Book of Abstracts

Doctoral College

Post Graduate Researcher (PGR) Showcase

June 26, 2025

9am to 4pm

Main Building – Rooms C1060 & C1061

Planning Committee:

Elizabeth O'Callaghan; Belinda Simiyu; Brian Gleeson; Natasha Walsh; Katelyn O'Grady; Dr. Niamh Lenahan; Dr. Gerard Downes; Anne O'Dwyer, Professor Ann MacPhail

‘Research with Impact – An Interdisciplinary Postgraduate Showcase’

Conference Programme

Time	Venue: Main Building C1060 & C1061
09.00-09.30 am	**Registration**
09:30 am	**Welcome and Opening Remarks** Professor Ann MacPhail, Associate Vice President Doctoral College, UL **Venue: Room C1060**
09:45-11:15 am	**Parallel Sessions 1 & 2:** 10-minute presentations Theme 1: Advancing Knowledge Across Disciplines and Impactful Research for Society – **Room C1060** Theme 2: Innovative Approaches in Research and Creative Expressions in Research - **Room C1061** Q&A – Discussion
11.15 - 11.30 am	Coffee Break (View Poster display in C1 Corridor)
11:30 -12:30 am	**Keynote Address** Speaker: Full Professor Donna O’Shea, Chair in Digital Engineering, School of Engineering, UL - **Venue: Room C1060**
12:30 -1:15 pm	Lunch (View Poster display in C1 Corridor) **Venue: Room C1062**
1:15 - 2.00 pm	**Bake Your PhD competition** Venue: Room C1060
2:00 - 3:30 pm	**Parallel Sessions 1 & 2**: 10-minute presentations Theme 1: Advancing Knowledge Across Disciplines and Impactful Research for Society - **Room C1060** Theme 2: Innovative Approaches in Research and Creative Expressions in Research - **Room C1061** Q&A – Discussion
3.45 - 4.00 pm	**Closing Remarks**

Parallel Session 1 **Venue: Room C1060**		**Parallel Session 2** **Venue: Room C1061**	
Chair & Moderator: **Dr Ger Downes**		**Chair & Moderator:** **Dr Niamh Lenahan**	
Time	**Speaker** **Title**	**Time**	**Speaker** **Title**
09.40 - 09.50	Jade Gill	09.40 - 09.50	Kelsi Gallati
09.50 - 10.00	Jessie Tierney	09.50 - 10.00	Hind Mohamed (1)
10.00 - 10.10	Yue Xu	10.00 - 10.10	Deepak John Reji
10.10 - 10.20	Brian Gleeson	10.10 - 10.20	Eric Brady
10:20 - 10:30	Seidu Mumuni	10:20 - 10:30	Jishnu Padacherri Vethil
Parallel Session 1 **Room C1060**		**Parallel Session 2** **Room C1061**	
Chair & Moderator: **Dr. Ger Downes**		**Chair & Moderator:** **Professor Ann MacPhail**	
Time	**Speaker** **Title**	**Time**	**Speaker** **Title**
2.00 - 2.10	Adeola Babatunde	2.00 - 2.10	Hind Mohamed (2)
2.10 - 2.20	Sarah Cusack	2.10 - 2.20	Muqian Wen
2.20 - 2.30	Rizki Amalia	2.20 - 2.30	Seli Kharwb
2.30 - 2.40	Rebecca O'Regan	2.30 - 2.40	Naomi Rice
2.40 - 2.50	Tanaka Gandidzanwa	2.40 - 2.50	Ellen Kennedy

Parallel Session 1 (MORNING)

Advancing Knowledge Across Disciplines and Impactful Research for Society

Room C1060

Name: Jade Gill (09:40-09:50)

Title: Adolescent Migrant Girls' Experiences of Co-Designing a Wellbeing Intervention: Leadership and Empowerment

Faculty: Education and Health Sciences

Supervisors: Dr. Jennifer McMahon and Dr. Anca Minescu

Abstract:

Adolescent migrant girls face unique challenges to their wellbeing, including heightened anxiety, avoidance, and other negative psychosocial outcomes. A youth advisory panel (YAP) of adolescent migrant girls was established (N = 5) to co-design a school-based wellbeing intervention as part of a larger research project. In August 2024, A leadership and empowerment workshop, grounded in Seligman's PERMA theory of wellbeing, was delivered to the YAP to promote the development of social-emotional competencies, such as confidence and self-efficacy.

