



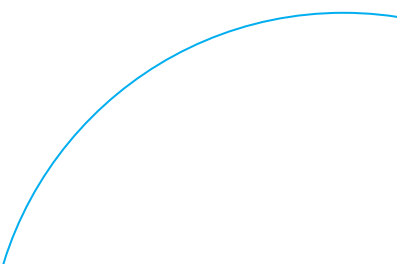
Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Annual Overview of Doctoral Health Research 2026

School of Medicine

May 2026





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School of Medicine

“As a working professor and part-time PhD researcher in the School of Medicine, the world-renowned facilities and expertise of the school have provided invaluable in terms of knowledge, connections and partnerships. It has facilitated the growth of my research from a simple collaborative prototype to international collaboration and inter-institutional partnerships.”

Trinity School of Medicine PhD Student: **Basil Lim**

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Foreword

The School of Medicine at Trinity College Dublin has a long-standing reputation for excellence in health research, underpinned by a strong culture of clinical–scientific collaboration and a commitment to research-led education. Central to this endeavour are our doctoral students, whose intellectual curiosity, creativity and resilience continue to drive innovation across the full spectrum of discovery, translational and clinical research. This Annual Overview of Doctoral Health Research 2026 provides a vivid illustration of the depth, diversity and ambition of doctoral scholarship currently underway within the School.

The projects showcased in this volume span an impressive range of disciplines and methodologies, addressing some of the most pressing challenges facing health systems and society today. From fundamental laboratory-based science to pre-clinical translational research, health services and policy analysis, and clinically embedded studies with direct relevance to patient care, these doctoral programmes exemplify the School's strength in translational health research. Collectively, they reflect a strong commitment to improving the quality of health outcomes across the life course, informed by rigorous science, interdisciplinary collaboration, and meaningful engagement with patients, communities and policymakers.

Doctoral research is intellectually demanding and often challenging. It requires persistence in the face of uncertainty, openness to unexpected findings, and a commitment to methodological and ethical rigour. In today's climate, where misinformation and disinformation are rife, our postgraduate researchers are supported in their journey by outstanding supervisors, research-active clinical environments, and a vibrant academic community within the School of Medicine. While postgraduate research is exciting and, for the most part, fulfilling and rewarding, even in the best of times it can be demanding and frustrating. We are continually inspired by

the determination, dedication and, critically, the passion of our doctoral students, many of whom are already emerging as future leaders in academic medicine, healthcare innovation and policy.

A new feature of this year's publication is the inclusion of a comprehensive overview of postgraduate fellowships, scholarships and awards available through the School of Medicine and Trinity College Dublin. These awards, made possible through the generosity of donors and benefactors, play a vital role in supporting doctoral research, enabling mobility, fostering independence and recognising excellence. We are pleased to highlight these opportunities and to acknowledge their importance in sustaining a thriving doctoral research environment.

We congratulate our doctoral students on their achievements to date and extend our sincere thanks to their supervisors, funders and supporters. We hope this overview provides insight into the exceptional doctoral research community within the School of Medicine, and the vital contributions it continues to make to health research in Ireland and beyond.



Professor Sarah Doyle
Director of Research



Professor Stephen Maher
Director of Postgraduate Teaching and Learning



A Selection of Current Doctoral Research Highlights in 2026

The 2026 selection of doctoral research projects on the following pages showcases the diverse and innovative work being performed by postgraduate students within the School of Medicine to solve real-world health challenges.

These researchers are exploring a wide range of topics, from improving the accuracy of medical procedures using ultrasound technology to harnessing virtual and extended reality for neurosurgery and medical education.

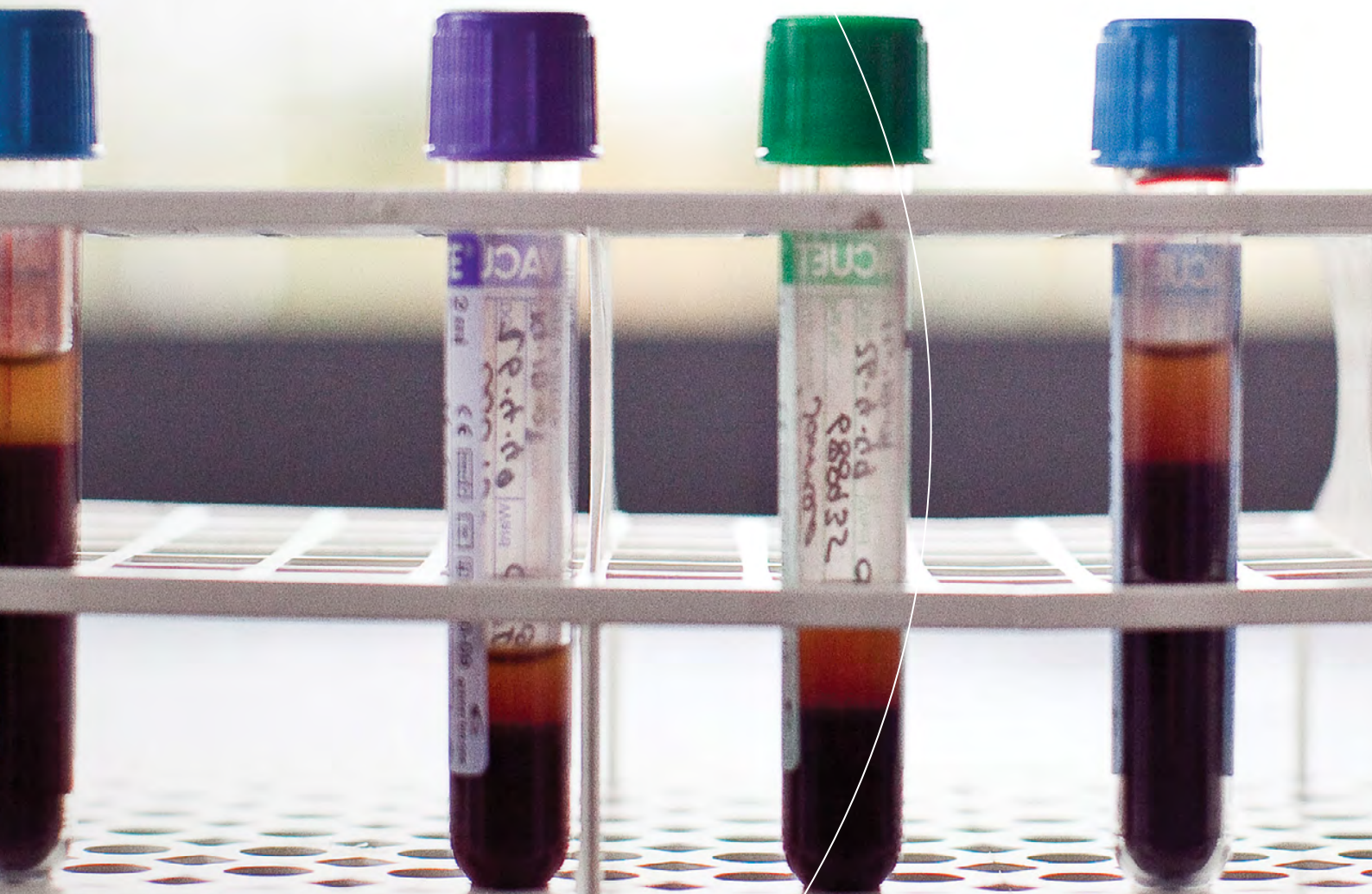
A major theme in this year's highlights is the move toward personalised, patient-centred care. PhD students are using artificial intelligence to improve the diagnosis of tumours, developing “digital twins” to customise radiation therapy for lung cancer, and applying machine learning to better predict relapses in rare autoimmune diseases.

Other vital research focuses on lifestyle interventions, such as using exercise to protect brain health in people with diabetes or co-designing psychological support for young cancer survivors.

What unites these projects is a commitment to translational research—the process of ensuring scientific discoveries made in the lab directly benefit patients in clinics and hospitals.

Whether tackling antimicrobial resistance or improving early cancer detection, these future health leaders are dedicated to enhancing the quality of life for everyone in society. We hope you enjoy reading.

School of Medicine Academic Doctoral Mentors and Supervisors



School of Medicine

Academic PhD Supervisors

Anatomy

Dr. Daniel Johnston, Assistant Professor
Dr. Denis S. Barry, Associate Professor
Dr. Melissa Conroy, Assistant Professor
Dr. Neil Fleming, Assistant Professor

Centre for Health Policy & Management

Dr. Irina Kinchin, Research Assistant Professor
Professor Sara Burke, Associate Professor,
Director of the Centre for Health Policy and
Management
Dr Sarah Parker, Visiting Researcher
Professor Stephen David Thomas, Edward
Kennedy Professor of Health Policy

Clinical Medicine

Dr. Adriele Prina-Mello, Ussher Assistant
Professor
Professor Alan Irvine, Professor of Dermatology
Professor Andrew Davies, Professor Consultant of
Palliative Medicine
Dr. Andrew Maree, Clinical Associate Professor
Dr. Anne-Marie Baird, Senior Research Fellow
Professor Anne Marie Tobin, Clinical Professor
Dr. Anthony O'Connor, Clinical Associate
Professor
Dr. Brian Kent, Clinical Associate Professor
Dr. Cilian Ó Maoldomhnaigh, Clinical Senior
Lecturer
Dr. Claire Healy, Adjunct Assistant Professor
Dr. Cliona Ni Cheallaigh, Associate Professor
Consultant
Professor Cliona O'Farrelly, Chair in Comparative
Immunology
Professor Colm Bergin, Associate Professor,
Consultant Physician
Dr. Conor Finlay, Research Assistant Professor
Dr. Daniel Ryan, Clinical Senior Lecturer/
Consultant Geriatrician
Professor David John Kane, Clinical Professor
Professor Deirdre Mc Namara, Professor In
Clinical Medicine, Consultant
Professor Dominick Mc Cabe, Associate Professor
Consultant
Dr. Finbar O'Shea, Clinical Associate Professor

Professor Fiona Lyons, Clinical Professor
Dr. Gina Renata Leisching, Research Assistant
Professor
Dr. Giovanni Villa, Clinical Senior Lecturer
Professor Ignacio Martin-Loeches, Associate
Professor Consultant
Professor Joseph Keane, Professor of Medicine
Dr. Kathy Gately, Clinical Senior Lecturer
Dr. Kevin Molloy, Clinical Senior Lecturer
Dr. Kiva Brennan, Research Assistant Professor
Professor Laura Gleeson, Associate Professor
Consultant
Professor Mark Alan Little, Professor Consultant
Dr. Martin Barr, Clinical Senior Lecturer
Dr. Natasha Jordan, Clinical Senior Lecturer
Professor Pdraic Gerard Fallon, Professor of
Translational Immunology
Dr. Patrick Walsh, Associate Professor in
Paediatric Immunology
Dr. Richard Conway, Clinical Lecturer
Professor Sarah Louise Doyle, Professor in
Immunology and Director of Research
Professor Seamas Donnelly, Professor of
Medicine, Discipline Head
Dr. Sean Donohue, Lecturer Registrar
Dr. Sean O'Dowd, Clinical Senior Lecturer
Dr. Sharee Basdeo, Assistant Professor
Dr. Sinéad Smith, Ussher Assistant Professor
Professor Siobhan Hutchinson, Clinical Associate
Professor
Professor Stephen Lane, Clinical Professor
Professor Susan McKiernan, Clinical Associate
Professor
Dr. Suzanne Cloonan, Professor in Respiratory
Biochemistry
Dr. Suzanne Elizabeth Dennan, Adjunct Associate
Professor
Professor Suzanne Norris, Clinical Professor

Clinical Microbiology

Dr. Brendan Crowley, Clinical Senior Lecturer
Professor Johannes Wagener, Professor of
Clinical Microbiology
Dr. Julie Renwick, Assistant Professor
Dr. Michael Carty, Assistant Professor
Dr. Rabaab Zahra, Assistant Professor
Dr. Stephen G.J. Smith, Associate Professor

Haematology

Professor Christopher (Larry) Bacon, Clinical Professor
Professor Elisabeth Vandenberghe, Clinical Professor
Dr. Nina Orfali, Clinical Senior Lecturer
Dr. Tony Mc Elligott, Assistant Prof in Molecular Haematology

Histopathology

Dr. Cara Martin, Assistant Professor
Professor John James O'Leary, Professor Consultant, Head of Discipline
Dr. Sharon O'Toole, Senior Research Fellow
Dr. Stephen Finn, Associate Professor Consultant

Immunology

Professor Derek Doherty, Professor Emeritus in Immunology
Dr. Niall P. Conlon, Clinical Professor

Medical Education

Dr. Aileen Patterson, Associate Professor
Dr. Barry Lyons, Associate Professor
Dr. Emer Mc Gowan, Assistant Professor
Dr. James Gibney, Director of TCD Intern Programme
Professor Martina Joan Hennessy, Associate Professor Consultant Medical Education
Dr. Ghaiath Hussein, Assistant Professor in Medical Ethics

Medical Gerontology

Dr. Amanda Lavan, Clinical Senior Lecturer
Dr. Cathal McCrory, Associate Professor in Life Course Development and Ageing
Dr. Daniel Ronan Collins, Clinical Associate Professor
Professor Donal Sexton, Clinical Associate Professor
Dr. Nollaig M. Bourke, Associate Professor
Dr. Paul McElwaine, Clinical Senior Lecturer
Professor Richard Reilly, Research Chair of Neural Engineering
Dr. Robert Briggs, Clinical Senior Lecturer
Professor Román Romero-Ortuño, Professor of Ageing Medicine & Frailty in Medical Gerontology and Consultant Physician
Professor Rose Anne Kenny, Regius Professor of Physic, Professor Geriatric Medicine and Consultant Physician
Dr. Seán Kennelly, Clinical Associate Professor and Consultant Physician

Molecular Rheumatology

Professor Ursula Fearon, Professor of Molecular Rheumatology
Dr. Viviana Marzaioli, Research Assistant Professor

