health Area E;
- improve support for investigators to increase investigator-led trials; and
- become a trusted destination for innovative studies utilizing digital technology, medical device investigations and clinical data analysis, processing and management.





## VISION

TO BECOME A LEADING RESEARCH INSTITUTE FOR THE ADVANCEMENT OF **GOOD HEALTH AND WELLBEING ACROSS THE LIFESPAN**.

# MISSION

## TO ADVANCE PERSON—CENTRED, TECHNOLOGY—ENABLED, INTEGRATED HEALTHCARE AND TREATMENT

by focusing on relevant, evidence-based areas of research with real impact while fostering a culture of high-performance excellent research, inspiring ground-breaking transdisciplinary collaboration and nurturing our talent pipeline.

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Core Values

**Equality, Diversity and Inclusion** We commit to the ongoing development of an inclusive environment that values equality and diversity and respects the human rights and dignity of all.

**Excellence and Integrity** With excellence at the core of our work, our research is conducted to the highest standards of ethics, quality and integrity.

**Collaboration** Our researchers work in partnership across disciplines and with local, national and international institutions and networks to drive effective solutions and synergistic opportunities.

**Openness** Transparency in our work is expected, and we welcome the sharing of data, new ideas, perspectives and methods in both theory and practice in an agile, dynamic and vibrant community.

**Empowerment** Our members work in an environment in which they feel respected, valued and understood and in which their potential is optimised.

**Sustainability** We have a keen sense of responsibility to undertake relevant research with sustainable outputs that help address grand challenges and contribute towards a regenerative society.

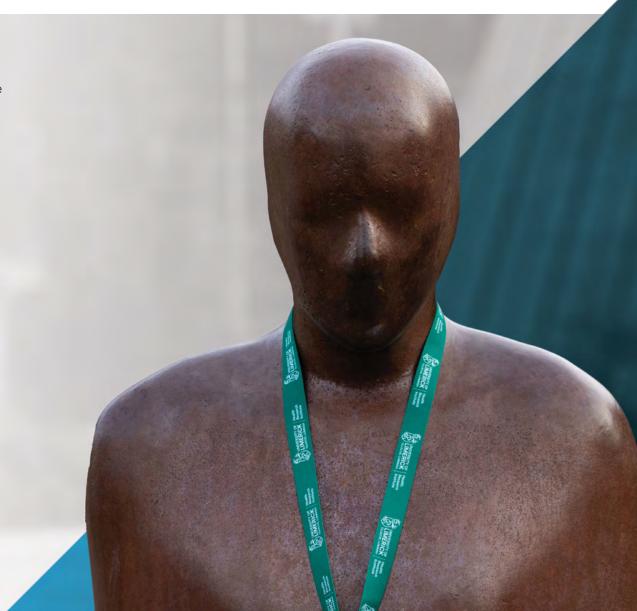




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To improve health and wellbeing across the lifespan and so positively impact quality of life, we have identified critical and interconnected areas of research that align our research and academic strengths in a coherent manner and enable us to effectively respond to this grand societal challenge. The distinct areas (as described below) form a logical, cohesive model of delivery with four priority research areas and three intersecting, underpinning elements, allowing us to achieve our health and wellbeing ambitions. This is depicted in the diagram below.







## 9.1 Ageing

Ireland has an ageing population. According to the national Healthy and Positive Ageing for All: Research Strategy 2015–2019, by 2047, the number of those aged 65 and over is projected to increase from 531,600 to 1.42 million (or by 167%); and the number of those aged 80 years and over is expected to quadruple, from 128,000 to 476,700.

Ageing can negatively affect people's health and wellbeing and presents challenges for society, health services and individuals. Research can play a vital role in helping to inform better policymaking and planning for this ageing population, which will help improve the lives of older people across the island of Ireland. The Healthy and Positive Ageing for All research strategy describes a set of research priority areas that focus on health services delivery, health inequalities, health behaviours and social care.