A semi-structured focus group was conducted to explore the impact of the workshop. Thematic analysis identified five themes: 'Leadership Development' – participants reported increased confidence in decision-making and leadership roles; 'Empowerment and Voice' – participants felt meaningfully heard and valued; 'Value of Advocacy' – participants recognised their capacity to influence education and policy; 'Community and Social Belonging' – the group fostered a sense of sisterhood and psychological safety; and 'Confidence and Self-Efficacy' – participants became more comfortable expressing their views. These findings are underpinned by PERMA theory, with each theme reflecting one or more of its core pillars: positive emotion, engagement, relationships, meaning, and accomplishment.

As a result, YAP members developed leadership competencies, enhanced self-efficacy, and formed a supportive peer network. Their continued involvement in the larger research project ensures that migrant girls' voices remain central to intervention development. This study underscores the value of youth-led co-design in promoting wellbeing and fostering inclusion.

Name: Jessie Tierney (09:50-10:00)

Title: It has tentacles into every single aspect of me": Synthesising Qualitative Research Exploring ADHD Youth's Lived Experiences Worldwide
Faculty: Education and Health Sciences

Supervisor: Professor Katie Robinson & Associate Professor Ann-Marie Morrissey

Abstract:

Attention Deficit Hyperactivity Disorder (ADHD) encompasses differences in brain processes affecting personal, social and academic functioning, with varying levels of such impairment among individuals. Globally, ADHD affects up to 5.9% of youth. These youth are simultaneously transitioning from dependent childhood to independent adulthood, which harbours further relationship, academic and employment difficulties. The heterogeneity of ADHD, coupled with the challenges of entering adulthood, highlights the necessity of this study.

Aim: To explore the lived experiences of ADHD youth, 15-29 years old.

Method: A qualitative evidence synthesis, utilising meta-ethnographic methods.

Results: 30 studies across 12 countries, including 847 ADHD youth were analysed. Themes generated were, 1. navigating identity and authenticity, 2. diagnosis disclosure dilemma, 3. new ADHD manager, 4. social connections and challenges, 5. service provision through youths' eyes, 6. everyday experiences, 7. turning insight to action. All themes aligned with the Social Model of Disability which suggests that the challenges faced by these ADHD youth stem from social oppression and exclusion, not individual deficits.

Implications: This research yielded impactful findings with implications for future research. The patient-clinician relationship plays a crucial role in shaping ADHD youths' service provision experiences and further exploration could lead to guidelines which enhance these relationships, improving service delivery. Furthermore, ADHD youth describe the transition to employment as challenging, much like their transfer to adult health services. However, whilst plentiful protocols and guidelines exist for transitioning to adult services, comparable support for transitioning to employment is notably lacking.

Name: Yue Xu (10:00-10:10)

Title: Chinese Physical Education Teachers' Professional Development Through Social Media: A Preliminary Report

Faculty: Education and Health Sciences

Supervisors: Professor Ann MacPhail and Professor Ash Casey

Abstract:

Introduction: Social media can be used to build professional learning communities that align with school responsibilities and support professional development opportunities among physical education teachers worldwide. While most studies exploring cultural differences in social media usage have been conducted in the USA and UK, this study examines the extent to which Chinese physical education teachers engage with social media platforms as a community for learning.

Methods: Purposive sampling was used for participant recruitment, with the inclusion criteria as follows: (1) teachers hold a registered teaching certificate in school physical education in Shanghai; (2) teachers actively use social media for professional learning purposes; and (3) the school has established regulations, policies, or workshops to enhance teachers' use of social media for professional learning. Interview questions were informed by a range of previous research study protocols. Two pilot interviews were conducted to adapt the interview questions to the Chinese context. Five participants were selected for semi-structured individual interviews conducted via Tencent Meeting (Voov). Data analysis was guided by elements from various models of learning communities, including Communities of Practice, Teacher Professional Communities, Professional Learning Communities, and Powerful Learning Communities.

Preliminary Results: In response to the research question, eight codes were identified from the interviews and subsequently collapsed into three main themes: group chat, learning outcomes, and learning approaches.

Conclusions: The findings of this research will inform the most effective support needed for Chinese physical education teachers to maximise the use of WeChat as a professional learning community. Initial results suggest that such support should include access to practical teaching approaches for daily physical education classroom settings, as well as opportunities for teachers to share their challenges and expertise in teaching practice.

