**Project Title: "I'm so sick of running as fast as I can, wondering if I'd get there quicker if I was a man1": an exploratory study of women founders in technology entrepreneurship**

**Supervisory Team: Dr Gillian Barrett, Dr Ciara Fitzgerald, Dr Fiona Edwards Murphy**

We live in an era of unprecedented technological innovation and scholars have deemed this to be an age of opportunity for women entrepreneurs. The rise of women entrepreneurs in the technology sector has garnered global attention. Despite facing systemic challenges such as funding disparities, gender bias, and underrepresentation, women-led STEM startups continue to drive innovation and economic growth. For example, Sharon Cunningham (CEO) and Orlaith Ryan (CTO) of Shorla Oncology were awarded the Ernst and Young (EY) 2024 Entrepreneurs of The Year (EOY).

This research study aims to explore the unique contributions of women technology entrepreneurs, in particular, exploring how women entrepreneurs overcome the myriad of challenges and gender disparity in entrepreneurship. Furthermore, we will explore how technology advancements impact on the propensity for women to select into entrepreneurship. This cannot be examined in isolation and must be considered within the wider context and the impact of entrepreneurial outcomes on women-led technology businesses. Specifically, it is critical we explore the environments that facilitate the enactment of technology entrepreneurship for women.

In essence, this project seeks to celebrate women technology entrepreneurs – to learn from how they overcome the systemic challenges in starting and scaling a technology venture; and to determine their contribution within a women entrepreneurial ecosystem which would help identify, encourage and support aspiring women entrepreneurs. By addressing the systemic barriers women entrepreneurs face and highlighting their contributions, this study will support efforts towards creating gender equity in the technology sector, fostering a more diverse and innovative startup ecosystem. Research outputs will include academic papers, practitioner ‘real life stories’ and policy guidelines to help shape future policy instruments to provide better access to resources and experienced mentors.

Thus, the purpose of our proposed research study is to explore how female entrepreneurs are succeeding in this ‘male dominated’ technology entrepreneurship space. We wish to explore the learnings from women technology-based entrepreneurs and to celebrate their success but also to reveal how their actions and behaviours are influencing the innovation and entrepreneurial technology outcomes. We believe it is necessary to promote women’s entrepreneurship, to showcase real impact case studies, to share how women technology entrepreneurs have overcome their challenges, all of which will provide practical know-how and inspiration to existing and aspiring women entrepreneurs. Policy implications will also be highly relevant as policy makers will be better informed with real insights into the nuances and needs of women technology entrepreneurs.

1 Taylor Swift, “The Man”, 2019

**Project Title: Women Technopreneurs in the Agri-food Industry: Cross-country Case Studies of Lived Experiences, Economic Practices, Entrepreneurship Ecosystems and the Future Outlook**

**Supervisory Team: Dr Lana Repar, Dr Tracy Bradfield and Professor Joe Bogue**

Technology supports the food system at each step, particularly with the evolution of AI, to help feed the growing global population. This ranges from technologies that support food producers to those that aid consumers’ purchasing decisions. Women technopreneurs, those who leverage technology and innovation to design new products and services, have a very significant role to play in developing and commercialising new technologies that help in establishing a resilient and sustainable agri-food business sector. Nevertheless, seventy-five per cent of women agri-food technopreneurs have experienced negative gender bias and 83% have encountered negative gender bias when pitching to investors (EIT Food, 2021). In 2018, within the agri-food tech industry, women-only founded companies secured only 7% of all deal activity and 3% of funding (AgFunder, 2025; EIT Food, 2021).

This project aims to understand these barriers and provide solutions. It explores the challenges women technopreneurs in the agri-food industry face, to determine how we can advance the landscape for women entrepreneurs in technology. This research will specifically explore entrepreneurship ecosystems in which women technopreneurs operate, examining the key stakeholders and actors in the ecosystem, and developing an ecosystem model that can encourage more women entrepreneurs to successfully commercialise technologies in the agri-food sector.