The Ageing Research Centre (ARC) comprises an interdisciplinary group of researchers, the aim of which is to conduct excellent research across disciplinary boundaries to address health research priorities that reflect the day-to-day realities of older people's lives. Consequently, our research in this area is closely aligned with SDG 3, as described earlier.

ARC works to develop capacity in ageing research at UL and build collaborations with researchers, clinicians, industry partners, older people and their representative organisations. ARC has a strong track record of public and patient involvement in research enabled by collaboration with a stakeholder panel of older adults and family carers. Collaborations with clinical partners in UHL and nationally have also supported the relevance and expedited the impact of our research.

Over the next five years, ARC will strengthen and extend its collaborations with clinical partners and older adults. We will support early-career researchers through training and mentoring and grow our funding through national and international funding awards.

We will continue to forge a national and international reputation as innovators in ageing research that positively impacts older people's lives.

Ageing Research Centre (ARC) Website www.ul.ie/hri/ageing-research-centre-arc

## 9.2 Cancer

Every year, 43,500 Irish people receive a cancer diagnosis. Even though more people survive cancer and live longer due to early diagnosis and new treatments, cancer remains one of the biggest killers in Ireland, causing 30% of all deaths.

The Limerick Digital Cancer Research Centre (LDCRC) is a multidisciplinary collaboration between UL and UHL. It integrates experimental biology, high-throughput sequencing and spatial multiomics, sensors, digital technology, advanced computing and data science to study the fundamental biology of cancer and build computational platforms that support scientific discovery in preventing, diagnosing, monitoring and treating disease. Advanced data analytics in biomedicine differentiates cancer research in the HRI from other such initiatives.

Cancer patients are at the core of the LDCRC's goals, and the centre will work with them over the next five years to establish the academic and clinical infrastructure that supports world-class digital cancer research and an expanding portfolio of clinical interventional, observational and translational studies in haematology and medical oncology at UHL.

The LDCRC will develop strategic national and international transdisciplinary partnerships to build a vibrant, dynamic research environment attracting outstanding scientific talent. The centre will continue to expand its external research funding portfolio and highly cited research outputs and will mentor new members and early-career researchers. LDCRC clinical and bench scientists will work with engineers, data scientists and computer science experts to advance data-driven cancer science with the goal of developing innovative approaches to cancer diagnosis and treatment.

This dynamism and forensic focus are critical; the area is complex and presents a significant sustainability challenge for healthy lives and wellbeing for all, globally.

**Limerick Digital Cancer Research Centre Website** www.ul.ie/limerick-dcrc





## **9.3 Physical Activity for Health**

Ireland has a significant public health challenge with few individuals adhering to the national physical activity guidelines.

There is overwhelming evidence from public health studies that low levels of physical activity across the lifespan are associated with higher rates of some cancers, cardiovascular disease, type 2 diabetes and other morbidities and are a cause of early mortality. Consequently, the current low physical activity levels of Ireland's population will affect people's lifespan and quality of life and will have long-term consequences for health provision and the economy as a whole.

The Physical Activity for Health (PAfH) research centre aims to improve our understanding of the long-term consequences of inactivity and to develop interventions and policy to improve physical activity levels across the population, thus aligning closely with SDG 3. The PAfH centre is building an international hub of excellence through multidisciplinary expertise,

international renown for research excellence and capacity to meet global and local research, policy and practice challenges in the promotion of physical activity for health. PAfH research covers multiple settings across the lifespan, and its activities include research, collaboration, networking, capacity building and training.

PAfH's goals for the next five years include extending links to develop more collaborative research projects with clinicians; developing and expanding PAfH research funding streams, particularly EU funding; and placing a greater focus on publications in top quartile and decile journals. The centre will strengthen existing members' research portfolios and will focus on mentorship of new members and early-career researchers in the field.

PAfnH's long-term vision is for the group to be recognised as a world leader in research excellence, with real-world impact in policy and practice.