Name: Brian Gleeson (10:10-10:20)

Title: Candidate biomarkers for systematic screening of neutrophil responses to infection in patients with chronic lymphocytic leukaemia

Faculty: Interfaculty (Science and Engineering + Education and Health Sciences)

Supervisors: Professor Elizabeth Ryan and Professor Ruth Clifford

Abstract:

Background: Patients with chronic lymphocytic leukaemia (CLL) have weakened immune systems and are at heightened risk of infection. Research has focused on many white blood cells in these patients. However, neutrophils have received less attention, despite being essential first responder immune cells that protect the body against infection.

Aims: 1) To review existing knowledge about neutrophils in patients with CLL. 2) To find the best way of measuring neutrophil responses to infection.

Methods: A systematic literature search identified 43 primary studies for review. Publicly available datasets of blood-derived neutrophils were used for meta-analysis. Signatures of neutrophil activation were compared between patients with COVID-19, bacterial infections (pneumonia, sepsis) and solid cancers (breast, head and neck, lung, prostate). No datasets from patients with CLL or other blood cancers were identified.

Results: The literature review suggested that neutrophils may promote leukaemia cell growth while suppressing T cells, which are important for vaccination and immune memory. Patients receiving treatment for CLL had lower numbers of neutrophils and these cells struggled to recognise or kill germs. The meta-analysis revealed that neutrophils share a similar activation signature across patients with COVID-19 and solid cancers, but not bacterial infections.

Discussion: This activation signature and its relationship with infection risk has not been studied in patients with CLL. Research is ongoing to cross-reference this signature against additional publicly available datasets. Methods are being developed to measure this signature in the lab before screening blood samples from patients with CLL.

Name: Seidu Mumuni (10:20-10:30)

Title: The experiences and perspectives of persons with prostate cancer and their partner: A qualitative evidence synthesis using meta-ethnography.

Faculty: Education and Health Sciences

Supervisor: Associate Professor Claire O' Donnell and Associate Professor Owen Doody

Abstract:

Background: Prostate cancer is recognised as the second most common diagnosed cancer in men and remains a significant global public health concern. In Ireland, the incidence of prostate cancer continues to rise, with approximately 1 in 6 men being diagnosed in their lifetime. Men's experiences with prostate cancer are complex, necessitating further research into the factors influencing diagnosis and treatment. Therefore, this study aims to explore men's experiences with prostate cancer, emphasising the interplay between screening, diagnosis, and the lived experiences of those affected**.**

Methods: A qualitative descriptive study was conducted among men with prostate cancer in Ireland. Using a purposive sampling (n = 11) were interviewed with data saturation guiding sample size determination. A semi-structured interview guide was used for data collection either face-to-face or via Microsoft Teams and phone calls. Data were analysed using Braune and Clarke's thematic analysis approach after transcription, with NVivo 12.0 software supporting analysis.

Results: Thematic analysis identified five themes: systemic obstacles in timely cancer detection, the role of efficient system in cancer care, emotional resilience in cancer recovery, redefining normalcy post treatment and harnessing specialised support network in coping strategies. These themes were examined through the lens of the Biopsychosocial Model to understand their interconnected nature and impact on patient experiences.

Conclusions: This study highlights the complex factors affecting prostate cancer patients' experiences, emphasizing the need for a patient-centred approach, addressing systemic disparities, and promoting multidisciplinary care. It suggests implementing evidence-based survivorship care frameworks to improve quality of life for survivors, with future research exploring long-term effects of integrated care models.

Parallel Session 2 (MORNING)

Innovative Approaches in Research and Creative Expressions in Research

Room C1061

Name: Kelsi Gallati (09:40-09:50)

Title: Optimizing parameters for improved pre-clinical models of oestrogen receptor positive breast cancer

Faculty: Education and Health Sciences

Supervisors: Dr. Amira Mahdi & Dr Kieran McGourty

Abstract:

Breast cancer (BC) consists largely of the oestrogen receptor positive (ER+) subtype with endocrine therapy (ET) being the standard of care (SOC) treatment. ET and surgery interventions are extremely successful in early-stage BC, leading to a 5-year survival rate of 88%. However, exploring new therapeutics is necessary as many patients develop resistance to SOC treatments. An existing selective oestrogen receptor degrader (SERD), fulvestrant, offers clinical benefit to overcome resistance however it has pharmaceutical limitations that require it to be administered with intramuscular injections. As a result, there is a demand for developing orally available SERDs. Although there is promising investigation of 13 compounds, only one has gained approval (elacestrant) following clinical trials. Patients in clinical trials have experienced prior treatment, making it possible that a drug's efficacy seen in pre-clinical tests are being masked by the mechanisms of resistance which are poorly understood. This project aims to develop three-dimensional (3D) co-culture spheroid models for ER+ breast cancer with adipocytes to replicate tumour microenvironment and incorporate therapeutic resistance as a more accurate pre-clinical testing method for potential SERDs. 3D microtissues of ER+ MCF-7 BC cells were developed to measure spheroid compaction and growth, establishing that a 200 µm spheroid size and a time period of 4-5 days was optimal for downstream treatment, processing and analysis. Acid phosphatase assays measured MCF-7 cell proliferation to produce inhibition profiles for four SERDs (fulvestrant, camizestrant, elacestrant, giredestrant) and two ETs (tamoxifen and palbociclib), prior to the induction of drug resistance. MCF-7 cells were treated with gradual increases of tamoxifen and fulvestrant treatments to establish cell lines resistant to standard of care methods. Improving models to refine pre-clinical testing and screening of potential ET to save resources and minimize patients exposed to unsuccessful trials. Future studies will include the addition of adipocytes and single-cell RNA sequencing to compare treatment-sensitive and treatment resistant 3D co-culture models.

Name: Hind Mohamed (09:50-10:00)

Title: Vulnerability of Saudi people living with cancer and their supporters to online misleading information: An interview study

Faculty: Education and Health Sciences

Supervisor: Associate professor Dervla Kelly, Associate Professor Jon Salsberg and Associate Professor Turki Alanizi

Abstract:

Background
Despite Saudi Vision 2030's plan for adopting new technology, online misleading information about cancer remains noticeable. To our knowledge, our paper is the first to explore the vulnerability of people living with cancer and their supporters to misleading information.
Aim
Explore the vulnerability of people living with cancer and their supporters to online misleading information.
Method
Onsite interviews were done with nineteen people living with cancer and six of their supporters. We used open questions, followed by studying the text to understand the main ideas and deeper meanings within them. This approach was used to understand the participants' beliefs that influence online health information searches, the control strategies they use to protect themselves from misleading online information, and the factors that prevent and help protect them from inaccurate online information.
Results
After interpreting the information, four main ideas stood out: attitudes toward searching/evaluating online information, trust in people who have similar experiences, the consequences of misleading cancer information, and sharing information with doctors. Participants were searching for cancer information online despite awareness of unsafe media. Participants reported using superficial methods to search and evaluate online cancer information. Healthcare providers were considered trustworthy sources to check the quality of online cancer information. However, we identified several barriers to sharing health information with doctors.
Conclusion
Adopting technology to improve patient's healthcare is one of the main goals of Saudi Vision 2030. Technology solutions could play a facilitating role in detecting inaccurate cancer information

Name: Deepak John Reji (10:00-10:10)

Title: Computational Analysis of Immigration Narratives: Studying Gendered Experiences of Immigration and Integration in Ireland

Faculty: Arts, Humanities Social Sciences

Supervisor: Associate Professor Brendan Halpin and Dr. Emily Murphy

Abstract:

Understanding how public attitudes towards immigration evolve under the influence of critical events, media narratives, and institutional practices is important for addressing the coordination and stabilization of gendered perceptions of Immigration. This is particularly relevant within the complex immigration narratives where human influencers and automated agents (social bots) contribute to opinion formation. This research proposes a dynamic, attitude network-based investigation into how societal events and discourses in Ireland shape public attitudes toward male and female immigrants over time.

Building on interdisciplinary advances in identity theory, ethnomethodology, and computational sociology, this study conceptualizes attitudes as dynamic, multi-dimensional constructs. When individuals engage in multiple discourses, sometimes conflicting attitudes towards immigration, the symbolic links between these interactions give rise to social-symbolic structures that reinforce perceived ingroup alignment and outgroup difference. The research will track how gendered perceptions of immigrants become "normalized" to collective identity structures, particularly under conditions of social threat, policy change, or publicized crises (basically critical events).

Media corpora, ESS (European Social Survey) data, and ethnographically tagged lived experiences of immigrant men and women in Ireland will be transformed into network representations to model how attitudes are amplified, sustained, or disrupted across human and hybrid networks.