Neurology

Dr. Bahman Nasserroleslami, Assistant Professor, Clinical Medicine
Professor Colin Doherty, Professor Consultant
Dr. Dara Meldrum, Associate Professor
Dr. Hugh Kearney, Clinical Senior Lecturer
Professor Iracema Leroi, Prof In / Assoc Prof Consultant
Dr. Lara McManus, Research Assistant Professor
Dr. Miriam Galvin, Associate Professor
Dr. Niall Pender, Adjunct Associate Professor
Professor Orla Hardiman, Professor of Neurology, Head of Academic unit
Professor Peter Bede, Professor in Neurology

Obstetrics & Gynaecology

Dr. Catherine O'Gorman, Associate Professor Consultant Obstetric
Professor Deirdre Murphy, Chair in Obstetrics
Dr. Lucy Norris, Senior Exp Officer Obstetrics and Gynaecology
Dr. Richard Deane, Associate Professor Consultant
Dr. Sharon O'Toole, Senior Experimental Officer

Occupational Therapy

Professor Deirdre Connolly, Professor in Occupational Therapy
Dr. Geraldine Foley, Associate Professor
Dr. Michelle Spirtos, Associate Professor
Dr. Sarah Quinn, Assistant Professor and Head of Discipline
Dr. Tadhg Stapleton, Associate Professor
Dr. Yvonne Codd, Assistant Professor

Paediatrics

Dr. Adam James, Clinical Senior Lecturer
Dr. Declan O'Rourke, Clinical Senior Lecturer
Professor Denise McDonald, Associate Professor Consultant
Professor Edna Roche, Professor Of Paediatric Endocrinology & (Paediatrics)
Professor Eleanor Molloy, Professor of Paediatrics & Child Health

Dr. Judith Meehan, Assistant Professor
Dr. Michael Barrett, Clinical Senior Lecturer
Professor Orla Franklin, Clinical Associate Professor

Pharmacology & Therapeutics

Dr. James Paul Spiers, Associate Professor
Dr. Joanne M. Ramsey, Visiting Research Fellow
Dr. Laura McCullagh, Clinical Senior Lecturer
Dr. Mark Ward, Assistant Professor
Dr. Michael Barry, Adjunct Associate Professor
Dr. Nengwei Hu, Assistant Professor

Physiology

Professor Aine Kelly, Professor In Physiology
Dr. Eric J. Downer, Associate Professor
Dr. Eva Jimenez-Mateos, Associate Professor
Dr. Kate Connor, Assistant Professor
Professor Kumlesh Kumar Dev, Professor in Neuroscience
Professor Maeve Caldwell, Professor in Neuroscience
Professor Mark Oliver Cunningham, Professor of Neurophysiology of Epilepsy
Dr. Mikel Egaña, Associate Professor
Dr. Norita Gildea, Assistant Professor
Dr. Roisin Mc Mackin, Assistant Professor, Physiology
Dr. Tamara Boto, Adjunct Assistant Professor

Physiotherapy

Dr. Cuisle Forde, Associate Professor
Dr. Emer Barrett, Assistant Professor
Dr. Emer M. Guinan, Associate Professor
Professor Fiona Wilson, Professor In Physiotherapy
Professor John Gormley, Head of Discipline
Professor Juliette M. Hussey, Professor of Physiotherapy
Dr. Sara Dockrell, Assistant Professor

Psychiatry

Dr. Arun Bokde, Associate Professor
Professor Brendan Kelly, Professor of Psychiatry, Consultant
Dr. Daniela Tropea, Associate Professor
Dr. Dominic Trepel, Associate Professor
Dr. Elizabeth A. Heron, Assistant Professor
Professor Jane McGrath, Associate Professor Consultant

Dr. Niamh Ryan, Senior Research Fellow
Dr. Shigeki Nakagome, Assistant Professor
Dr. Simon McCarthy-Jones, Associate Professor

Psychology

Professor Desmond O'Neill, Professor in Traffic Medicine
Dr. Meg Ryan, Assistant Professor

Public Health & Primary Care

Professor Catherine D. Darker, Professor in Health Services Research
Professor Cathal Walsh, Professor in Biostatistics
Professor Jo-Hanna Ivers, Associate Professor in Addiction
Dr. John Travers, Clinical Senior Lecturer
Professor Lina Zgaga, Professor in Epidemiology
Dr. M. Felicity Daly, Assistant Professor
Dr. Matthew Chersich, Research Fellow
Professor Noel Mc Carthy, Professor of Population Health Medicine
Professor Susan Smith, Professor of General Practice

Radiation Therapy

Professor Frances Duane, Clinical Associate Professor
Professor Michelle Leech, Associate Professor

Surgery

Ms. Amy Gillis, Clinical Senior Lecturer
Dr. Claire Donohoe, Clinical Senior Lecturer
Professor Jacintha N. O'Sullivan, Professor in Translational Oncology / Surgery
Dr. James Meaney, Clinical Professor
Dr. Jessie Elliott, Clinical Senior Lecturer
Dr. Joanne Lysaght, Professor in Cancer Immunology and Immunotherapy
Professor John Reynolds, Adjunct Professor
Professor Lorraine Cassidy, Clinical Professor of Ophthalmology
Professor Maeve Lowery, Professor of Translational Cancer Medicine
Professor Michael Eamon Kelly, Chair of Surgery, SJH
Professor Niall Sheehy, Clinical Associate Professor
Dr. Niamh Lynam-Lennon, Research Assistant Professor
Professor Paul Ridgway, Professor Consultant, Head of Discipline, Chair of Surgery, TUH
Professor Stephen G. Maher, Professor in Translational Oncology

A Selection of
Current Doctoral
Research Projects
in 2026



Applying Evidence-Based Research to Support Anatomical Ultrasonography Education



PhD Student: Ashley Durfee

Supervisor: Dr Denis S. Barry, Dr Ourania Varsou (UofG)

Funding Sponsor (s): Discipline of Anatomy
Project Title: Using Evidence-Based Research to Drive the Implementation of Anatomical Ultrasonography in Medical Education

Overview of PhD Project:

Injections in the lower jaw (mandibular region) are commonly used in dental and head and neck procedures for pain relief and diagnosis. However, when performed without imaging guidance, these “blind” injections carry risks such as inaccurate placement and potential damage to surrounding structures. Despite their widespread use, these risks have not been fully explored. This research begins by investigating the accuracy and potential adverse effects of blind injections in the lateral pterygoid muscle. Using dodge-embalmed cadaveric models allows the needle pathway to be directly assessed through dissection which enables us to directly identify the structures damaged and compare this with an ultrasound guided approach.

Within the literature, the use of ultrasound on dodge-embalmed donors remains limited. To determine whether these donors can provide reliable and representative images, the next set of studies examines the visibility of anatomical structures of the neck across different preservation techniques, including formalin-embalmed and fresh frozen donors. The influence of temperature on image quality was also evaluated, given its potential impact on tissue characteristics. These findings justify

the use of dodge donors in the previous clinical study while also informing the specific preservation techniques to be used in the following educational intervention.

Ultrasound is commonly used in clinical practice, yet opportunities for hands-on training during medical education is limited. To bridge this gap, the final project integrated ultrasound into anatomy practical teaching to enhance students’ anatomical and technical knowledge as well as their confidence. Together, these studies aim to support safer procedural practice while strengthening the connection between medical education and clinical application.

Long-term impact of project:

This research aims to improve the safety of common clinical procedures by supporting the use of ultrasound guidance. It also contributes to the advancement of anatomy education by promoting hands-on, clinically relevant learning, ultimately helping to better prepare healthcare professionals and improve patient outcomes.

Quote:

“It’s been really rewarding to work on research that not only looks at improving clinical procedures but also helps students build the confidence and skills they’ll need in practice. Working with ultrasound has been especially exciting, as it allows us to visualise the anatomy in an interactive way while still being clinically relevant.”

Harnessing Virtual and Extended Reality to Advance Neuroscience Education and Research



PhD Student: Basil Lim

Supervisor: Professor Richard Reilly

Funding Sponsor (s): Technological University Dublin, Enterprise Ireland

Project Title: Immersive and Extended Reality as Epistemic and Pedagogical Tools in Neuroanatomy and Neuroscience Education and Research

Overview of PhD Project

This PhD investigates the application of virtual and extended reality (VR/XR) technologies as effective tools for neuroscience education, research, and clinical practice. It aims to provide proof of these technologies' ability to support traditional neuroanatomy teaching and experimental research methods, particularly in representing complex three-dimensional structures and processes.

This PhD's research is structured around five applied case studies:

1. a VR system for spatial visualisation and virtually dissecting white matter tracts derived from fMRI data
2. a patent-granted XR intraoperative navigation system using HoloLens 2 for neurosurgical planning and surgery
3. a VR cadaveric brain database for neuroanatomy training that alleviates traditionally limited laboratory access to cadaveric material
4. a VR-based diagnostic platform for dystonia utilising headset gyroscopes and spatial displays.
5. a VR experimental environment for studying saccades and memory formation in patients with implanted electrodes.

Using a mixed-method, multiple case study approach, the thesis evaluates how immersive interaction influences spatial understanding, diagnostic consistency, and experimental validity. Across these domains, it demonstrates that XR systems can act not only as visualisation tools but as diagnostic and experimental research systems in their own right.

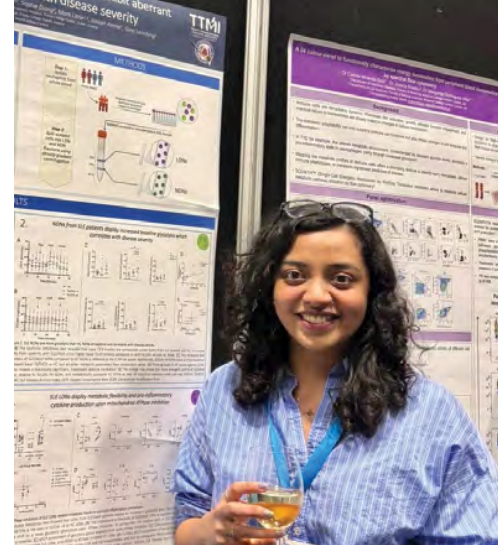
Long-term impact of Project

This research demonstrates that game development tools can supporting the formal adoption of emerging immersive technologies in medical research policy, even at a lower development tech level, providing evidence for interdisciplinary collaboration and research pathways, demonstrating credible, scalable platforms for education, diagnosis, and neuroscience research.

Quote

"As a working professor and part-time PhD researcher in the School of Medicine, the world-renowned facilities and expertise of the school have provided invaluable in terms of knowledge, connections and partnerships. It has facilitated the growth of my research from a simple collaborative prototype to international collaboration and inter-institutional partnerships."

Advancing Our Understanding of Systemic Lupus Erythematosus



PhD Student: Anjali Yennemadi

Supervisor: Dr Gina Renata Leisching,
Professor Joseph Keane

Funding Sponsor (s): Royal City of Dublin
Hospital Trust and Health Research Board
Ireland

Project Title: Immune cell functional and
metabolic heterogeneity and its contribution
to the pathogenesis of Systemic Lupus
Erythematosus

Overview of PhD Project

Systemic lupus erythematosus (SLE) is a lifelong, complex, multi-organ system, autoimmune condition. Women are nine times more likely to be affected by SLE than men, and it takes an average of 6 years from onset of first symptoms to diagnosis. During this time, people with SLE suffer organ damage, which significantly impairs their quality of life and long-term health outcomes. Owing to the incredible complexity and heterogenous presentation of this condition, there remain many outstanding questions some even as basic as how immune cells might be altered in SLE and how this might lead to them causing organ damage.

My PhD work focusses on a property of immune cells called immunometabolism – the ability of cellular metabolism to impact an immune cell's interactions with its environment, and vice versa. More specifically, my research involves characterising the immunometabolism of neutrophil subsets in SLE patients and assessing whether the use of metabolism-

altering drugs might have an impact in restoring the normal metabolism of these cells. I also study macrophage metabolism and how this might be linked with their potential to instigate clot formation and promote a pro-inflammatory environment. Thus, my research uses an immunometabolism-based approach to better understand the pathogenesis of SLE.

Long term expected impact

My PhD research hopes to highlight the role of immune cells that are included less often in SLE research, but that might still contribute to its pathogenesis. Further, I hope it advances our understanding of immunometabolism in disease and its potential as a therapeutic target in SLE.

Quote

“Working within the School of Medicine has enabled incredible collaborations with clinical staff as well as direct access to patient samples, ensuring that my research maintains a strong translational focus. I hope that this will allow my work to have an impact on understanding the immune complexities of people with SLE.”

Advancing the Study of Alpha-Synuclein Pathology in Neurodegenerative Diseases



MD Student: Sarah Fullam

Supervisor: Dr Sean O'Dowd, Dr Conor Fearon

Funding Sponsor (s): Self-Funded

Project Title: Prevalence and phenotypic significance of alpha-synuclein pathology in Alzheimer's disease and other neurodegenerative diseases – a multicentric, real world study

Overview of PhD Project

The global prevalence of neurodegenerative disease is estimated to be over 57 million, carrying significant personal, societal and economic costs. The recent emergence of disease modifying therapies for Alzheimer's disease has marked the beginning of a new era of hope for people living with dementia and has served to focus the attention of researchers and clinicians on the importance of biological classification of neurodegenerative disease in-vivo. The pathologic specificity of these evolving therapies will rely on early and accurate biological classification of disease, facilitated by in-vivo disease specific biomarkers.

The development of Alzheimer's disease (AD) biomarkers has served to significantly enhance diagnostic accuracy and determine suitability for pathologically targeted disease modifying therapies. However, we know from decades of neuropathological research that disease specific pathology rarely exist in isolation, and that co-pathology (the existence of multiple pathological substrates) can correlate with differing clinical phenotypes and trajectories in life. Furthermore, the presence of additional pathologies will be a significant determinant of suitability for disease modifying therapies.

The relatively recent emergence and widespread validation of the α -synuclein seed amplification assay (α -syn-SAA) has enabled in-vivo detection of α -synuclein pathology – the hallmark pathological signature of Lewy body diseases. Large well defined research cohorts have demonstrated the detrimental effects of α -synuclein co-pathology on disease trajectory in AD, however real-world analysis is lacking.

We aim to examine the effects of α -synuclein co-pathology in AD and other neurodegenerative diseases in a multicentric study using real-world cohorts from Tallaght University Hospital and the University Health Network at Toronto Western Hospital. Using the α -synuclein seed amplification assay, we will determine the prevalence of α -synuclein co-pathology and also look for the presence of specific phenotypic predictors of α -synuclein co-pathology in this cohort.