## Physical Activity for Health (PafH) Website:

www.ul.ie/ehs/pafh

## **9.4 Food, Diet and Nutrition**

The role of food, diet and nutrition in chronic disease prevention and management is particularly important as diet is a modifiable risk factor for most chronic conditions, including cancer, cardiovascular disease and metabolic disorders including type 2 diabetes mellitus.

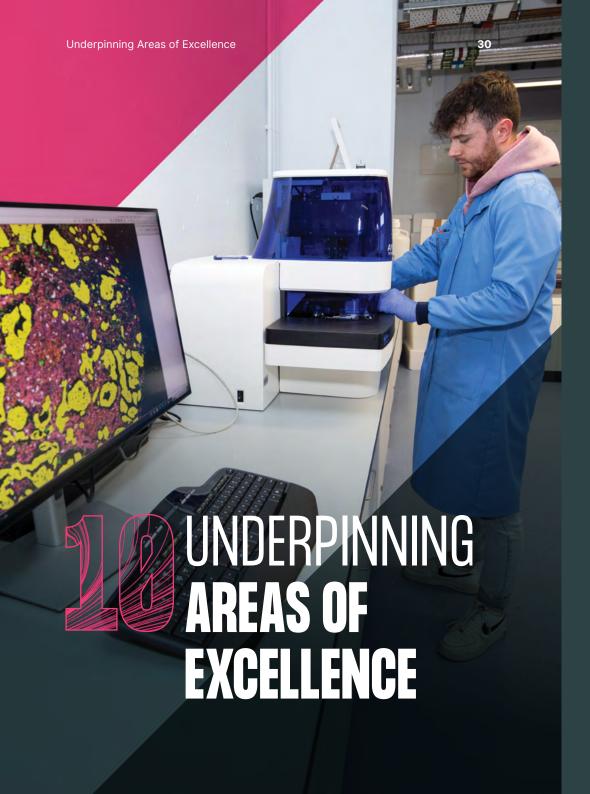
The increase in the prevalence of these chronic conditions is a societal challenge that requires multidimensional approaches, of which nutrition interventions are a critical component.

Research and innovation in food, diet and nutrition have developed interdisciplinary critical mass and strength in the HRI across multiple centres, schools and faculties. Areas of strength span research on the impact of functional foods on health, performance nutrition, sustainable food practices and understanding the link between diet quality, chronic disease and healthy ageing. Principal Investigators in this area are leading on several national and international projects having received funding from organisations such as the Food for Health Ireland National Technology Centre; Enterprise Ireland; the Health Research Board; the Department of Agriculture, Food and Marine; the Marine Institute; and the Disruptive Technologies Innovation Fund. HRI members have links to and are active members of the cutting-edge science and technology platform of the Dairy Processing Technology Centre, creating synergies for our newly formed Food, Diet and Nutrition priority area within the HRI.

It is now the aim of the HRI to prioritise and support the growth of this area by bringing together active and productive researchers with a food, diet and nutrition research focus and to provide clear links to existing centres (local, national and international), industry partnerships and, of course, related SDGs.

Over the next five years, this priority research area will seek to address the critical stages of the lifecycle and the health span by undertaking translational research that incorporates key interdisciplinary researchers and technologies in the development of functional foods and dietary strategies to optimise health using a bench-to-bedside approach. Food, diet and nutrition researchers will pursue a standalone programme of research and contribute to the HRI's other priority research areas. Specifically, research will focus on areas of nutrition that support healthy ageing, performance, metabolic health in cancer and diabetic populations, dietary strategies and behaviour change.





## **10.1 Digital Technology and Advanced Data Analytics**

The development and use of digital technology and advanced data analytics in health research is a cross-cutting strength of the HRI that has direct and indirect impact on the Institute's research activities.