Name: Eric Brady (10:10-10:20)

Title: Using Auto-Ethnography as a Research Methodology – The Challenges

Faculty: Education and Health Sciences

Supervisor: Professor Giles Warrington and Professor Patricia Mannix McNamara

Abstract:

The self-reflections of a newly elected “Chair” are explored using the incumbents own lived experience as a lens to interpret the beliefs, practices and cultural challenges encountered over the course of his time leading an NGB through a pandemic.

Methodology

The study, split into two parts, involves a rigorous process of self-reflection as a means of interrogating the Chair’s thinking, feelings and actions while immersed in the organisation; facilitated by the exploration of identifiable personal epiphanies (key moments perceived to have significantly impacted the Chair’s trajectory as a leader) that articulate how he extracted meaning and navigated his way through the challenges.

In part two, key individuals associated with the running of the organisation will be invited to complete critical incident interviews. These interviews will document their own personal epiphanies and act as a sounding board to those of the Chair. A smaller subset of the group will then be invited to complete a series of open-ended phenomenographic interviews exploring how each individual perceived the world within the organisation, while the Chair was their leader.

Results

The personal and methodological challenges of using reflexivity as a research tool will be illuminated and shared. Real examples from the auto-ethnographic text will be used to illustrate the Chair’s thinking.

Implications

The implications of choosing an auto-ethnographic methodology including its influence on, and relationship with, part two of the study will be considered; ultimately highlighting potential beneficial insights and learnings for future organisational leaders.

Name: Jishnu Padacherri Vethil (10:20-10:30)

Title: High-throughput fabrication of testicular cell-laden microspheres using microfluidic system.

Faculty: Science and Engineering

Supervisors: Dr. Eoghan Cunnane

Abstract:

Introduction

Male infertility presents a profound concern with far-reaching societal implications. Current therapeutic approaches remain empirically driven and often inadequately address this complex issue (1). To formulate effective strategies for male infertility, it is imperative to establish preclinical testicular models that accurately represent the intricate architecture of testicular tissue and the natural functions of the human testes. To overcome these limitations, a platform that can create representative testicular models is needed. Microfluidic approaches can be used to fabricate cell-laden microspheres (2) with compartmentalized structures that more closely mimic the cell niches of the testis, thereby providing a more accurate representation of the natural human testicular environment. This research project undertakes this critical endeavour by introducing fabricating testicular microgel models at high throughput using a microfluidic approach.

Materials and Methods

Preparation and Characterization of Sodium Alginate Hydrogel: The SA hydrogel was synthesized by blending Sodium Alginate with a crosslinker, calcium-EDTA /acetic acid. The microstructure of the hydrogel was examined via scanning electron microscopy (SEM). Pore size characterization was achieved by measuring individual pore diameters. Nanoindentation technique was used to measure key mechanical properties of hydrogels, like modulus, hardness, viscoelastic behaviour, and adhesion. The biocompatibility of the SA was checked by encapsulating the CHO-GFP cells and culturing it for 3 weeks.

Generation of Cell-Laden Microspheres: Cell-laden monodispersed hydrogel microspheres were generated through Microfluidic T-junction. A combination of equimolar concentration of sodium alginate/Ca-EDTA containing cells and the crosslinker acetic acid.

Results

Characterization of Sodium Alginate Hydrogel: The microstructure of sodium alginate/Ca-EDTA hydrogels was analysed using SEM. Viscoelastic properties of SA hydrogels, evaluated via nanoindentation, were found to be of the same order of magnitude as native tissue, underscoring their suitability for biomimetic applications.

Generation of Cell-Laden Microspheres: The examination of cell viability within the hydrogel macrospheres during a 14-day static culture period provided substantial evidence supporting the compatibility of the cells with the hydrogel.

Discussion

In this study, a microfluidic system was developed for the efficient generation of hydrogel microspheres containing encapsulated testicular cells. The uniform encapsulation of cells within these droplets ensures consistent distribution and interaction of cells, which is critical for accurate tissue modelling. This advancement enhances the development of physiologically relevant human testis models, with potential applications in research and therapy.

References

1. Vollset SE (et al.) The Lancet ; 396 :1285–1306, 2020.
2. Crafa A (et al). Journal of Clinical Medicine, 12(9), 3152, 2023.