Long term expected impact

Early and accurate biological classification of neurodegenerative disease, which will not only directly impact diagnosis and management, but which will enable the development of effective and appropriately targeted disease modifying therapies for neurodegenerative disease.

Quote

"Large well defined research cohorts have demonstrated the detrimental effects of α -synuclein co-pathology on disease trajectory in AD, however real-world analysis is lacking."

Investigating Airborne Antimicrobial Resistance in Farm Environments



PhD Student: Anita Grasso

Supervisor: Dr Julie Renwick

Funding Sponsor (s): Prendergast Challenge-based awards

Project Title: Farm-to-farmer, farm-to-air transfer of antimicrobial resistance during farming practices.

Overview of PhD Project

Antimicrobial resistance (AMR) is recognised by the World Health Organization as one of the most pressing public health threats of the 21st century. While antimicrobials are essential to modern medicine, their overuse and misuse have accelerated the emergence and spread of resistant microorganisms.

The agricultural sector, particularly livestock production, accounts for a substantial proportion of global antimicrobial use. Research on antimicrobial-resistant organisms' transmission has largely focused on direct contact with animals or contaminated surfaces. However, the potential role of airborne transmission remains poorly understood. A 2021 gap analysis by the Environmental Protection Agency identified air and aerosols as among the least explored routes for the dissemination of antimicrobial-resistant organisms and antimicrobial resistance genes, highlighting a critical knowledge gap in understanding airborne AMR transmission.

Farm environments generate high levels of bioaerosols during routine farming activities such as livestock handling, cleaning operations,

and slurry or manure management. These airborne particles may carry bacteria and fungi, including AMR strains, posing a potential exposure risk for farm workers.

Adopting a 'One Health' perspective, this research investigates whether aerosolised particles in farm environments can facilitate AMR transmission to farm workers and examines the associated occupational exposure risks. Using a multidisciplinary approach combining environmental microbiology, metagenomics, and occupational health, the study aims to characterise the microbiome and resistome of farm aerosols and assess potential occupational exposure to antimicrobial-resistant organisms.

Long term expected impact

This research will improve understanding of airborne antimicrobial resistance risks in agricultural environments. The findings may inform occupational health guidelines and support evidence-based policy for safer farming practices, helping to reduce AMR exposure risks for farm workers while contributing to broader strategies addressing antimicrobial resistance.

Quote

"Tackling antimicrobial resistance requires thinking beyond traditional boundaries. A One Health approach helps us understand how environmental, animal, and human health systems interact in the spread of resistance."

Personalisation of Relapse Risk in Autoimmune disease

PhD Student: Angel Mary George

Supervisor: Professor Mark Alan Little,
Professor John D. Kelleher

Funding Sponsor (s): Research Ireland Centre
for Research Training in Digitally-Enhanced
Reality (d-real)

Project Title: Personalisation of Relapse Risk in
Autoimmune disease

Overview of PhD Project

Antineutrophil cytoplasmic-associated vasculitis (AAV) is a type of autoimmune disease caused by the presence of anti-neutrophil cytoplasmic-associated antibodies (ANCA) in the blood. Even though it is a rare disease, the complications associated with the AAV are numerous, including the unpredictable relapses and the infections and other comorbidities associated with the use of prolonged immunosuppressants. They affect not only patients' quality of life but also place a financial burden on the Irish health care system. Based on this background, we aim to predict the likelihood of relapse using AAV patients' data from different registries worldwide and machine learning (ML) techniques. Also, we aim to develop a web app to numerically quantify a patient's current immune function status and to identify key biomarkers associated with relapse prediction using statistical methods and real-world patient data. Since this project is completely data-driven and includes real-world patient data, data quality issues, imbalanced data (rare relapse events), characteristics of longitudinal data, and differences in disease progression

patterns between patients make the relapse prediction task complicated, especially for ML models, which struggle to identify common patterns and trends in the data and to learn from it. These issues are addressed by including registry data after proper data quality checks and restricting relapse prediction to patients with kidney involvement.

Long term expected impact

The algorithm that I am developing will be used in the clinical workflow to assist clinicians in personalising immunosuppressive therapy prescriptions. I hope it will identify patients in whom therapy can be safely discontinued. This helps reduce healthcare costs and improves patients' quality of life.

Quote

"As we enter the era of data and artificial intelligence (AI), my research explores how data and AI methods can improve patients' well-being by serving as an additional pair of eyes to identify issues that human eyes might miss."



A Policy Analysis of Universal Healthcare Reform in Ireland



PhD Student: Luisne Mac Conghail

Supervisors: Dr Sara Burke, Dr Sarah Parker, Professor Anne Matthews (DCU)

Funding Sponsor (s): SPHeRE Programme, Health Research Board

Project Title: A Policy Analysis of Universal Healthcare Reform in Ireland

Overview of PhD Project

Universal Healthcare (UHC) has become a global health policy objective, widely promoted as a pathway to achieving equitable access to healthcare. However, while many countries have adopted UHC as a guiding policy goal, its translation into national reforms remains highly variable in scope, content, and ambition. Much of the international literature examines UHC as a technical challenge of financing arrangements or service delivery; less attention is paid to the political and institutional processes through which these reforms are shaped.

In practice, the advancement of UHC depends on contested decisions regarding entitlement, service coverage, resource allocation, and models of service delivery. These decisions are shaped not only by historical legacies, institutional capacity, and economic constraints, but also, crucially, by how those with power, policymakers and system leaders, interpret and justify the concept of ‘universality’ itself. As a result, these dynamics can significantly influence how reforms are designed and implemented and ultimately who gains access to care.

This PhD examines how universal healthcare

reforms are constructed and translated into policy arrangements that structure access to healthcare in Ireland. The research adopts a multi-study design. First, a global scoping review explores how political, economic, and social actors influence UHC policy processes across high- and upper-middle-income countries. The project then focuses on Ireland, where ongoing health system reforms aimed at achieving universal healthcare provide an important opportunity to examine how policy actors interpret and operationalise the concept of universality in practice. The final study investigates how these interpretations are reflected in eligibility and entitlement arrangements that ultimately shape access to healthcare services.

Long term expected impact

This research will provide insights into how universal healthcare reforms are translated into real-world policy arrangements that shape access to care. By identifying how political and institutional dynamics influence eligibility and entitlement arrangements, the project aims to inform policymakers and health system leaders designing reforms to improve access and advance health equity.

Quote

“Health systems are not simply technical structures, but social institutions shaped by people and ideas that guide decision-making. My research seeks to understand how these dynamics influence universal healthcare reforms, policy choices and the institutional arrangements through which access to healthcare organised.”

Exploring Novel Therapeutic Strategies in Chronic Lymphocytic Leukaemia

PhD Student: Julie David

Supervisor: Dr Tony McElligott, Professor Daniela Zisterer

Funding Sponsor (s): Trinity Research Doctorate Award

Project Title: Novel therapeutic strategies in chronic lymphocytic leukaemia

Overview of PhD Project

Chronic Lymphocytic Leukaemia (CLL) is the most common blood cancer in the western world. Despite the success of targeted therapies for CLL in recent years, the occurrence of resistance and off-target effects, as well as the low complete response rate achieved by these therapies calls for the development of new combination treatments. CLL cells have an intricate relationship with the tumour microenvironment, mediated by the B-cell receptor (BCR) signalling pathway. This study explores two novel Bruton tyrosine kinase (BTK) inhibitor combination approaches targeting 1) microtubules - a known vulnerability in CLL cells, and 2) MUC-1, an oncoprotein whose role in CLL has not yet been reported. CLL cells are characterised by cytoskeletal abnormalities and tubulin, the major component of microtubules, is tightly associated with BCR-mediated signalling molecules. MUC-1 is a glycoprotein of the mucin family that mediates cell proliferation, growth, invasion and metastasis, and is frequently upregulated across multiple cancers. Microtubules and MUC-1 therefore individually represent promising therapeutic targets in this disease. This research

explores potential therapeutic approaches combining the BTK inhibitor ibrutinib with the microtubule targeting agent vincristine, or with the MUC-1 inhibitor GO-203, aiming to leverage their complementary mechanisms of action to improve treatment outcomes in CLL.ght cross-cultural differences.

Long term expected impact

Overall, this project aims to broaden the therapeutic strategies in CLL, particularly in relapsed and refractory disease and in treatment-naïve patient cohorts. This research will also advance understanding of disease mechanisms to improve the therapeutic outcomes for patients living with CLL.

Quote

"We are lucky to benefit from ongoing collaboration between the research staff and clinical colleagues at St. James's Hospital, which is fundamental to this research. I love my work and I hope these findings can be applied to help patients with CLL in the future."



Exploring the Role of Eosinophils in Asthma Inflammation



PhD Student: Daniel Ivers

Supervisor: Professor Padraic Fallon

Funding Sponsor (s): Research Ireland

Project Title: Investigating the functional roles of PD-L1+ eosinophils in pulmonary Inflammation

Overview of Project

Asthma is a major chronic inflammatory lung disease affecting approximately 339 million people worldwide. Ireland has among the highest asthma prevalence rates globally, with approximately 10% of the population affected. Increasing prevalence of later-life onset asthma associated with early childhood allergy highlights a critical link between allergic immune responses (“type-2 inflammation”) and severe asthma endotypes, particularly type-2 high severe asthma. This endotype is characterised by pronounced airway eosinophilia and persistent inflammatory responses that contribute to disease severity. Although biologic therapies targeting type-2 inflammatory pathways have improved treatment options for severe asthma, a significant proportion of patients continue to experience poorly controlled disease and recurrent exacerbations.

My research investigates the regulatory role of eosinophils during type-2 inflammatory responses in asthma. Using murine models of allergen sensitisation and challenge, I identified a population of programmed death-ligand 1 positive (PD-L1⁺) eosinophils recruited to the lung and draining lymph nodes during

type-2 asthma-like inflammation. These cells appear to regulate immune responses through PD-L1-mediated immune checkpoint interactions with PD-1⁺ adaptive T cells (CD4⁺ and CD8⁺), suggesting eosinophils may function as innate regulators of inflammatory severity rather than solely pathogenic effector cells.

This work utilises novel transgenic mouse models and is conducted with international collaborations from Friedrich-Alexander University Erlangen-Nuremberg (Germany) and University of Cambridge (UK). Ultimately, this project aims to uncover novel immune-checkpoint mechanisms controlling allergic lung inflammation and challenge prevailing assumptions that eosinophilia acts exclusively as a driver of asthma pathology.

Long term expected impact

This research will advance understanding of eosinophil interactions with adaptive immune cells in asthma and allergic lung inflammation. By identifying novel immune-checkpoint mechanisms regulating type-2 inflammation, this work aims to inform future translational studies, therapeutic strategies, and drug development across eosinophilic diseases, including asthma, atopic dermatitis, obesity-associated inflammation, and certain cancers.

Quote

“By studying how immune cells interact in asthma-like conditions, my research aims to uncover novel approaches to controlling harmful inflammation.”

Assessing the Influence of Medication on Falls and Syncope in Older People



PhD Student: Dr Kate Doyle

Supervisor: Professor Rose Anne Kenny,
Dr Amanda Lavan

Funding Sponsor (s): N/A

Project Title: Assessing the influence of medication on falls and syncope

Overview of PhD Project

Falls and syncope are common among older people, and can result in negative outcomes including injuries, hospitalisation and mortality. More than one cause may be present for falls and syncope in older people, therefore it is important to identify potential modifiable risk factors for these issues, including fall-risk-increasing drugs (FRIDs). STOPPFall (Screening Tool of Older Persons Prescriptions in older adults with high fall risk) provides a comprehensive list of FRIDs. There is limited evidence to date assessing the association of STOPPFall medications with negative outcomes including falls, fractures and orthostatic hypotension (OH).

Certain medications may be considered when trying to reduce syncope risk, if non-pharmacological measures are inadequate, and usually comprises either the mineralocorticoid fludrocortisone or the directly acting alpha sympathomimetic midodrine. Supporting evidence for their use is limited, especially regarding their impact on biomarkers of future syncope risk measured by ambulatory blood pressure monitoring (ABPM).

My research aims to investigate the influence of medication on falls and syncope. The objective of my research is to assess if STOPPFall medications increase the likelihood of OH, falls and fractures, using data from TILDA (The Irish Longitudinal Study on Ageing). Furthermore, my research assesses whether fludrocortisone and midodrine can improve biomarkers of future syncope risk and symptoms of presyncope/syncope.

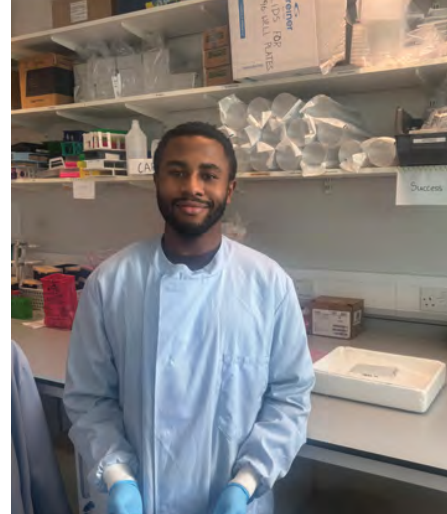
Long term expected impact

Understanding the association between STOPPFall medication use and falls, fractures and OH highlights the importance of careful consideration prior to their prescription among older people who have fallen, and the importance of deprescribing these medications if these negative outcomes have occurred while taking these medications to prevent further negative outcomes.

Quote

"I hope my research will support the concept of individualised medication prescription and rationalisation among older people who have fallen or had a syncopal episode or are at risk of falling. I hope my research will encourage physicians to consider whether an appropriate indication for all medications is present given the cascade of negative outcomes that can occur after falls and syncope among older people."