The HRI has a strong tradition of incorporating digital technologies in health research, and we see these technologies as an important enabler of a healthy society with equitable healthcare for all based on technology-enabled prevention, early intervention and health service provision within the community.

Technological activities that have applications across our research areas are conducted by the HRI in diverse areas such as the design and development of medical devices, hemodynamics, the use of advanced data analytics for diagnosis and treatment, and the design and optimisation of medical software workflows.

Moreover, through the Rapid Innovation Unit, a research group comprising UL and ULHG colleagues that aims to apply cutting-edge 3D printing technologies to address unmet clinical needs, HRI members have access to state-of-the-art rapid prototyping facilities and an avenue towards licensing and commercialisation.

Over the next five years, we aim to drive technological and data analytics innovation through focused collaboration amongst our multidisciplinary membership across and with our external partners. We recognise that digital innovations, in particular, play a vital role in enhancing treatments and therapies and thus help to sustain and improve the health of the population.

Our interdisciplinary membership is ideally positioned to drive such innovation and make a lasting impact on the healthcare solutions of the future, including personalised ones. This aim is underpinned by the ambition to create robust data collection, storage and processing facilities at university level.

## **10.2 Implementation Science**

Implementation science is the scientific study of methods and strategies that facilitate the uptake of evidence-based practice and research by practitioners and policymakers, thus providing practical solutions to health services delivery and other challenges.

Interventions and evidence-based practices that are poorly implemented – or not implemented at all – do not produce the expected health benefits. The field of implementation science seeks to systematically close the gap between what we know and what we do by identifying and addressing the barriers that slow or halt the uptake of proven health interventions and evidence-based practices.

The HIST (Health Implementation Science and Technology) group leads an interdisciplinary programme of capacity building, research collaboration and networking that strengthens academic and researcher engagement with implementation science and encourages the integration, application and sustainability of implementation science methods in future research endeavours within UL and beyond. HIST is focused on advancing research in implementation science and on the systematic uptake of evidence-based, technology-enhanced interventions into practice and policy across all priority research areas. It achieves this by encouraging and supporting the early integration of implementation science in all research projects, demonstrating the applicability and translational aspect of implementation science across disciplines, and conducting interdisciplinary implementation research.

The cross-cutting activities of the group are aimed at supporting other research areas to employ implementation science methodologies in achieving impact across a wide range of projects in clinical and policy contexts.

The HIST vision for the next five years is to further build expertise in implementation science research, to lead and support the embedding of implementation science into research culture and to gain national and international recognition as a leader in the field of interdisciplinary implementation research.

Health Implementation Science and Technology (HIST) Website: www.ul.ie/hri/health-implementation-science-and-technology-hist



## 10.3 Participatory Health Research

The goal of Participatory Health Research (PHR) is to maximise the participation of those whose life or work is the subject of the research, across all stages of the research process.

Research is not done "on" people as passive subjects but "with" them to provide relevant information for improving their lives. Arts-based Research (ABR) focuses on the role of artistic practices as research methods to develop and sustain culturally informed, creative, whole-person research partnerships and projects.

Work in the HRI within this area aims to ensure that our research is aligned to the needs of people. In line with UL's focus on equality and human rights (EHR), equality, diversity and inclusion (EDI) and the UN SDGs, one challenge being addressed in the HRI is that posed by the global phenomenon of migration and the importance of involving migrants in health research. The role of music and singing as culturally attuned methods to support migrants' involvement in health research is of particular interest here.