Parallel Session 1 (AFTERNOON)

Advancing Knowledge Across Disciplines and Impactful Research for Society

Room C1060

Name: Adeola Babatunde (14:00-14:10)

Title: Virtual Reality (VR) for Youth Offending Risk Assessment: Conceptualization of a Self-control VR Game Script

Faculty: Inter-Faculty

Supervisor: Dr. Catherine Naughton and Dr. Elaine M. Rogers

Abstract:

To effectively tackle youth offending, it is essential to understand the risk and protective factors that contribute to young people's involvement in crime or other delinquent behaviours (Zúñiga et al., 2024). There are challenges associated with measuring risk factors (Winters, 2020), as risk factors do not occur in isolation (Azeredo et al., 2019). Therefore, assessment tools with higher ecological validity are pertinent (Lobbestael & Cima, 2021). Technological advancements make it easier to achieve this (De-Juan-Ripoll et al., 2018). Virtual Reality (VR) measures combine the strengths of traditional measurement tools, including behavioural tasks and self-report measures, by providing room for more careful experimental control and increased ecological validity. Building on the affordances of Virtual Reality, this PhD study proposes the use of an immersive VR game to measure self-control as a behavioural risk factor for youth offending behaviour.

Name: Sarah Cusack (14:10-14:20)

Title: The Machine will work": The Construction of an Idealised Irish Woman, 1922-1937

Faculty: Arts, Humanities Social Sciences

Supervisor: Dr. Emma Dolan and Professor Owen Worth

Abstract:

My project is using feminist critical discourse analysis to examine how women were constructed in Irish political discourse from 1922 to 1937, using two case studies: Juries Act of 1927 and Article 41.2 of Bunreacht na hÉireann. This project draws on the debates from Dáil Éireann and coverage in the Irish Independent and Irish Times and through using FCDA, the research reveals the way women were being discussed which maintained traditional ideas about gender. This was a period where politicians were debating, what kind of society Ireland should have and what role women were to play in it. The Juries Act asked whether women should serve on juries, ultimately excluding women permanently as they had separate and distinct responsibilities from those of the male dominated public sphere while Article 41.2 was a constitutional enshrinement about the place of women in society and recognising her domestic role as essential to the functioning of the state. By examining the ways in which gendered ideologies were ingrained within political discourse, it highlights how these discourses reflected a wider political effort to shape a national identity and relationship of the state with women. This work is relevant to the theme of impactful research for society as it underscores how, historically, political and legal discourses shaped, and continue to shape, the gender norms and roles women play in Irish society. This study reveals how this was legitimising the exclusion of women from participation in the public sphere with domestic roles being inherently feminine.

Name: Rizki Amalia (14:20-14:30)

Title: An Exploration of Work-Related Stress and Coping Strategies among Female Platform-Based Motorcycle Ride-Hailing Workers in Indonesia

Faculty: Kemmy Business School

Supervisors: Dr. Caroline Murphy and Dr. Ann-Marie

Abstract:

Platform work presents unique stressors that are distinct from those in traditional environments. Although much of the scientific literature focuses on female workers in sectors such as domestic labour and beauty services, there is a notable gap regarding women in male-dominated fields, particularly in transportation. This study specifically addresses this gap by exploring stressors and coping strategies among female motorcycle ride-hailing workers in Indonesia, where they represent the largest group of platform-based workers.

The research employed a survey with standardised questionnaires. The Mini Depression, Anxiety, and Stress Scale assessed the stress levels of these female workers, while the Copenhagen Psychosocial Questionnaire III identified psychosocial risk factors intrinsic to their work conditions. To understand coping mechanisms, the Strategies for Coping with Work Stressors Scale will be employed to capture the various coping strategies participants utilised to navigate their work-related stressors.

The research aims to enhance understanding of female workers' experiences in male-dominated sectors of the platform economy. Insight into their unique challenges can inform policies to improve conditions in this field. Ultimately, this study aims to contribute valuable knowledge regarding gender dynamics in the platform economy, paving the way for future research and discussions.

Keywords: Gig work, job stress, coping mechanism, precarious work

Name: Rebecca O'Regan (14:30-14:40)

Title: Elite women and the local economy in rural Ireland, 1850-1860: A case study of Augusta, third countess of Dunraven

Faculty: Arts, Humanities Social Sciences

Supervisor: Associate Professor School of History and Geography

Dr. Karol Mullaney-Dignam,

Abstract:

This paper discusses aspects of a current Ph.D. research thesis examining the socio-economic influence of elite women in their local communities in the mid-West of Ireland during the nineteenth century. The thesis examines the role of elite women's social networks in nineteenth century Ireland's rural economy. It argues that women's networks were integral to their philanthropic work and influence in the local community, and that female agency must be emphasised to fully understand their role and position in the country house and surrounding areas. This presentation discusses a case study of Augusta, Countess of Dunraven during the 1850s, examining her economic role, as well as her socio-economic networks in the village of Adare, Co. Limerick. Augusta's interactions with members of the elite, the middle-class and tenants on the family estate show the value of her economic contribution.