Real Potential for improving our treatment of Rheumatoid and Psoriatic Arthritis



PhD Student: Success Amaechi

Supervisor: Professor Ursula Fearon, Dr Viviana Marzaioli

Funding Sponsor (s): Research Ireland

Project Title: Molecular signatures that distinguish rheumatoid arthritis and psoriatic arthritis pathotypes – impact for disease progression and response

Overview of Project

Rheumatoid arthritis (RA) and psoriatic arthritis (PsA) are chronic autoimmune diseases driven by dysregulated immune responses, resulting in synovial inflammation, pain and progressive joint damage. Approximately 1% of the Irish population is estimated to be affected by either RA or PsA, and the prevalence of both conditions is expected to increase significantly with an ageing population. Although RA and PsA share multiple pathogenic mechanisms, they also exhibit marked differences at the clinical, cellular and molecular levels, which contribute to heterogeneous responses to currently available targeted therapies. In recent years, we have identified distinct immune cell phenotypes in both the peripheral circulation and the primary site of inflammation, the synovium, in patients with RA and PsA. To further delineate the disease-specific immune signatures, the present project focuses on circulating monocytes. Monocytes play a central role in regulating innate and adaptive immune responses through antigen uptake, robust secretion of pro-inflammatory cytokines, and differentiation into effector cell populations, including macrophages, dendritic

cells and osteoclasts. The objectives of this project are to (i) define the phenotypic and functional profiles of circulating monocytes in RA and PsA; (ii) characterise synovial tissue macrophages in both diseases; and (iii) investigate the impact of molecular pathways that are either shared or distinct between RA and PsA.

Long term expected impact

Defining circulating monocyte and synovial macrophage phenotypes in RA and PsA will directly advance the identification of disease-specific pathotypes and key drivers of disease progression, enabling the development of more precise, mechanism-based therapeutic approaches. This work has the potential to deliver measurable improvements in patient outcomes and quality of life, while reducing long-term disease burden and associated healthcare costs.

Quote

“With RA and PsA becoming an increasing burden on the Irish population, it is humbling to know that my research could have real implications into improving our treatment of these diseases. I’m honoured to be a part of these studies.”

Placing People living with ALS at the Centre of our Research

PhD Student: Ciara O'Donoghue

Supervisor: Professor Orla Hardiman, Dr Ross P. Byrne

Funding Sponsor (s): FutureNeuro

Project Title: Interrogating the overlap between ALS and Neuropsychiatric Disease: Using deep phenotyping and clan genomics to identify biologically distinct subphenotypes

Overview of Project

Amyotrophic lateral sclerosis (ALS) is a progressive neurodegenerative disease that typically leads to death within three to five years of diagnosis, most often due to respiratory failure. Once symptoms emerge the condition is inexorably progressive. There is no cure, in part because ALS is both clinically and genetically heterogeneous, which complicates efforts to understand its mechanisms and identify effective therapies. Although most ALS cases appear sporadic, emerging evidence from the Irish ALS Register suggests that many may lie on an extended familial spectrum. Clustering of neuropsychiatric conditions within ALS families and a shared genetic correlation with schizophrenia point to overlapping biological pathways and potentially distinct patterns of neural network vulnerability.

My research focuses on how expanded family history and pedigree analysis can deepen our understanding of ALS. Using data from the population-based Register of ALS, held in Trinity College, and applying clan genomics and identity-by-descent methods, I investigate cryptic relatedness among apparently sporadic cases which may potentially increase

power for rare variant discovery. In parallel, I assess polygenic and rare variant risk, with the aim to sequence unaffected relatives to explore potential genetic modifiers and protective factors. To further understand the pathobiological factors underpinning disease heterogeneity, I am linking these familial and genomic findings with neuro-electrophysiological profiles which may reveal biologically meaningful ALS subtypes. Ultimately, this integrated approach, which links to the PRECISION ALS programme (www.precisionals.ie) aims to uncover the contribution of extended genetic relationships to disease heterogeneity to improve patient stratification and future targeted therapies.

Long-term expected impact

This project aims to clarify how extended family history and shared genetic architecture influence ALS risk and heterogeneity. By integrating pedigree and genomic data with neuro-electrophysiological profiling, and the wider PrecisionALS dataset, the findings will improve variant discovery, search for variant co-segregation in families, and guide more precise patient stratification for future therapeutic and clinical trial design.

Quote

"In Professor Hardiman's team, people living with ALS are at the centre of everything we do. We focus on providing the best possible care while seeking new answers about the disease. Understanding each person's wishes and quality of life is just as important as progressing our scientific knowledge."



Improving Early Detection of Epithelial Ovarian Cancer



PhD Student: Marika Kanjuga

Supervisor: Dr Sharon O'Toole, Professor John O'Leary

Funding Sponsor (s): Attracta O'Regan Scholarship in partnership with Breakthrough Cancer Research

Project Title: Early Detection of Epithelial Ovarian Cancer using Next Generation Biopanning Techniques

Overview of PhD Project

This project is focused on improving the early detection of epithelial ovarian cancer through the identification of novel, highly specific biomarkers detectable in blood. Ovarian cancer remains the most lethal gynaecological malignancy, largely because over 70% of cases are diagnosed at advanced stages when treatment options become limited, and five-year survival drops from approximately 90% in stage I to around 20% in stage IV disease. Current clinical biomarkers such as CA-125 lack sufficient specificity, often being elevated in benign conditions, which limits their utility for early detection and screening.

My approach combines two complementary strategies to address this clinical challenge. The first utilises SELEX (Systematic Evolution of Ligands by Exponential Enrichment) for aptamer-based de novo biomarker discovery; this involves comparative selection between malignant and benign patient serum samples using aptamers, to identify cancer-specific molecular targets such as proteins and peptides, that have not been previously

characterised. The second approach employs Phage Display technology to develop high affinity antibody-based binders for detection of promising novel and existing biomarker candidates. Together, these strategies allow us to screen vast libraries - exceeding 10^{14} structurally diverse binders, to identify the ones capable of recognising the unique molecular signatures present in ovarian cancer patient serum. The ultimate goal is to develop a robust, highly accurate and clinically applicable assay for earlier detection of ovarian cancer at a stage when curative intervention remains possible.

Long term expected impact

This project aims to enable detection of ovarian cancer at much earlier stage than current standards, where disease is more treatable, thereby significantly improving survival and patient outcomes. By developing a minimally invasive, blood-based assay that is rapid, accurate and easy to implement, it has the potential to transform screening, reduce diagnostic delays, and improve quality of life for women.

Quote

"I am delighted to be part of such meaningful research with potential to change lives for the better; it drives me to give it my absolute all, and turn my passion into real-world impact."

The Impact of Driver Assist Technologies on Older Adults' Driving

PhD Student: Tom Hall

Supervisor: Dr Tadhg Stapleton

Funding Sponsor (s): Trinity Research
Doctorate Awards

Project Title: The Impacts of Driver Assist
Technologies (DAT) on Older Adults' Driving in
Ireland

Overview of PhD Project

Globally, the number of older drivers is increasing, leading to rising concerns regarding older adults' safety and mobility. While driver assist technologies including lane departure warning, blind spot detection and collision avoidance systems have the potential to improve driving safety, further research is required to better understand the risks and benefits of these systems for older adults. Previous research has primarily focused on younger drivers and higher-level technologies with less representation of older drivers. The current project addresses the lived experiences of older Irish drivers (65 years+) using technologies that are currently available in their cars, and the impact of these DAT on their everyday driving experiences.S.

Long term expected impact

This research will contribute to understanding the impact that driver assist technologies have on older adults' driving behaviour and patterns through the identification of particular in-car systems that are useful for older drivers, enhance driving safety, potentially extend independent mobility, as well as outlining barriers to the efficient use of DAT.

Quote

"Being part of a Trinity Research Doctorate Awards project has allowed me to carry out interdisciplinary research and develop my research skills."



Exploring the Potential of Artificial Intelligence in Eyelid Tumours

PhD Student: Qirat Qurban

Supervisor: Professor Lorraine Cassidy

Funding Sponsor (s): The Health and Research Board (HRB)

Project Title: Explore the potential of Artificial Intelligence in Eyelid Tumours

Overview of PhD Project

This PhD project explores the potential of artificial intelligence (AI) to improve the diagnosis, risk stratification, and management of eyelid tumours, a heterogeneous group of conditions ranging from benign lesions to aggressive malignancies such as sebaceous carcinoma and basal cell carcinoma. Despite being relatively uncommon, malignant eyelid tumours can lead to significant morbidity, vision loss, and poor outcomes when diagnosis is delayed or inaccurate. Current clinical assessment relies heavily on subjective visual inspection and histopathology, which can be limited by interobserver variability, overlapping clinical features, and delays in access to specialist care. In addition, there is a lack of large, well-annotated datasets specific to periocular disease, which has hindered the development of robust decision-support tools. The primary objective of this research is to develop and validate AI-based models, using clinical images and associated metadata, to assist clinicians in differentiating benign from malignant eyelid lesions and predicting tumour behaviour. By leveraging machine learning and deep learning techniques, this project aims to identify subtle patterns not readily apparent to the human eye, improve diagnostic accuracy,

and support earlier intervention. Ultimately, this research seeks to demonstrate how AI can be safely and effectively integrated into ophthalmic oncology workflows to enhance clinical decision-making and patient outcomes.

Long term expected impact

This project has the potential to improve early detection and risk stratification of eyelid tumours, leading to better patient outcomes and reduced morbidity. By advancing the application of artificial intelligence in ophthalmic oncology, it may also support more efficient clinical workflows, inform evidence-based practice, and guide future adoption of AI-driven decision support in healthcare.

Quote

“This research explores how artificial intelligence can support earlier and more accurate diagnosis of eyelid tumours, with the aim of improving patient outcomes in ophthalmic oncology. Being a PhD researcher in the School of Medicine at Trinity College Dublin has provided a highly collaborative environment that bridges clinical insight with cutting-edge computational research.”



Childhood Allergy: Neutrophil Activation in Response to Nuts

PhD Student: James Trayer

Supervisors: Professor Eleanor Molloy, Dr Aideen Byrne

Funding Sponsor (s): Grants from TCD School of Medicine and TCD Research

Project Title: CANARY- Childhood Allergy: Neutrophil Activation in Response to Nuts

Overview of PhD Project

Food allergy affects 5-10% of children in western countries with a rising prevalence in other parts of the world. Nut allergy is the most common food allergy that persists through from childhood to adult life. All children with nut allergy are at risk of developing anaphylaxis which is potentially fatal. Despite the high prevalence and potential severity, the factors influencing allergic reaction severity (such as intercurrent illness) and the underlying cell-signalling pathways are incompletely understood.

This study aims to investigate the role that the innate immune system, particularly neutrophils, plays in the acute allergic reaction. Previous studies have demonstrated that neutrophils are activated during anaphylaxis though it is unclear if this contributes to clinical symptoms and reaction severity or is simply the result of massive mast cell/basophil mediated inflammation. We hypothesise that neutrophils may play an amplifying role, converting localised mast cell activation to systemic anaphylaxis.

To investigate this, we are collecting blood from children with nut allergy as well as non-allergic controls. We are using a modified Basophil Activation Test examining both basophil and neutrophil activation whole blood treated with nut extracts with and without the addition of LPS. We aim to contribute towards a more complete understanding of anaphylaxis.

Long term expected impact

A better understanding of anaphylaxis and the role played by neutrophils could aid in identifying children at higher risk of severe reactions. If neutrophils are shown to play a significant role, then they represent a potential therapeutic target for anaphylaxis.

Quote

"I am grateful to have had the opportunity to move from bedside to bench and learn research skills from the supportive team in TTMI. I hope that our work may be of benefit to the patients we see every day in clinic."



Molecular Mechanisms of Chemotherapy Associated Thrombosis

PhD Student: Irene Narinda

Supervisor: Dr Lucy Norris, Dr Mark Ward

Funding Sponsor (s): Health Research Board (HRB)

Project Title: Molecular Mechanisms of chemotherapy associated thrombosis in Cancer

Overview of PhD Project

An estimated 1 in 5 cancer patients will develop a thrombosis through their continuum of care and cancer associated thrombosis (CAT) results in poorer survival outcomes. Cancer patients are particularly vulnerable because they exist in a prothrombotic state, which is driven, not only by the malignancy itself but also by systemic treatments such as chemotherapy. The mechanisms through which chemotherapy promotes thrombosis are not understood and predictive biomarkers are needed.

The aim of this project is to investigate the mechanisms by which chemotherapy causes thrombosis in cancer patients using in vitro studies and a plasma biomarker study.

Our group has previously reported that acquired resistance to activated Protein C (aPC) is linked to chemotherapy associated thrombosis. This study will determine the effects of chemotherapy on key components of the aPC pathway in an endothelial cell model and the indirect effects of inflammatory cytokines and adhesion molecules affected by chemotherapy will also be studied. Key thrombotic mediators will be studied in a VTE case-controlled study. Finally, biomarkers will

be studied longitudinally in lung ovarian and gastro-intestinal cancer patients undergoing chemotherapy and their ability to predict VTE will be compared to current risk assessment models (Khorana and CATScore).

Long term expected impact

My project is part of the PINPONT study (NCT07196020). The primary aim is to design a patient-informed dynamic biomarker based VTE risk prediction system. The data from this study may produce a more accurate method of predicting thrombosis during chemotherapy, which could reduce thrombosis in cancer patients and improve outcomes.

Quote from student

“Trinity research inspires a deep curiosity towards discoveries with potential to impact real people in a positive way and my project like many others is a testament to this.”



Protecting Brain Health for Individuals Living with Type Two Diabetes Mellitus

PhD Student: Emma Curtin

Supervisor: Dr Norita Gildea, Dr Mikel Egaña

Funding Sponsor (s): Discipline of Physiology, School of Medicine

Project Title: Cerebrovascular Function in Individuals Living With Type Two Diabetes Mellitus Subsequent to Exercise Training

Overview of PhD Project

Type 2 diabetes mellitus (T2DM) is a growing global health concern, affecting millions of people worldwide. Beyond its peripheral vascular complications, T2DM also affects the cerebrovasculature, increasing the risk of vascular brain lesions, brain atrophy, and cerebral hypoperfusion, all of which are linked to cognitive decline. Key markers of cerebrovascular function include dynamic cerebral autoregulation, cerebrovascular reactivity, and neurovascular coupling. Impairments in these mechanisms are associated with an increased risk of cerebral ischaemic events and cognitive decline, yet research on cerebrovascular function in individuals living with T2DM is limited.