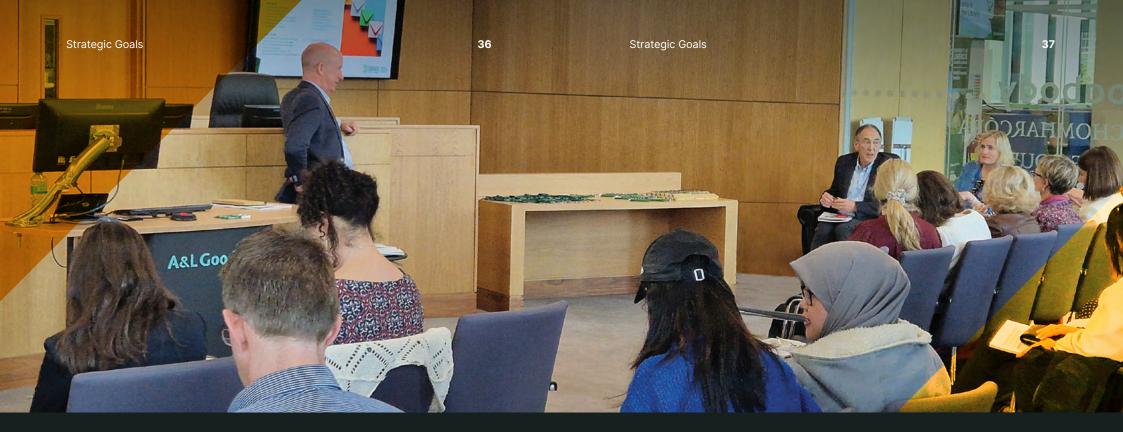
This research area is represented by the newly constituted, interdisciplinary Participatory and Arts-based Health Research Unit (PAHRU), which is codirected by academic leaders in Primary Healthcare (School of Medicine) and Arts Practice (Irish World Academy of Music and Dance). The unit is a World Health Organization Collaborating Centre for Migrants' Involvement in Health Research.

Through the PAHRU, the HRI will continue to support the development of the National PPI Ignite Network (2021-2026), which is funded by the Health Research Board and Irish Research Council.

With the ultimate goal of building capacity for public and patient involvement (PPI) in health research on the island of Ireland, the PAHRU will conduct cutting-edge research to build evidence of meaningful and sustainable PPI over the next five years while driving a better understanding of the role of arts-based methods as participatory strategies for involving migrants in health research.

**Public and Patient Involvement (PPI) Research Unit Website:** www.ul.ie/ehs/medicine/research/research-groups/public-and-patient-involvement-ppi







# STRATEGIC GOALS

TO REALISE **OUR VISION** AND ACHIEVE **OUR MISSION** OVER THE FIVE YEARS OF THIS PLAN, WE HAVE DEVELOPED FOUR STRATEGIC GOALS, EACH OF WHICH IS SUPPORTED BY SEVERAL KEY ACTIONS, AS LISTED BELOW.

- To conduct excellent, impactful research that drives innovative solutions to health and wellbeing challenges, thereby contributing to a healthy society.
- To effectively employ digital technologies in research to leverage the power of data and drive innovation in every aspect of health research and health services delivery.
- To expand our national and global networks of collaborators and partners.
- To cultivate and build cutting-edge health research expertise and experience through sustained talent development at all career stages.

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## **Our Goals**

## **Goal 1**

To conduct excellent, impactful research that drives innovative solutions to health and wellbeing challenges, thereby contributing to a healthy society

### **Key actions:**

- 1. Develop and support a **culture of excellence in research** and high achievement, with a focus on quality outputs.
- 2. Maximise our **research impact** in quality, quantity and peer recognition by publishing in top decile and top quartile quality journals and **disseminate effectively**.
- 3. Expand capacity for innovative, collaborative, translational, high-quality **clinical research** to answer identified needs and opportunities, both locally and further afield.
- 4. Create an environment where **innovative and pioneering approaches** to health research are encouraged and celebrated.
- Attract high-calibre researchers, scholars and experts by increasing awareness of high-quality, cutting-edge and relevant health research amongst a targeted national and international research community through the use of effective communications channels.
- 6. Place a particular focus on and drive research that has a tangible impact on **policy and practice**.
- 7. Develop an environment of sustainable high-performance **operational excellence** with a focus on continual improvement.
- 8. Explore all channels to enhance the **research infrastructure**, such as state-of-the-art research instruments, additional support staff, and laboratory and research space for HRI researchers.
- 9. Appoint an External Advisory Board to guide the **strategic development** of the Institute.