The study of elite women in nineteenth century Ireland has received little attention, and this 'glaring lacuna' has been noted by several historians. In response, this paper seeks to highlight women's agency, influence and relationships in their localities and recover the voices of women who have been obscured from history. This paper draws primarily upon the Dunraven collection in the University of Limerick Special Collections, which includes household account books, letters, and diaries. Moreover, parish records and contemporary publications are utilised to provide insights into public perception, societal expectations, and the non-elite perspective.

Name: Tanaka Gandidzanwa (14:40-14:50)

Title: Developing A Trustworthy Governance Framework for Immersive Technologies

Faculty: Kemmy Business School

Supervisor: Associate Professor Martin Cunneen and Professor Raymond Friel

Abstract:

XTREME is 8M Horizon funded project that consists of 14 multidisciplinary partners around Europe. The goal of the project is to create artistic classical music experiences that are inclusive, meaningful and responsible through Extended Reality Technology. Extended Reality is an umbrella term for augmented reality (AR), mixed reality (MR), and virtual reality (VR). An example of these immersive technologies is the Meta Quests and the Apple Vision Pros. These technologies enhance or replace our perception of the world.

The UL living lab is a big part of this project and our main focus is ensuring that the use of this technology is done ethically. We ask important questions about trust, privacy, accessibility, and fairness. How can we design immersive experiences that respect artists' rights? How do we protect users' data? Who gets to participate in this digital future and who might be left out? Our interdisciplinary approach brings together researchers in law, health, the arts, and technology to develop XR experiences with real-world relevance and social impact.

My current research is on determining whether or not nations are prepared for trustworthy AI. In 2019, the European Union introduced the term “Trustworthy AI” to describe AI systems that are lawful, ethical, and robust, grounded in principles such as transparency, accountability, and respect for human rights. These guidelines matter because they help everyone, from AI developers to everyday people, feel confident that AI systems will act in ways that are safe, fair, and respectful.

Parallel Session 2 (AFTERNOON)

Innovative Approaches in Research and Creative Expressions in Research

Room C1061

Name: Hind Mohamed (14:00-14:10)

Title: Exploring the readiness of people living with cancer, their supporters, and healthcare providers for technology-driven cancer health literacy training: An interview study

Faculty: Education and Health Sciences

Supervisor: Associate Professor Dervla Kelly, Associate Professor Jon Salsberg and Associate Professor Turki Alanizi

Abstract:

Background: Technology is changing the way the world communicates and how we learn, remember, and transform information. One such innovative approach is learning new information in small units.

Aim: Explore the readiness of people living with cancer, their supporters, and healthcare providers for technology-driven cancer health literacy training.

Method: Onsite and telephone interviews were done with nineteen people living with cancer, six supporters, and ten healthcare providers. We used open questions, followed by studying the text to understand the main ideas and deeper meanings within them. This approach was used to understand the participants' beliefs about technology adoption, participant's preferences regarding cancer health literacy training approach, and the facilitating conditions for delivery of cancer health literacy training.

Results: Six ideas emerged from the analysis: introducing technology-driven approaches, simplifying technology training materials, providing user-friendly training materials, focusing on patients' needs when providing healthcare, cooperation, and addressing cultural and language barriers.
We found that people living with cancer and their supporters are motivated to use technology to improve cancer health literacy. We identified a demand for technology-driven small-unit training to improve cancer health literacy. Our participants expressed a preference for the delivery of cancer digital health literacy training through cooperation with multiple medical and non-medical staff to enhance relevance and trust.

Conclusion: Learning in small units could leverage novel technology to deliver tailored digital health literacy training, learn new searching/evaluating skills, and reduce cancer patients' mental efforts.

Name: Muqian Wen (14:10-14:20)

Science and Engineering

Innovative Approaches in Research - Showcase novel methodologies, technologies, or innovative research techniques.