Despite exercise training being a cornerstone of treatment and management for T2DM, with well-established benefits for cardiovascular and peripheral vascular health, many individuals living with T2DM do not meet recommended physical activity guidelines. Higher levels of cardiorespiratory fitness are linked to increased cerebral blood flow, improved cognitive function, and a reduced risk of dementia and Alzheimer's disease.

However, the extent to which chronic exercise induces beneficial cerebrovascular and cognitive adaptations in individuals living with T2DM remains unclear.

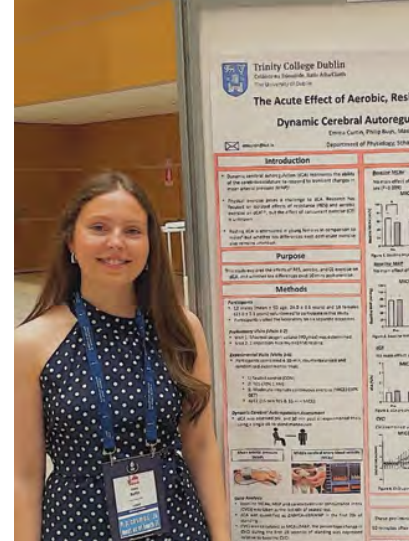
Exercise interventions may therefore represent a promising strategy for improving cerebrovascular and cognitive health. The aim of my PhD is to investigate key markers of cerebrovascular function alongside cognitive performance, and to determine whether personalised exercise training can elicit beneficial adaptations. This research has the potential to strengthen the evidence base for exercise as a therapeutic strategy to optimise brain health in individuals living with T2DM.

Long term expected impact

This research will advance understanding of how T2DM affects cerebrovascular function and cognitive health. It aims to inform targeted, real-world interventions, using exercise prescription, to preserve cerebrovascular function, prevent cognitive decline, and enhance quality of life for individuals living with T2DM. The findings may also support the development of future clinical practice and public health strategies.

Quote

"I'm motivated to find simple, effective ways to protect brain health in individuals living with T2DM. If something as accessible as exercise can make a real difference, it could have a meaningful impact on patients' everyday lives."



Developing Lifestyle Interventions for People with Barrett's Oesophagus



PhD Student: Diana Cooke

Supervisor: Dr Emer Guinan, Professor Juliette Hussey, Dr Olinda Santin (QUB)

Funding Sponsor (s): Breakthrough Cancer Research and the CROSS Charity (AllCaN Oesophageal Programme)

Project Title: Developing Lifestyle Interventions in Barrett's Oesophagus

Overview of PhD Project:

Oesophageal cancer has one of the lowest survival rates of all cancers, highlighting the urgent need for prevention and risk reduction strategies. Barrett's oesophagus is a precursor condition that increases the risk of developing oesophageal adenocarcinoma and affects a growing number of individuals worldwide. Lifestyle behaviours such as diet, body weight, physical activity, and smoking are recognised as important modifiable factors that may influence both disease progression and overall health outcomes in this population. Despite this, there is currently limited evidence on the prevalence of these behaviours among individuals with Barrett's oesophagus, how patients experience and manage lifestyle changes, and how lifestyle interventions could be effectively developed and implemented in clinical care.

This PhD aims to address these gaps by examining lifestyle behaviours in individuals with Barrett's oesophagus and exploring how evidence-informed lifestyle interventions can be developed and tested to support behaviour change. Patient and Public Involvement is integrated throughout the project to ensure that patient perspectives inform the research process. The research uses a mixed-methods

approach, including a scoping review to map the existing evidence, qualitative interviews to explore patient perspectives and experiences, and registry-based analysis to examine lifestyle patterns and patient characteristics in large datasets. Findings from these studies will inform a co-design process with patients and key stakeholders to develop and refine potential lifestyle interventions. Ultimately, this research aims to support the development of patient-centred strategies that help individuals with Barrett's oesophagus adopt healthier lifestyle behaviours and improve long-term health outcomes.

Long-term impact of project:

This research will generate new evidence on lifestyle behaviours in Barrett's oesophagus and support the development of evidence-informed lifestyle interventions. In the long term, these findings may inform clinical guidance, support prevention strategies, and help improve health outcomes and quality of life for individuals living with Barrett's oesophagus.

Quote:

"I am excited to work on research that places patient perspectives at the centre, helping to develop practical lifestyle interventions that can support people living with Barrett's oesophagus and make a meaningful difference to their lives."

Improving Early Recognition of Young-Onset Gastroesophageal Cancer



PhD Student: Oana Deac

Supervisor: Professor Maeve Lowery and Professor Jacintha O'Sullivan

Funding Sponsor (s): Irish Clinical Academic Track (ICAT) Program and HRB/Welcome Trust UK

Project Title: Elucidating the Inflammatory, Metabolic, and Genomic Characteristics of Young-Onset Gastroesophageal Adenocarcinoma

Overview of PhD Project

Gastroesophageal adenocarcinoma has traditionally been considered a disease of older adults; however, population-based data now demonstrate a rising incidence in patients under 50 years of age. Using a harmonised, all-Ireland dataset of 21,706 patients from the cancer registries in Ireland and Northern Ireland, my work shows that incidence is increasing in young-onset (YO) disease, particularly in lower oesophageal adenocarcinoma. Overall YO patients presented with more aggressive pathological features, and over 50% were metastatic at diagnosis, highlighting a critical gap in early recognition. In response, I have engaged in patient and public involvement initiatives aimed at improving awareness among both the public and primary care practitioners.

Building on these findings, this PhD integrates population science, machine learning, and translational tumour biology to determine whether YO gastroesophageal cancer represents a biologically distinct entity. Machine learning models applied to registry data demonstrate robust survival prediction in YO patients and

confirm that stage and treatment remain the strongest determinants of outcome.

At a biological level, I have established the first-in-human profiling of inflammatory-metabolic characteristics in young-onset tumours using a dedicated ex vivo explant platform. Fresh tumour tissue is cultured under controlled hypoxic conditions to recapitulate the tumour microenvironment, enabling real-time assessment of metabolic flux and inflammatory secretome dynamics. To our knowledge, this represents a unique national platform integrating hypoxia, metabolism, and inflammatory signalling, now being linked with transcriptomic and genomic analyses to define clinically relevant phenotypes.

Long-term impact of Project

This work aims to improve earlier recognition of young-onset gastroesophageal cancer and to identify biologically meaningful biomarkers that support personalised care. By combining epidemiology with functional tumour profiling, the ultimate goal is to shift diagnosis toward earlier, potentially curative stages and to inform future screening and treatment strategies.

Quote

"When over half of young-onset gastroesophageal cancer patients are metastatic at diagnosis increasing awareness and promoting earlier recognition is not optional- it is essential. By understanding the metabolic and inflammatory wiring of these tumours, I hope to open the door to smarter combination therapies and contribute meaningfully to how we approach this urgent clinical challenge."

Improving Mental Healthcare Diversion from Prison in Ireland

MD Student: Conor O'Neill

Supervisor: Professor Brendan Kelly

Funding Sponsor (s): N/A

Project Title: Prison Inreach and Court Liaison
in Ireland over 9 years: Penrose People?

Overview of PhD Project:

Prison populations have increased and psychiatric inpatients have reduced internationally in recent decades. Absolute numbers of severely mentally ill people in prisons have increased. It would be helpful to know whether people may repeatedly enter prisons at times when they are acutely psychotic, homeless and charged with minor offences. If manageable with other community diversion, these might represent a (countable) group for whom community care in traditional “catchment areas” have difficulty assisting.

There are few longitudinal studies of identification and outcomes of mental illness in prisons. To assess this would require “counting in and counting out” by a small MDT of large numbers of prison committals, together with assessment, diagnosis and clinical outcome measurement (such as admission to hospital). This study describes this process over a 9-year period at Ireland’s main remand prison, which received a majority of remands nationally during the period studied.

The study describes 26,261 consecutive committals, 4,304 taken onto mental health caseloads, 812 identified as acutely psychotic and 921 diverted to psychiatric healthcare. We identified a subgroup of “frequent flier” individuals who were much more likely to be psychotic, homeless and diverted to community healthcare per committal episode than those less frequently remanded.

Long-term impact of project:

This study shows that diversion to healthcare from prison in Ireland was possible over an extended period even given limited legislative provision. We provide a model for similar services elsewhere. The countable “frequent-flier” group can help guide resourcing for other PICLS Services, Inclusion Health Services and Intensive Care Rehabilitation Services.

Quote:

“Some of the most severely and acutely mentally ill in Ireland are increasingly and inappropriately accumulated in our overcrowded prisons, often when charged with minor offences. It is important to measure this process in order to highlight that there are alternatives, both actual and potential.”



Supporting Disinvestment from Low-Value Medicines in Ireland

PhD Student: David Aluga

Supervisor: Professor Susan Smith, Professor Paddy Gillespie, Dr Paula Byrne

Funding Sponsor (s): Health Research Board (HRB)

Project Title: Developing a Model for Health Technology Reassessment (HTR) and Disinvestment from Low-Value Medicines in Ireland

Overview of PhD Project

This PhD project seeks to develop and apply a draft Health Technology Reassessment (HTR) and disinvestment tool to guide decisions on withdrawing low value medicines from Ireland's publicly funded reimbursement list. Low value care refers to medicines, devices, or procedures whose harms or costs outweigh their benefits. Ireland currently lacks a structured framework for reassessing such technologies, resulting in ad hoc and inconsistent decision making.

HTR is defined as a structured, evidence based evaluation of the clinical, social, ethical, and economic effects of technologies already in use, to determine their optimal role compared with alternatives. The research began with a global evidence synthesis of existing HTR and disinvestment tools, followed by an analysis of secondary data on reimbursement decisions made by the Health Service Executive's Drugs Group. The next phase explored stakeholder perspectives on HTR and disinvestment from low value medicines within the Irish health system.

Findings from these studies will inform the co design of a tailored tool to support systematic, transparent, and evidence informed HTR and disinvestment decisions for medicines in Ireland.

Long-term impact of Project

This PhD project will develop a tailored tool to support disinvestment from low value medicines, helping redirect limited resources toward more cost effective therapies and improving allocation efficiency. Each study will generate at least one journal article, alongside conference presentations and policy briefs to inform academic, clinical, and policy audiences.

Quote

"Value changes along the lifecycle of health technology. Robust evidence from reassessment should inform disinvestment decisions."



Using Digital Twins to Personalise Radiation Therapy in Lung Cancer

PhD Student: Ryan O’Keeffe

Supervisor: Professor Michelle Leech,
Professor Gerry Hanna

Funding Sponsor (s): Research Ireland

Project Title: DIGILUNG - Optimizing radiation therapy delivery in non-small cell lung cancer with digital twins

Overview of PhD Project:

Radiation therapy is one of the key treatments for lung cancer. It can be used to both control symptoms and cure lung cancer. What can be achieved in the management of advanced lung cancer when radiation therapy meets artificial intelligence? That is what we will find out in this project called DIGILUNG. We propose creating digital ‘twins’ of patients with advanced lung cancer where we can try out new treatments in a computerized environment, without any disruption to patients and their carers. Digital twinning aims to create computerized copies, or “twins” of actual people, including personalized features about them.

Proton therapy vs photon therapy, is one better than the other at an individual level?
What role can radiomics play in digital twinning?

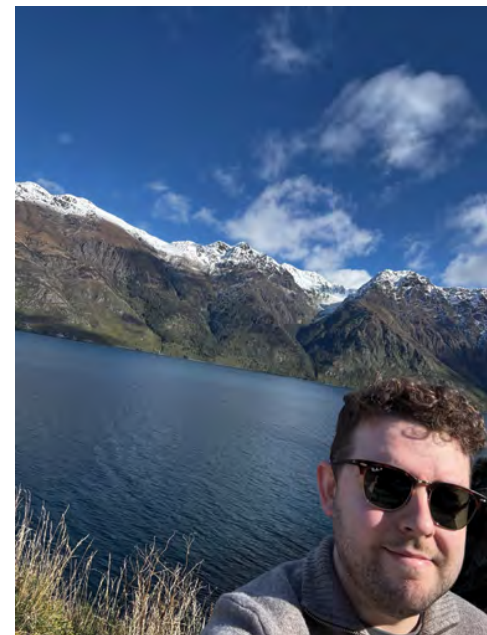
How can circulating tumour DNA (ctDNA) contribute to personalised twinning?
These are some of the questions we aim to address during the project with the hope of being able to further individualise a patient’s therapeutic journey, one which is tailored to them and results in more personalised outcomes.

Long-term impact of project:

DIGILUNG represent an opportunity to combine medicine and data science in a way that will benefit patients and clinicians alike. Through digital twinning, patients could get treatments tailored specifically to them and their treatment goals, while clinicians gain extra confidence in the treatments they are recommending.

Quote:

“DIGILUNG represent an opportunity to combine medicine and data science in a way that will benefit patients and clinicians alike.”



Advanced Imaging Analytics to Support More Personalised, Patient-Centred Care



MD Student: Hugo C. Temperley

Supervisor: Professor Michael E Kelly

Funding Sponsor (s): Dept. of Surgery – TCD / St James Hospital & Trinity St James's Cancer Institute

Project Title: The application of radiomics within the field of anal cancer to predict response to primary treatment, recurrence, and overall survival

Overview of PhD Project

Anal cancer is a relatively uncommon malignancy and, as a result, remains underrepresented in large-scale oncologic research compared with other gastrointestinal cancers such as colon or rectal cancer. Despite this, patients who fail primary chemoradiotherapy often require salvage surgery, a highly morbid intervention with a profound impact on quality of life. There is therefore a critical need for improved tools to predict treatment response and long-term outcomes at the time of diagnosis.

This PhD project explores the application of radiomics and radiogenomics to pre-treatment imaging in anal cancer, with the aim of developing predictive nomograms for treatment response, recurrence, and overall survival. Central to this work is the International Anal Cancer Collaborative, a global research network established to address the challenges of studying a relatively rare disease. Through collaboration with specialist centres worldwide, the group enables access to large-scale, high-quality “real-world” imaging, clinical, histopathological, and genomic data

that would not be achievable within a single institution.

Quantitative radiomic features are extracted from pre- and post-treatment MRI scans using validated software and integrated with clinical and molecular variables using advanced statistical modelling. A second, prospective phase will assess the clinical utility of these nomograms in real-world practice.