## Goal 2

To effectively employ digital technologies in research to leverage the power of data and drive innovation in every aspect of health research and health services delivery

#### **Key actions:**

- Foster the use of advanced data analytics and machine learning to fully leverage the information content of collected data and provide necessary support.
- 2. Promote the close collaboration of interdisciplinary teams with the capability to deliver advanced data-driven methodologies for health research and health services delivery.
- 3. Promote the use of advanced data analytics and associated software for the **optimisation of clinical studies and trials**.
- 4. Drive and support research that aims to meaningfully **personalise interventions** through advanced digital technologies.
- 5. Highlight and increase awareness of the potential of **technology-enabled research**, specifically support studies that utilise this approach, and share outputs.
- 6. Accelerate the translation of research by partnering with experts across UL, including the **Rapid Innovation Unit**.
- Create an electronic data capture and storage system for health research data that supports remote and real-time measurement, controlled access to data and GDPR (General Data Protection Regulation) compliance.

## Goal 3

To expand our national and global networks of collaborators and partners

#### **Key actions:**

- Increase the number of local, national and international research
  partnerships by providing the ecosystem, infrastructure and support
  systems to facilitate and enhance such relationships in key areas such
  as acute and community care (public health system), biomedical,
  NGOs, industry, and research & development and clinical research
  organisations.
- 2. Define a mechanism to ensure close collaboration with the **public and patient** community through the Participatory and Arts-based Health Research Unit.
- 3. Develop trusted and recognised **thought leadership** in our priority and underpinning areas of research.
- 4. With a view to developing interdisciplinary initiatives, liaise closely with **national centres** hosted at UL and with external national and **international centres** where there is a natural synergy and alignment.
- Undertake a comprehensive rebranding exercise to establish a
  positive, clear identity that is instantly recognisable nationally and
  globally.
- 6. Drive **resilient growth** by increasing the breadth of the Institute's funding portfolio.

## Goal 4

To cultivate and build cutting-edge health research expertise and experience through sustained talent development at all career stages

#### **Key actions:**

- 1. Ensure the **membership** profile is inclusive and relevant and incorporates a talent pipeline.
- Provide a clear research progression pathway by enabling and supporting doctoral students and early-career researchers (ECRs).
   This will include the development of an incubation hub of support, advice and networking contacts for ECRs and novice research colleagues in our partner organisations.
- 3. Secure and employ **adequate and appropriate resources and targeted initiatives**, including human capital and infrastructure, to support the needs of members and optimise research potential.
- Develop a vibrant and relevant networking environment that is underpinned by a dynamic communications plan and a membership model that is fit for purpose.
- Foster a culture of best practice in data dissemination using Open Science and FAIR principles with reference to associated UL policy.
- 6. Ensure that **human rights and equality, diversity and inclusion requirements** are considered in decisions and initiatives.
- 7. Devise a **development and retention plan** for the core operational team for personal growth, career progression, effective strategy implementation and continual institutional improvement.
- 8. Work with faculties to identify **recruitment opportunities**, e.g., SALI professors and clinical adjuncts.





A critical element of any strategy is the output definition and measurement. The HRI KPIs, or success measures, align with the ambition for the Institute and for UL as a research—led university.

Our focus is on impact and excellence with challenging targets for quality and international co-authored publications and for citation impact. Awards success is critical, and over the lifespan of the strategy, we aim to increase such funding by 25% with a 30% increase expected for non-exchequer funding.

Capacity measurement is included, as are invention disclosures (IDs). Activity in the CRSU will also be measured.

To ensure transparency and consistency, we will use the UL Research Dashboard as the repository of most of the required information. The use of CRF Manager® in the CRSU will provide us with the required activity reports. This is a web-based resource management system used primarily for clinical research studies.