Coherent Raman microscope is a kind of microscope important in biology and chemistry etc. It works by focusing two laser lights of different frequencies onto the sample and then detect the resulting Raman light. The Raman emission generated in this way will be much stronger than regular Raman microscopes. This research aims to use a coherent Raman microscope with a rapidly tuneable laser to develop an image acquisition technique that can be faster than most conventional coherent Raman microscope techniques.

Name: Seli Kharwb (14:20-14:30)

Title: In vivo challenge testing of cold-adapted *Listeria monocytogenes* on spinach cultivars

Faculty: Science and Engineering

Supervisors: Dr. Achim Schmalenberger

Abstract:

Listeria monocytogenes is a major foodborne pathogen responsible for listeriosis, a life-threatening infection that poses significant risks of vulnerable populations. This bacterium is highly resilient, capable of surviving extreme conditions such as high acidity, elevated salt concentrations, and refrigeration temperatures. Recent outbreaks linked to ready-eat foods have raised serious public health and economic concerns. Previous in vitro studies have demonstrated that cold-adapted *L. monocytogenes* strains possess enhanced growth potential due to specific physiological and genetic adaptations. However, the behaviour of these strains in real food matrices, particularly leafy vegetables, remains underexplored. This study aims to conduct in vivo growth assessments using spinach as a model food matrix to evaluate the growth dynamics of cold-tolerant *L. monocytogenes* strains. We hypothesize that these strains will exhibit superior growth performance under refrigeration compared to non-adapted strains. To test this, strains with known rapid and slow growth profiles on agar plates at 4°C and 10°C were selected from DetCon consortium's strain repository and compared with reference strains following EURL challenge study guidelines. Spinach from three different production systems, laboratory controlled (var. Trumpet), commercial (supermarket), and organic (local farm, Big Early Leaf), was inoculated with 100 CFU/g and stored at 7°C. Unexpectedly, strains originally characterized as "slow-growing" demonstrated high growth potentials on supermarket and organically grown spinach than the "fast-growing" strains. Laboratory grown spinach showed comparable growth rates for both. Spinach variety and cultivation method appeared to greatly influence growth potentials. These findings highlight the importance of evaluating growth behaviour in real food systems.

Name: Naomi Rice (14:30-14:40)

Title: Writing history on the Walls. Northern Irish republican murals, 1981-2024

Faculty: Arts, Humanities Social Sciences

Supervisor: Dr. Ruan O'Donnell

Abstract:

This presentation aims to connect with the theme of creative expressions in research through examining the use of republican murals as relics of the past that reveal specific narratives about communities. The North of Ireland is known for its vibrant street art scene which deals with a wide range of issues in an unavoidable and creative way. Murals once formed the backdrop to the major events of the Troubles conflict and continue to hold great value despite the move towards peace in recent decades. Murals carry many functions and have been used as a method of communicating ideas, creating boundaries, and documenting history. To provide a more focused approach to this topic, this paper aims to build on theories of scholars such as Bill Rolston, Tony Crowley and Neil Jarman while focusing on a select number of artworks which highlight how issues such as gender are explored through this artform. This approach allows space for an in depth and original analysis to be conducted while considering how artworks can document history through being created, preserved, and updated in accordance with social and political developments.

Name: Ellen Kennedy (14:40-14:50)

Title: Synthesis of a Novel Hydrogel for Advanced Cell Culture Applications

Faculty: Science and Engineering

Supervisors: Dr. Emmet O'Reilly and Dr. Kieran McGourty

Abstract:

Accurate lab models that mimic how cells behave in the body are key to improving drug development, disease research, and tissue repair. However, most traditional lab studies grow cells on flat (2-D) plastic surfaces, which don't reflect the body's 3-D environment. Human tissues are soft, with stiffness ranging from 1 to 50 kPa, while standard lab plastics are much harder—about 10 million kPa. This mismatch can lead to misleading results, since stiffness affects how cells grow, change, and survive.

To address this, my project looks at developing a novel hydrogel—a soft, water-based material—that better mimic real tissue. The hydrogel is made from a common material called poly (acrylic acid), which has been modified by adding cysteine to make it more cell-friendly and "sticky," helping cells attach and grow.

The hydrogel is designed to imitate the 3-D shape, softness, and chemical environment of real tissues. 3-D printing is used to build complex shapes, while its softness is fine-tuned with special treatments. Natural proteins are also added to support healthy cell behaviour.

This new hydrogel could revolutionize how we study cells in the lab, leading to better medical research, safer drugs, and new treatments in regenerative medicine.