By leveraging global collaboration and advanced imaging analytics, this research aims to strengthen evidence generation and support more personalised, data-driven decision-making in anal cancer care.

Long-term impact of Project

This research aims to improve risk stratification in anal cancer by combining advanced imaging biomarkers with international clinical expertise. By enabling earlier identification of patients at risk of poor outcomes, it may support more personalised treatment strategies, reduce unnecessary exposure to highly morbid surgery, and improve patient quality of life.

Quote

“In the setting of rare diseases (like Anal cancer), only global collaboration will help address evidence gaps. Advanced imaging analytics are increasingly vital to support more personalised, patient-centred care.”

Exploring Electroporation as a New Therapy in Oesophageal Cancer

PhD Student: Lorraine Smith

Supervisor: Professor Jacintha O'Sullivan

Funding Sponsor (s): Breakthrough Cancer Research (AllCaN Oesophageal)

Project Title: Investigating the effects of electroporation across the Barrett's to Oesophageal Adenocarcinoma disease sequence

Overview of PhD Project:

Barrett's Oesophagus is a disease which arises from chronic gastro-oesophageal reflux. It is the only known risk factor for oesophageal adenocarcinoma (OAC), a poor prognosis cancer with a five-year survival rate <30%. Approximately 60% of OAC patients when diagnosed also have Barrett's Oesophagus, highlighting the need to better understand this disease and develop new therapies. We are investigating electroporation as a potential novel therapy. Electroporation is the term used when electrical pulses are applied to a cell rendering its membrane porous. This can be applied as a pulse only treatment or used in combination with drugs, greatly increasing their toxicity. Electroporation as a therapy is being investigated in various malignancies with encouraging results.

In this project with Mirai Medical's ePORE technology, we will examine the effect of electroporation on the inflammatory microenvironment in Barrett's non-dysplastic and dysplastic ex vivo human tissues from consented patients in St James's Hospital. Specifically, we will determine how electroporation affects the secretome and if

the treated tissue can influence immune cell biology (namely Dendritic cells and T cells). Dr Sharon McKenna and Dr John Mackrill from UCC are also collaborators on the project and I will be seconded there to investigate mechanistic effects of electroporation.

Long-term impact of project:

This PhD project will expand our current knowledge of both Barrett's Oesophagus and electroporation. This could have significant implications in the clinic where the addition of electroporation treatment may be applied to patients. This pre-clinical study will generate this preliminary data for evaluation.

Quote:

"Working in a translational group has revealed to me how hugely beneficial it can be when scientists and doctors collaborate."



Co-Designing Support for Fear of Cancer Recurrence in Young Adult Survivors



PhD Student: Catherine O'Brien

Supervisor: Professor Maeve Lowery

Funding Sponsor (s): Irish Cancer Society

Project Title: Co-design the Fear of Cancer Recurrence group-based intervention (FORGE) for young adult cancer survivors

Overview of PhD Project

Fear of cancer recurrence (FCR) is the largest unmet need for cancer survivors with reported moderate levels at 59% and clinically significant levels as high as 20%. While the effectiveness and efficacy of different psychological interventions for FCR have been widely demonstrated on an individual basis, scalable group-based interventions are needed that offer a structured and efficient approach to deliver targeted FCR treatments while fostering a peer support environment. Younger adults are affected the most by FCR impacting on their education, careers, relationships, and family planning. Current group programmes differ greatly in programme design, highlighting the need for research to understand how best to adapt them to meet the needs of young adult cancer survivors.

The FORGE study aims to co design an adapted group intervention for young adults with moderate FCR. Using a four part sequential mixed methods design, we will tailor an existing psychological programme for group delivery and assess feasibility and acceptability. Young adult cancer survivors are a distinct and vulnerable population who face many challenges as they balance family, work, and social expectations while rebuilding

their lives after treatment. By drawing on the experiences of both survivors and healthcare professionals, we plan to design an age appropriate, group based programme that supports their psychological wellbeing and keeps these real world challenges at the centre of the adaptation process.

Long-term impact of Project

New or adapted interventions must be co designed through professional and PPI collaboration to ensure they reflect the lived experiences of people affected by cancer and genuinely meet patient needs. The FORGE study will design an age sensitive, scalable, and sustainable group-based FCR intervention that can be implemented across psycho oncology teams nationally.

Quote

"Throughout my career I have seen the profound impact cancer has on patients and their families, and while treatments have advanced, the psychological burden remains significant. I am delighted to have the opportunity to pursue an area of innovative research that will enhance the quality of life for cancer survivors."

Exploring Long-Term Remission in ANCA-Associated Vasculitis



PhD Student:

Dr Eithne Muireann Nic An Riogh

Supervisor: Professor Mark Alan Little, Dr Arthur White, Professor Alan Salama (UCL), Professor Matthew Griffin (UoG)

Funding Sponsor (s): Health Research Board - Irish Clinical Academic Training Programme (ICAT)

Project Title: ATLANTIS Identification of Autoimmunity reversal in ANCA vasculitis

Overview of PhD Project:

ATLANTIS explores why some patients with ANCA-associated vasculitis (AAV) achieve long-term remission off therapy, while others remain at risk of relapse. AAV is a severe autoimmune disease in which inflammation damages small blood vessels and can lead to major organ injury, particularly in the kidneys and lungs. Although treatments such as rituximab have significantly improved outcomes, relapse remains a clinical challenge, and there are currently no reliable biomarkers to identify which patients can safely stop treatment.

My research focuses on patients in long-term remission off therapy (LTROT), a group that may provide important insight into how immune tolerance is restored in autoimmune disease. Using single-cell RNA sequencing and high-dimensional flow cytometry, I am characterising the immune profile of these patients, with a particular focus on B cell biology. A central aim of the project is to understand early B cell repopulation following rituximab and to determine whether specific B cell populations or transcriptional signatures

are associated with sustained remission. I am also developing a B cell-focused spectral flow cytometry panel to examine regulatory, memory and activated B cell populations across LTROT patients, compared with active AAV patients and healthy controls. As part of this work, I am collaborating with University College London (UCL) to study their long-term remission cohort. By identifying immunological features of durable remission, ATLANTIS aims to support more personalised treatment strategies for patients living with AAV.

Long-term impact of project:

This project has the potential to identify biomarkers of durable remission in AAV and improve understanding of how immune tolerance may be restored after therapy. In the longer term, this could help personalise treatment, reduce unnecessary immunosuppression and improve outcomes for patients with vasculitis.

Quote:

"My experience as an ICAT PhD researcher in TTMI and the School of Medicine has been shaped by a collaborative and supportive environment. It's rewarding to work at the interface of clinical medicine and translational research."



Directory of Current PhD Research Projects 2024-2029 by Discipline

Anatomy

- PhD Addressing Neurophobia in Medical Education: An Anatomical Approach to Functional Neurological Disorder Using Mixed Methods
- PhD Investigating the applicability of cytokine-induced memory-like NK cell therapy for oesophageal adenocarcinoma
- PhD Modeling Hair Follicle Breakdown in The Inflammatory Skin Disease
- PhD Using Evidence-Based Research to Drive the Implementation of Anatomical Ultrasonography in Medical Education

Clinical Medicine

- PhD A New Age in Polymyalgia Rheumatica
- PhD A study of Primary Tauopathies in Ireland; a Clinically Defined Population Study in the Province of Leinster
- PhD Advancing the Liquid Biopsy in Lung Cancer
- PhD Cardiac mri parametric mapping and extracellular volume quantification for myocardial characterization: applications in post-covid-19 sequelae and cardiac amyloidosis
- PhD Clinical Assessment of Central and Peripheral Retinal Integrity in Down Syndrome and Age-related Macular Degeneration: Links to Immune-Senescence and Blood–Retinal Barrier Function
- PhD Cognition in Older Adults with Cancer
- PhD Cognitive Impairment in People who are experiencing long-term Homelessness: Evidence and Relationships
- PhD Data-Driven Characterisation of Clinical and Immune Response Trajectories in Critically Ill Patients with Sepsis
- PhD Defining innate immune responses with children with infectious diseases
- PhD Differential Attainment in Medical Education
- PhD Housing First and Women
- PhD Immunothrombosis in Tuberculosis
- PhD Impact of Reversible Visual Impairment on Cognition and Blood-Brain Barrier Integrity
- PhD Injectable gel for chronic wounds
- PhD Integrative single cell multiomics of immune cells

- PhD Intracellular iron chelators for the alleviation of alveolar macrophage dysfunction in chronic obstructive pulmonary disease
- PhD Investigation of the Role of Interleukin-11 (IL-11) in Paediatric IBD Patient Non-responsiveness to Therapeutic Intervention
- PhD Investigating immune cell functional and metabolic heterogeneity and its implications in the pathogenesis of systemic lupus erythematosus
- PhD Investigating the functional role of PD-L1+ Eosinophils in pulmonary inflammation
- PhD Investigating the importance of M. avium and Alveolar macrophage iron handling in the context of chronic lung disease
- PhD Investigating the interactions between Natural Killer Cell and Endothelial Cells in Retinal Neovascular Diseases
- PhD Investigating the Mechanisms of Impaired Bone Health in Adults with Atopic Dermatitis
- PhD Investigating the role of maladaptive trained immunity in COPD progression
- PhD Iron Loading in Alveolar Macrophages impairs Alveolar Type II Epithelial Cell Function in Chronic Obstructive Pulmonary Disease
- PhD Macrophage Activation and Transition in the Autoimmune Kidney (MacATAK)
- PhD Manipulating macrophage bioenergetics to improve host response in TB infection
- PhD Mechanisms of antimicrobial resistance in Helicobacter pylori
- PhD Microcirculation effects of 20% albumin in sepsis and septic shock
- PhD Natural Killer Cell and Macrophage Interactions in Age-Related Macular Degeneration
- PhD Narrowing the window of vulnerability to vaccine preventable disease by identifying and developing better adjuvants for paediatric vaccines
- PhD Platelet and Haemostatic Biomarkers in TIA and Ischaemic Stroke Patients on Antiplatelet Therapy
- PhD Repurposing small molecules as novel therapeutics for the treatment of chronic inflammatory intestinal diseases: A Bioinformatics-Driven Approach
- PhD The Immune-Blood Axis in the Pathogenesis of Haemophilic Arthropathy

PhD	The impact of socioeconomic status, homelessness, and psychosocial adversity on immune ageing, inflammatory biology, and vaccine-induced immunity in adults	MD	of alpha synuclein pathology in AD and other neurodegenerative diseases
PhD	The Role of the Integrated Stress Response in Traumatic Brain Injury	MD	The Relationship Between Sleep-Disordered Breathing and Airway Disease
PhD	The Role of Interferons in Immunothrombosis in Systemic Lupus Erythematosus (SLE)	MD	The Role of Spleen Stiffness Measurement in the diagnosis of portal hypertension
PhD	The Role of specialist palliative care services in cancer survivorship	MD	Unmet Need and Risk of Readmission Amongst Community Dwelling Stroke Survivors
PhD	Trained innate immunity in paediatrics		
PhD	Translational evaluation of EV-Based Therapeutic Strategies in Physiologically Relevant In Vitro Lung Adenocarcinoma Models	PhD	Antifungal drug interactions in <i>A. fumigatus</i>
PhD	Tumour educated platelets and metastasis in small cell lung cancer	PhD	Antimicrobial Resistance in Ireland – a targeted molecular epidemiological assessment
MD	Assessment of Autonomic Function in Moderate Aortic Stenosis	PhD	ATLANTIS identification of Autoimmunity reversal in Anca vasculitis
MD	Clinical and morphological determinants of health-related quality of life in mycosis fungoides and Sézary syndrome	PhD	Augmenting macrophage responses against <i>Aspergillus fumigatus</i>
MD	Equity in Death in Ireland	PhD	Farm-to-farmer, farm-to-air transfer of antimicrobial resistance during farming practices
MD	Giant cell arteritis (GCA) and Polymyalgia Rheumatica (PMR) Spectrum Disease (GPSD)	PhD	Personalisation of Relapse Risk in Autoimmune Disease
MD	<i>Helicobacter pylori</i> management for the 2020s: Optimising management in a low-incidence high-resistance country	PhD	Seeking Antisocial behaviour in Cystic Fibrosis airway microbiome
MD	MAIT cells function and metabolism in Melanoma	PhD	Selection and engineering of bacteriophages for intracellular delivery to control Uropathogenic <i>Escherichia coli</i> (UPEC)
MD	Optimising Maternal Health in Rheumatology	PhD	Systemic and Local Immune Profiling in ANCA-Associated Vasculitis
MD	Overcoming the key limitations of colon capsule endoscopy	PhD	Understanding the immune response to influenza vaccination in patients with haematological malignancy
MD	Pan-intestinal capsule is a good FIT in suspected mid-lower gastrointestinal bleeding, a prospective Irish study	MD	Invasive fungal disease and antifungal stewardship in paediatric haematology-oncology patients in the Republic of Ireland (Fungi-HOPE Project)
MD	Prevalence of and Interventions for Fatigue in Patients with Inflammatory Bowel Disease		
MD	Serial Monitoring of the Inflammatory Response in Resectable Lung Cancer		
MD	The Impact of Social Exclusion on HIV Outcomes	PhD	Novel Therapeutic Strategies in Chronic Lymphocytic Leukaemia
MD	The Impact of the parapneumonic effusion microenvironment on human macrophage phenotype and immunothrombotic potential		
MD	The Pharmacological management of sleep-in specialist palliative care		
MD	The prevalence and phenotypic significance		

Clinical Microbiology

Haematology

Health Policy and Management

- PhD Exploring Job and Workplace Factors associated with Nurse Retention and Turnover in the Irish Healthcare System
- PhD Graph-based systems modelling of the Lewy body dementia care pathway
- PhD Informing digital care pathways in sexual and reproductive health: a mixed-methods evaluation of an online HIV PrEP care pathway in Ireland
- PhD Understanding the factors shaping the implementation of the National Oral Health Policy through a workforce lens: a realist and health systems approach

Histopathology

- PhD A Translational Approach to Clinical Data and Molecular Profiling in Ovarian Cancer
- PhD Early Detection of Epithelial Ovarian Cancer using Next Generation Biompanning Techniques
- PhD Harnessing the power of liquid biopsies in epithelial ovarian carcinomas
- PhD Integrated Discovery and Validation of Liquid Biopsy Biomarkers for Early Oral Cancer Detection
- MD A Study of Biomarkers for Cancer Immune Checkpoint Inhibitor Therapy
- MD HPV's impact on proteasomal function in cervical and head and neck cancers
- MD Precision Prevention and Treatment for Aggressive Prostate Cancer with PTEN Loss

Immunology

- PhD Development of a bioanalytical platform to monitor immune reconstitution post allogeneic stem cell transplantation and post CAR-T therapy
- PhD More than skin deep: Inflammatory signals in chronic spontaneous urticaria and their role as biomarkers in predicting treatment response
- PhD Molecular Mechanisms of Liver Injury and Repair in Transplantation
- PhD Systemic Therapy Era Drift in Metastatic Spinal Disease: Development, Temporal and External Validation of a Contemporary Referral-Time Prognostic Model Integrating Immunotherapy Exposure, Host-Response, and CT-Derived Imaging Phenotypes.