Close collaboration with the Technology Transfer Office will allow us to measure IDs, and the capacity measure (KPI no. 6) on next page will be recorded internally.



#### In summary, with respect to its KPIs, the HRI will aim to:

- 1. Increase the proportion of **publications** in top 10 percentile journals.
- 2. Increase the proportion of annual publications with international coauthors.
- 3. Increase Field Weighted Citation Impact (FWCI).
- 4. Increase research funding income.
- Collectively increase research funding from the EU and industry (nonexchequer).
- 6. Extend the HRI's **research capacity** by increasing the number of PhD, Master's Degree (MD) and Master of Research (MRes) students per member.
- 7. Increase the number of **invention disclosures**.
- 8. Increase the number of funded studies and trials supported by the CRSU.



This strategy is underpinned by a comprehensive implementation plan. The development of the plan was informed by feedback gathered from key stakeholders using various mechanisms and platforms during the preparation phase.

The keys to successfully progressing the strategy are engagement, momentum, measurement and reporting, all of which form the basis of our implementation plan.

The implementation plan will document the steps required to drive this strategy forward and, critically, will define roles and responsibilities. It will map the HRI journey to the achievement of our goals over the five-year lifespan of the strategy and will enable us to monitor, measure, act and, indeed, react when necessary.

The alignment of the strategy with UL's strategic initiatives will ensure that our collective ambition fosters a positive, collaborative and synergistic institutional research ecosystem.

Responsibility for implementing the strategy lies with the HRI Executive Committee and the Management Team. Progress on achievement is key and will be assessed on a regular basis at Executive level with guidance from the External Advisory Board.

Critically, frequent and transparent updates will be provided to our members with feedback and consultation on aspects invited regularly. This step is important to us as the members – the HRI community – form the very foundation of this strategy.



# The HRI is committed to operating at the **highest standards** of governance.

We recognise the absolute necessity for external strategic input to ensure that we are challenged, are aware of relevant developments and potential opportunities in fields outside of our normal sphere and are guided through our strategic implementation to ensure that the plan is achieved and remains relevant.

To accomplish this, we will appoint an External Advisory Board with members from diverse and relevant backgrounds.

The revised HRI Executive Committee composition, which will be more broadly representative than heretofore, will concentrate on governance and strategy and will act as the decision-making body of the Institute. A new Management Team will ensure the strategy is implemented effectively and will work under the direction of the Executive Committee.

With definite lines of accountability and responsibility as part of this framework, we believe that we are optimally poised to deliver on our commitments in a structured manner.

The HRI Director chairs the recently established Health Research Oversight Committee, the scope of which is to deliver host institutional oversight of all health research and is responsible for making sponsor decisions in the case of regulated clinical trials.



The HRI has several internal and external stakeholder groups, engagement with whom is key to the successful operation of the Institute and the advancement of our reach and significance agenda.

## 15.1 External Relationships

The HRI works closely with its external partners. Our aim is to expand the number of partners in a strategic manner and to nurture and develop all relationships.

We are immensely proud of our collaborations with valued local partners ULHG and the Mid-West Community Healthcare Organisation. We look forward to investing more time and effort in developing these relationships for the benefit of all involved in healthcare in the Mid-West.

We currently collaborate with industry and see the potential to further develop such partnerships. We plan to explore the mutually beneficial opportunities that exist with a view to broadening and strengthening our research portfolio.

In health research, studies often require participants with no health issues as well as those who live with specific health conditions. Without these partners – our valued research participants – much of our work would be impossible. Taking an active part in a health research study is a significant and very personal decision for an individual to make. We recognise the responsibility associated with this partnership. The value we place on participatory health research is evidenced by making this area a key focus of our strategy.



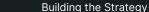


The person-centred work of our research groups has led to valued collaborations with NGOs, patient and advocacy representatives, charities and local community groups. The resulting interactions promote a nurturing environment for a research ecosystem such as ours and are the bedrock of our contribution to improving health and wellbeing outcomes for all.