- MD Cellular immune response to SARS-COV-2, Influenzae and RSV in patients with immunodeficiency

Medical Gerontology

- PhD A Concept Analysis of Frailty in China: Identifying Gaps and Cultural Influences
- PhD An Analysis of Critical Challenges to the Clinical Trials Ecosystem for Medical Devices in Ireland and Recommended Guidelines (policy changes?) to Address Them
- PhD Assessing the impact of medication on falls and syncope
- PhD Determining how ageing alters type I interferon immune responses
- PhD Exploring the Impact of Ageing and Immune Triggers on Immune Pathways in ANCA-associated Vasculitis
- PhD Mapping Inflammasome Mechanisms in the Female Genital Tract - Insights into Endometriosis and Infertility
- PhD Regulation of Artificial Intelligence enabled Medical Devices: An Analysis of the Public Policy Objectives and the Practical Implementation of the Regulations for Medical Device Organisations
- PhD Stress and Coping in Later Life: Examining Coping Styles for Stressful Situations in an Ageing Population
- PhD Syncope in Older Adults
- PhD The Ageing Kidney - Biomarkers and Implications
- PhD The impact of social inequality on ageing biology
- PhD The Male-Female Health-Survival Paradox
- MD An Observational Longitudinal Investigation of Early Predictors of Progression in Adults Living with Alpha-synucleinopathies
- MD Addressing Missed Opportunities for Falls and Fracture Prevention in Later Life
- MD Brain Health Clinics in Practice: Outcomes, Experiences and Stakeholder Perpespectives in an Evolving Dementia Prevention Model
- MD How does meaning and purpose in life affect resilience and well-being in older adults?
- MD The Association between Psychotropic Medication Use and Falls, Mobility Impairment & Orthostatic Hypotension in Later Life

- MD The Impact of the 2023 Irish National Stroke Public Awareness Campaign on Knowledge and Behavioral based Outcomes
- MD The STRIDES Study: Standardising Technology for Rapid and Innovative Digital AI Evaluation of Gait Speed

Medical Education

- PhD An exploration how asylum seekers, refugees, and other vulnerable migrant groups access healthcare
- PhD Regulating Medical Assistance in Dying: Learn from Other Jurisdictions
- MD A detailed study of increased rates of abnormal aldosterone/renin ratio in Africa- origin subjects compared to European-origin subjects. Understanding the prevalence and significance of this clinical observation
- MD Changes in Cholesterol Efflux Capacity in a Hyperthyroid and Hypothyroid Population
- MD The use of reflection in post-graduate medical training: a realist synthesis

Molecular Rheumatology

- PhD Distinct Cytokine Synergistic Interactions Drive Synovial Fibroblast and Chondrocyte function In Inflammatory Arthritis
- PhD Molecular signatures that distinguish rheumatoid arthritis (RA) and psoriatic arthritis (PsA) pathotypes – impact for disease progression and response
- PhD Monocytes from Rheumatoid Arthritis and Psoriatic Arthritis patients are hyper-inflammatory and distinctly primed for terminal differentiation
- PhD Stromal Cell Subtypes Define Distinct Pathogenesis in Rheumatoid Arthritis and Psoriatic Arthritis

Neurology

- PhD A novel digital home health hub platform for monitoring motor function decline in patients with amyotrophic lateral sclerosis
- PhD ALS CREATE - Connected Rehabilitation- Enablement, Acceptability & Therapeutic Effectiveness
- PhD Blood brain barrier in chronic epilepsy and head injury

- PhD Fine-Grained Network-based Neurophysiological Biomarkers of Cognitive Decline in ALS
- PhD Harnessing Digital Health Technology for Precise Remote Measurement of Speech and Swallow in ALS
- PhD Knowledge Generation and Information Flow in Specialist ALS Clinical Service - Principles, Processes and People
- PhD Identifying Neurophysiological Biomarkers of Altered Sensorimotor Integration in ALS: A multi-modal approach based on EEG, and peripheral stimulation
- PhD Interrogating the disease-specific impairment of sensorimotor networks in ALS and MS using effective neural signal connectivity analysis
- PhD Interrogating the disease-specific impairment of sensorimotor networks in ALS and MS using effective neural signal connectivity analysis
- PhD Interrogating the overlap between ALS and Neuropsychiatric Disease: Using deep phenotyping and clan genomics to identify biologically distinct subphenotypes
- PhD Maximising the clinical utility of the Telemedicine in MND (TiM) patient-clinician remote monitoring and communication system
- PhD Motor control in ALS using high density electromyography
- PhD Presymptomatic cognition and endophenotypic traits of neurodegenerative disorders of the motor system
- PhD Professional Caregiving in Motor Neurone Disease: An Exploratory Mixed-Methods Study of Professional Well-Being and Support Needs
- PhD Radiological correlates of respiratory involvement in neurodegenerative conditions
- PhD The Epidemiological Trends of Amyotrophic Lateral Sclerosis across Europe: A Collaborative, Machine-Learning-Based Approach to Natural History data
- PhD Quantifying oscillatory motor unit firing in ALS
- PhD Unravelling the role of genetic factors and excitation/inhibition imbalance as contributors to neurophysiological abnormalities in ALS

- MD AI-EPOCMON: AI-Enabled Point-of-Care Monitoring in Epilepsy
- MD Frailty and Sensory Impairment in Lewy Body Dementia: Multidomain Frailty Index Development and Characterisation of Clinical Phenotypes
- MD Optimising Structural and Functional Visual Outcomes in Acute Optic Neuritis and Multiple Sclerosis

Obstetrics & Gynaecology

- PhD Molecular Mechanisms of Chemotherapy-Associated Thrombosis in Cancer
- PhD Second-line tests of fetal wellbeing in labour

Occupational Therapy

- PhD An Exploration of the Occupational (In) Justice Experiences of Asylum Seekers, Refugees and other Forcibly Displaced Populations within the Irish Context
- PhD AIM CP Sleep
- PhD Parenting Matters with Arthritis: Developing and Testing a Parent-focused Intervention Programme to Support Parenting with Inflammatory Arthritis
- PhD Patient and caregiver approach to decision-making in specialist palliative care
- PhD Sustain-WORK-ability: Design, development and testing of an occupational therapy led digital work intervention to support people living with arthritis in their work roles
- PhD The Impacts of Driver Assist Technologies on Older Adults Driving (My study is part of the Health and Transport in the AI Era project)

Paediatrics

- PhD Altering Persistent Inflammation And outcomes in children at high risk of Cerebral palsy: ALPACAS project
- PhD BLOSSOM - Brightening Lives: Occupational performance Supporting Skills and Opportunities for Meaningful participation - Redefining High-Risk: A Neurodevelopmental Framework for Complex Medical and Surgical Neonates
- PhD Children and Families living with Cerebral Palsy in Ireland - characteristics, lived experience and personal priorities

- PhD CP GENIE: Cerebral Palsy Genomics in Ireland
- PhD DRAGONFLY: Down syndrome associated ongoing inflammation in children
- PhD FIREFLY project: follow up of inflammatory responses and multiorgan outcomes Following neonatal brain injury
- PhD Multimodal assessment of the placenta in fetuses with congenital heart disease
- PhD PEGASUS: Persistent inflammation and systemic multiorgan dysfunction in Understanding neonatal encephalopathy
- PhD Platypus: Preterm infant Immunomodulation to Treat sepsis and brain injury Prevention
- PhD STARFISH: Sustained inflammation in preterm infants and multiorgan dysfunction correlates with long term outcomes
- PhD To inform and develop care pathways for children with Cerebral Palsy
- MD CANARY- Childhood Allergy: Neutrophil Activation in Response to Nuts
- MD Evaluating Paediatric Trauma Readiness in Ireland: A Donebedian Framework Approach
- MD Immune Function in Neutropenic Disorders of Childhood

Pharmacology & Therapeutics

- PhD Assessing the immunomodulatory properties of 5-HT2AR acting psychedelics
- PhD Health Technology Management in Ireland
- PhD The Health Technology Assessment of Pharmacologic Disease Modifying Therapies for Early Alzheimer's Disease
- PhD The Role of PP2A in VE-cadherin Modulation in Human Cerebral Microvascular Endothelial Cells

Physiology

- PhD Advanced nasal drug delivery systems for the treatment of CNS diseases
- PhD Assessing the contribution of the AMPA receptor to physiological and pathophysiological brain rhythms in vitro
- PhD Assessing the impact of AI-Mediated versus Human Coaching on physical performance

PhD	Cardiovascular and cerebrovascular adaptations to exercise in health and Type 2 Diabetes	PhD	Peripheral Immune Cell Infiltration and Neuroimmune Programming Following Neonatal Hypoxia
PhD	Cerebrovascular Function: From Healthy Aging to Type Two Diabetes and the Role of Exercise	PhD	Pro-inflammatory Cytokines Induce a Reactive Phenotype in iPSC-derived Midbrain Astrocytes
PhD	Cerebrovascular dynamic responses subsequent to high-intensity interval vs moderate-intensity continuous training in men and women with type 2 diabetes	PhD	Terpene/cannabinoid modulation of endosomal TLR signalling in immune cells
PhD	Characterise the clinical and physiological phenotype of patients with RTT and biological models for the identification of translational biomarkers	PhD	Using MRI to evaluate neurodevelopment in a mouse model of neonatal hypoxia
PhD	Combining Neuroimaging and Electrophysiological Analysis to Identify Biomarker Profiles for Amyotrophic Lateral Sclerosis and Huntington's Disease	MD	Cinema as a pedagogical method to enrich understanding of ageing in undergraduate education, postgraduate training and continuous professional development in medicine
PhD	Contributions of PPL2 dopaminergic neurons to olfactory representations in <i>Drosophila melanogaster</i>	Physiotherapy	
PhD	DANCE-FND: Deep learning Analysis of Neurophysiology and Computer vision methods in the Evaluation of Functional Neurology and Dystonia	PhD	Developing and Feasibility testing of a pragmatic, Patient-Centred Exercise Intervention During Chemotherapy: A Mixed-Methods Approach
PhD	Development and Improvement of Oncolytic Virotherapy in Glioblastoma	PhD	Developing Lifestyle Interventions in Barretts Oesophagus
PhD	Effect of a practical and theoretical behavioural intervention for maintenance of physical activity and cerebrovascular function in type 2 diabetes	PhD	Exploring the impact of exercise in people experiencing severe and multiple disadvantage
PhD	Establishing an Ex Vivo Electrophysiological Model of Infantile Spasms in Hypoxic-Ischemic Encephalopath	PhD	Physical Activity and Physical Fitness in Children and Adolescents with Haemophilia (ActFit-H)
PhD	Glutamate-mediated microglial activation contributes to the pathophysiology of neonatal hypoxia-seizures and the development of acquired paediatric epilepsy	PhD	Recruitment of adolescent girls into physical activity programmes: Evidence to inform recruitment strategies for policymakers and programme developers and policymakers
PhD	Interrogation of Mechanisms of Peritumoural Hyper-Excitability in Glioma	PhD	The development of a personalised health intervention for adults with haemophilia in Ireland
PhD	Intra-operative neurophysiology in tumour related seizures: identification of clinically useful biomarkers	PhD	The impact of frailty on the physical function of patients with a haematological malignancy undergoing an allogeneic stem cell transplant
PhD	Neuroinflammation – the Trojan Horse of Neurodegeneration: Dissecting Regional, Genetic and Therapeutic Modulation of Astrocyte Reactivity in Alzheimer's Disease	PhD	The integration of Extended Reality (XR), Virtual Reality, Mixed Reality (MR) and Augmented Reality (AR) Simulation in Diagnostic Radiography Education
PhD	NLRP3 inflammasome regulation in MS pathogenesis: cannabinoids as a therapeutic strategy	PhD	The Role of Intermediaries in Connecting Community Dwelling Adults to Local Physical Activity and Exercise Services

- PhD The Role of Transportation in Facilitating Physical Activity Among People with Disabilities
- PhD Understanding status of physiotherapy services for patients with cancer in Oman

Psychiatry

- PhD Ancient DNA at the Frontiers of Eurasia
- PhD Disorders of Brain Development Across the Lifespan: Insights from Rare Genetic Conditions
- PhD Economics of Brain Health: Individual Preferences for Health and Healthy Behaviours
- PhD Entanglement to Clarity: An Interdisciplinary Exploration of the Lived Experience in Lewy Body Dementia
- PhD Evaluating the Cost-effectiveness of Comprehensive Geriatric Assessment for community-dwelling older adults living with frailty
- PhD Epilepsy within Systems of Institutionalisation: An Irish Historical Examination
- PhD Evaluating the Cost-effectiveness and Value-based Pricing of Interventions for Dementia and Alzheimer's Disease
- PhD From Priorities to Participation: A Foundational Agenda for Dementia Research in Long-Term Care Facilities in Ireland
- PhD Identifying variants in multi-ancestry psychiatric pedigrees
- PhD Immersive and Extended Reality as Epistemic and Pedagogical Tools in Neuroanatomy and Neuroscience Education and Research
- PhD Improving our Understanding of Social Cognition and its Core Domains Across Neurodegenerative Diseases
- PhD Paleoepidemiology in Asia
- PhD Patterns in Involuntary Admissions to Psychiatric Hospitals in Ireland
- PhD Phenotype and Genotype Heterogeneity of Autism Spectrum Disorder (ASD)
- PhD Sexual Assault Treatment Unit (SATU) staff-delivered brief psychological intervention: delivery and evaluation of a new service component
- PhD Sexual Attractions to Children: Mapping the Psychological Landscapes of Hate

- PhD The relationship between neonatal functional connectivity and later neurodevelopmental outcomes
- PhD Towards an understanding of the mechanism of action of methylphenidate in ADHD
- PhD What is the best available evidence, stakeholders' perspectives, associated risk, and most effective interventions for misinformation?
- MD Cancer diagnosis, treatment and engagement with Psycho-oncology services- the patients' perspective
- MD Prison In reach and Court Liaison in Ireland over 9 years: Penrose People?