It is important to foster relationships that position us to be able to clearly illustrate how our research aligns with the principles and ambitions of Sláintecare and Healthy Ireland. In this context, we need to pursue avenues for consideration in policy and practice discussions. Therefore, we value all opportunities to interact constructively with governmental groups such as the Department of Health, the HSE, funding bodies and advocacy groups, and we actively seek such interactions.

We are delighted to be a member, through the CRSU, of the Health Research Board National Clinical Trials Office, a national, integrated clinical research network for clinical research facilities/centres in Ireland. Through this network, we also interact with ECRIN (European Clinical Research Infrastructure Network), a not-for-profit intergovernmental organisation that supports the conduct of multinational clinical trials in Europe. These networks provide us with invaluable opportunities and learning experiences.

The HRI engages in mutually beneficial, collaborative relationships with other third-level institutions and national clinical research facilities. These relationships allow us to effectively nurture study partnerships and to share skills and expertise.





## 15.2 Internal Relationships

Our foundation and primary internal stakeholder group is the HRI membership. Comprising full (academic and clinical researchers) and postgraduate/postdoctoral members, the HRI membership represents a vibrant, dynamic community of researchers with a track record of impactful, relevant research and a serious focus on the next generation of health researchers. For more information, please visit the HRI annual reports web page: www.ul.ie/hri/about-us/annual-reports

UL institutes and centres, UL faculties and the Office of the Vice President Research are other important internal stakeholders of the HRI. Relationships with these stakeholders are vital to help ensure that our collective vision, mission and strategic objectives remain aligned and are realised.

Because we recognise that working in silos is futile, we aim to nurture partnerships that extend across and beyond traditional disciplines and academic units with a view to realising our ambition of addressing global health challenges and improving quality of life. An example of this transdisciplinary work is exemplified by some members of the HRI community being active members of the UL Bernal Institute, which focuses on the scientific design and manufacture of structured materials, and Lero, the UL-based Irish Software Research Centre.

We believe that by creating an open, inclusive research community, we can support the creation of innovative ideas and solutions that would otherwise not be possible. This is evidenced by the fact that our research groups are explicitly multidisciplinary.



While developing this strategy, we considered feedback gathered through initiatives and processes conducted during our extensive period of consultation.

The HRI underwent an external advisory panel review (2021) and an institutional quality review (2022) during the consultation period. These intensive reviews involved a deep dive of the strategic direction and operations of the HRI, encompassing surveys, workshops, focus groups, interviews, individual consultations and group work. In-depth reports with recommendations were issued after each review and were instrumental in helping us to define our direction. The findings of an external review of the HRI clusters were also considered as part of this work.

The consultation process involved seeking feedback from all members, internal teams, ULHG (University Limerick Hospital Group) and community health partners – clinical and management, industry and internal and external stakeholders, as described above.

We believe that this strategy is the result of a positive and engaging consultation process and is a true testament to openness and transparency. We are sincerely grateful to and appreciative of those who joined us on this journey and, in so doing, helped us to shape the vision, mission and strategic direction of the Heath Research Institute for the next five years and beyond.



Since its inception, the Health Research Institute has developed into a vibrant, productive and relevant health research ecosystem with continually developing inter— and transdisciplinary strands across the university and, indeed, across the health research landscape in the Mid–West.

This strategy is borne out of lived experience, a robust deep dive of, and comprehensive horizon scanning for, the Institute. The result is the confirmation of four priority research areas with three underpinning areas of excellence that will collectively address the challenge of good health and wellbeing across the lifespan.

With our strategic roadmap, we can now move confidently into the next five years, excited about the potential for all who need, use and interact with healthcare provision in the Mid-West and beyond.

## "Wellness is a connection of paths: knowled and action"

Joshua Holtz

## Research delivering for health

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