Public Health & Primary Care

- PhD Complex evidence synthesis for generic justification: addressing methodological challenges
- PhD Developing a model for Health Technology Reassessment (HTR) and disinvestment from low-value medicines in Ireland
- PhD Experiences with Maternal Healthcare Services for Women with Disabilities in Abia State, Nigeria
- PhD Exploring Job and Workplace Factors associated with Nurse Retention and Turnover in the Irish Healthcare System
- PhD Heat-related risks for pregnant women in a warming climate (HEATWISE): the association between high ambient temperatures, hypertensive disorders of pregnancy and severe maternal morbidity
- PhD Novel solutions for understanding, monitoring and responding to the health impacts of Climate Change
- PhD Substance use and treatment needs among sexual and gender minority populations: A secondary analysis of Irish health data
- PhD Systematic development of recovery recommendations and recovery manual for Ireland
- PhD Toolkit for Informing Cross-Cultural Trauma-Aware Care (TICC TAC)
- MD Understanding and Addressing Frailty in People Experiencing Homelessness

Radiation Therapy

- PhD DIGILUNG - Optimizing radiation therapy delivery in non-small cell lung cancer with digital twins
- PhD Finding Allies Among the Enemy: Secreted and Extracellular Vesicle-derived Markers in Non-Small Cell Lung Cancer
- PhD Interactive monitoring of paediatric outcome reporting for radiation and chemotherapies
- PhD Knowledge Support for Adolescent and Young Adult Survivors of Hodgkin's Lymphoma in Ireland (KAYA)
- MD Optimising Breast Cancer Radiotherapy

Surgery

- PhD Advancing Precision Medicine in Oesophagogastric Cancer: Molecular Profiling and Liquid Biopsy Strategies
- PhD Co-design the implementation of a group-based intervention for young adult patients with moderate levels of Fear of Cancer Recurrence
- PhD Elucidating the inflammatory, metabolic and genomic characteristics in young onset gastroesophageal cancers
- PhD Enhancing radiotherapy efficacy in gastrointestinal tumours through a combination of hypoxia reversal and miRNA-mediated biological manipulation
- PhD Immunophenotyping pancreatic cystic lesions for cancer risk stratification
- PhD Investigating synthetic miR-31 mimics/ anti-miRs as a novel therapeutic for enhancing chemotherapy and radiotherapy sensitivity of pancreatic cancer
- PhD Investigating the effect of electroporation on the Barrett's Oesophagus tissue microenvironment
- PhD Investigating the role of complement in predicting and modulating treatment resistance in refractory gastro-oesophageal cancers.
- PhD Role of AI in detecting eyelid tumours
- PhD The prognostic utility of novel imaging techniques in patients with locally advanced rectal cancer

- MD Clinical, Molecular and Behavioural profiling of patients with eosinophilic oesophagitis and eosinophilic gastrointestinal diseases; comparing treatment responders and non-responders
- MD Examining the independent and moderating effects of arterial stiffness and cerebral blood flow on total hippocampal and hippocampal subfield volumes
- MD Factors Affecting Performance in Surgery
- MD Optimising Outcomes After Pelvic Exenteration Surgery: Establishing Core Reporting Standards, Characterising Sexual Function and Molecular Monitoring of Disease Recurrence
- MD PET/CT parameters can be used to predict overall and disease-free survival after esophageal cancer surgery
- MD Somatostatin Receptor 2 (SSTR2) Expression as a Diagnostic and Therapeutic Target in Nasopharyngeal and Rare Sinonasal Tumours.
- MD The application of code-free deep learning in the classification of optic disc abnormalities
- MD The application of radiomics within the field of anal cancer to predict response to primary treatment, recurrence and overall survival
- MD Watch and Wait Surveillance for Rectal Cancer - Oncological and Quality of Life Outcomes, and the Relative Cost of Organ Preservation versus Standard Treatment

An anatomical model of a human heart is shown, held by a white hand. The heart is painted in realistic colors: red for the ventricles and major vessels, blue for the pulmonary and systemic circulation, and yellow for the coronary arteries. The model is mounted on a metal rod. In the background, another similar model is visible but out of focus. The overall lighting is bright and clinical.

Postgraduate Fellowships, Scholarships and Awards

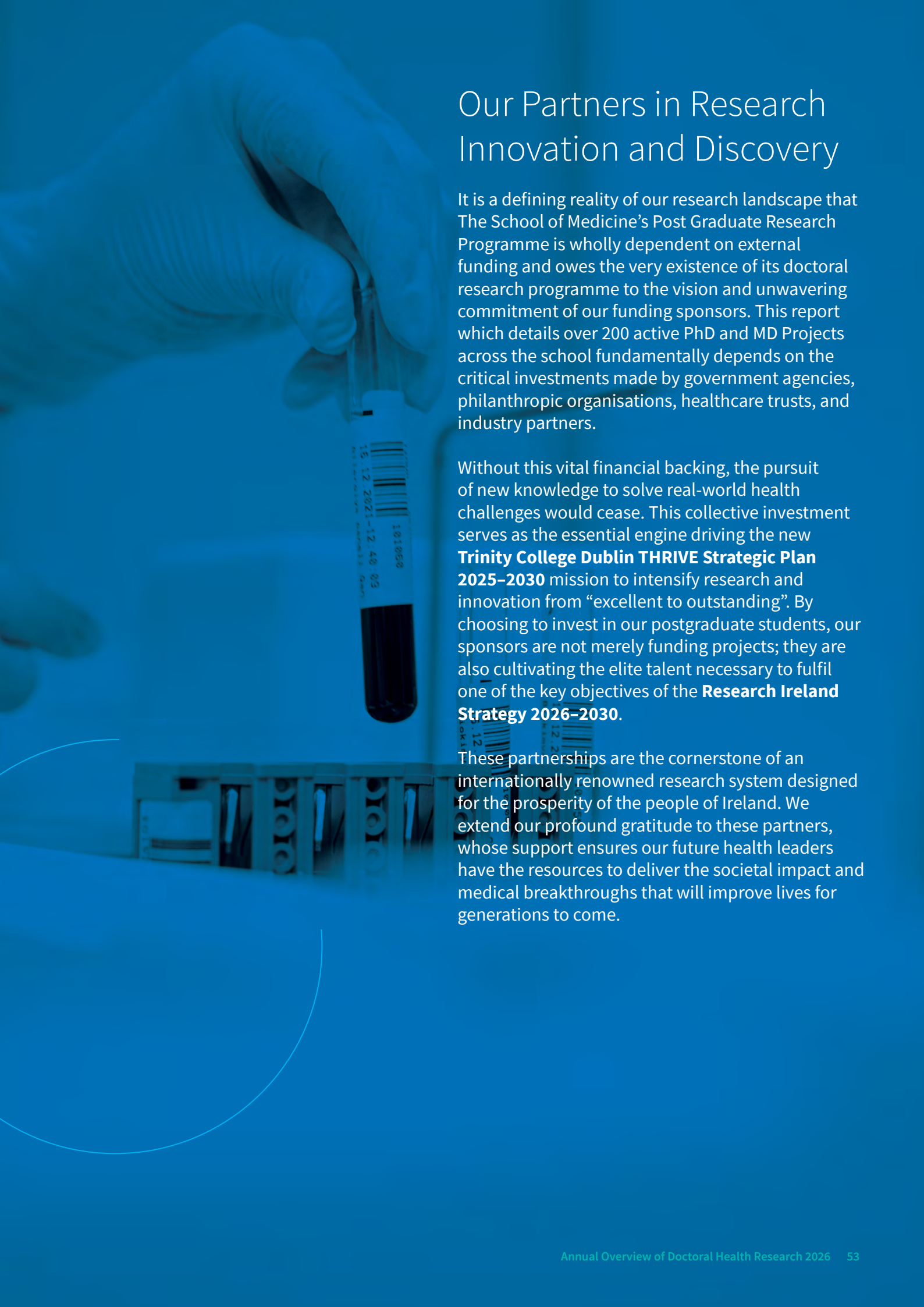
A range of fellowships, scholarships and awards are available to postgraduate students to support their research. These awards are made possible by bequests and gifts that have been generously donated to the School of Medicine and Trinity College Dublin.

A list of available fellowships, scholarships and awards is available below and in the College calendar.

- [Sarah Purser Medical Research Fund](#)
- [Technicon Research Fellowship](#)
- [John Banks Fund](#)
- [Bennett Prize](#)
- [Bicentenary Fund](#)
- [Sheppard Memorial Prize](#)
- [Henry Hutchinson Stewart Scholarship in Medicine](#)
- [Eithne Walls Fellowship](#)
- [Adrian Stokes Memorial Fellowship](#)
- [Dr Henry Hutchinson Stewart Scholarship in Psychiatry](#)
- [Derry and Phyllis Kelleher Travel Fellowship](#)
- [Postgraduate Travelling Scholarship in Medicine and Surgery](#)
- [Yamanouchi Postgraduate Toxicology Fellowship](#)
- [Peter Beckett Postgraduate Research Award](#)
- [Dr A. Finegan Scholarship](#)
- [R. A. Q. O'Meara Research Fund](#)
- [K.R.D Phillips Research Fund](#)
- [Richard Smyth Exhibition in Tropical Medicine](#)
- [Royal City of Dublin Postgraduate Travelling Award](#)
- [Sir Douglas Clague Fellowship](#)
- [E.C. Smith Scholarship in Pathology](#)
- [Trinity's Postgraduate Research Doctorate Awards 2026 – 27](#)

For more information on these awards please visit:

[Fellowships, Scholarships and Awards](#)
[TRDA School Based - Graduate Studies | Trinity College Dublin](#)

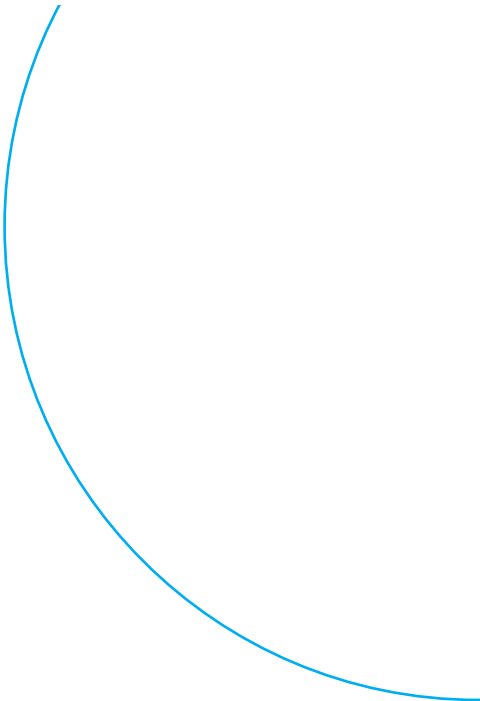


Our Partners in Research Innovation and Discovery

It is a defining reality of our research landscape that The School of Medicine's Post Graduate Research Programme is wholly dependent on external funding and owes the very existence of its doctoral research programme to the vision and unwavering commitment of our funding sponsors. This report which details over 200 active PhD and MD Projects across the school fundamentally depends on the critical investments made by government agencies, philanthropic organisations, healthcare trusts, and industry partners.

Without this vital financial backing, the pursuit of new knowledge to solve real-world health challenges would cease. This collective investment serves as the essential engine driving the new **Trinity College Dublin THRIVE Strategic Plan 2025–2030** mission to intensify research and innovation from “excellent to outstanding”. By choosing to invest in our postgraduate students, our sponsors are not merely funding projects; they are also cultivating the elite talent necessary to fulfil one of the key objectives of the **Research Ireland Strategy 2026–2030**.

These partnerships are the cornerstone of an internationally renowned research system designed for the prosperity of the people of Ireland. We extend our profound gratitude to these partners, whose support ensures our future health leaders have the resources to deliver the societal impact and medical breakthroughs that will improve lives for generations to come.



Arthritis Ireland
Ballyfermot Local Drug and Alcohol Task Force (BLDATF)
Breakthrough Cancer Research
Blackrock Health
Children's Health Ireland
China Scholarship Council (CSC)
Cross Charity
Dean of the Faculty of Health Sciences
D-real, Research Ireland
Dublin City Hospital Trust
Dublin City Sport & Wellbeing Partnership
European Commission Horizon Europe Research Innovation Action
European Research Council
European Union funded project INSPIRE
Fighting Blindness Ireland
FutureNeuro and S3 Connected Health
Global Brain Health Institute (GBHI)
Health Research Board (HRB)
Health Research Board (HRB) Definitive Intervention and Feasibility Awards (DIFA)
Health Research Board (HRB) - RESTORE project
Health Research Board (HRB)- Structured Population and Health-Services Education Programme (SPHERE)
Health Services Executive (HSE)
Higher Education Authority (HEA) (North-South Research Programme)
Irish Blood Transfusion Service
Irish Clinical Academic Training (ICAT) Programme
Irish Cancer Society (ICS)
Irish Research Council (IRC)
National Children's Research Centre
National Institutes of Health
Precision ALS
Prendergast Award Grant
Prostate Cancer Foundation
Research Ireland
Rheumatology Gainshare
Royal City of Dublin Hospital Trust
Saint James Hospital Foundation
The Meath Foundation
The Health Information & Quality Authority (HIQA)
The Royal Embassy of Saudi Arabia
Trinity College Dublin Provost PhD Project Award
Trinity Research Doctorate Award
Welcome Trust UK



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



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