This study will also identify how new emerging technologies in the agribusiness could be of great value in expanding the opportunities for women entrepreneurship by supporting them in overcoming the constraints they face and creating more favourable ecosystems. It will lead to recommendations about effective approaches to increase and improve the participation of women in technology in the agri-food industry and business start-ups as central to foster their inclusion in the global economy.

This PhD aligns with the CUBS Strategy Goal 2 – ‘To be recognised internationally for the quality, innovation, and impact of our research on individuals, organisations and society, and the sustainability of organisations and societal wellness’ (CUBS, 2021). Additionally, it directly addresses UCC’s commitment to sustainability Goal 5.1 ‘Develop innovative sustainability solutions for local, national, regional and global impact, and embed sustainability into education, research, operations and recognition initiatives for staff and students’ (UCC, 2023). The Irish Government, through Enterprise Ireland (2025), is also committed to ‘…propelling Ireland’s economy by cultivating a diverse entrepreneurial ecosystem’ and ‘Increasing opportunities for women entrepreneurs and women in management is a strong focus for Enterprise Ireland’. This research will play a role in influencing entrepreneurship policy that enhances economies and societies.

**Project Title: Breaking the Digital Ceiling: Identity Work and Power Dynamics in Women's Tech Entrepreneurship - A Mixed-Methods Analysis of Ireland's Innovation Ecosystem**

**Supervision Team: Dr Marie Ryan, Dr Huanhuan Xiong and Prof. Eleanor Doyle**

This research explores the complex relationship between gender identity, technological innovation, and entrepreneurial leadership in Ireland's evolving startup ecosystem. Building on Marlow and McAdam's (2015) foundational work on gender in high-technology ventures, this study examines how women navigate, and challenge established power structures when founding and scaling technology ventures, particularly in deep tech sectors. While Ireland has emerged as Europe’s leading tech hub, women’s participation in deep tech ventures remains disproportionately low, particularly in ventures emerging from academic research commercialization.

The study addresses a critical gap identified by Ahl and Marlow (2021) regarding the relationship of gender identity and technology in entrepreneurship. Using Enterprise Ireland's Commercialisation Fund as a focus, the research will examine how women researchers and entrepreneurs navigate the transition from technical expertise to entrepreneurial leadership in technology ventures.

A key contribution of this research could lie in its novel examination of the distinct pathways and challenges faced by two groups: women entrepreneurs entering the tech sector, and women researchers transitioning into entrepreneurship through commercialization of their academic work. Using Enterprise Ireland's Commercialisation Fund as a unique empirical lens, the study will analyse how founding journeys shape entrepreneurial identity, resource acquisition, and venture outcomes, offering new insights into how technical expertise and institutional context influence entrepreneurial leadership development.

This three-dimensional analysis contributes to both theoretical understanding, building on Atenas et al., (2022) feminist technology studies, and practical support mechanisms for women tech entrepreneurs. The project leverages unprecedented access to Enterprise Ireland's dataset on technology ventures and established networks within Ireland's women entrepreneur community.

The concept of ecosystem in entrepreneurship points to inter-related and collaborative components of the business environment in which entrepreneurial activities are embedded and develop. Rooted in biology, it refers to a community of living and non-living elements interacting in complex ways (Autio, 2022; Acs et al., 2017). As a network of interdependent non-hierarchical actors and institutions, the ecosystem enables cooperation and innovation in the form of entrepreneurial artefacts (Adner, 2017). The nature of the ecosystem, and the features impacting female entrepreneurship in deep tech provide the context for this research. Greater insight into ecosystem – entrepreneur relationships offer potential to better understand and support women in their entrepreneurial ventures in a sector identified as strategic for innovation and economic development (Barbosa et al., 2025; Nedayvoda, 2020).

**Project Title: Impact of technology on economic and non-economic outcomes of women entrepreneurs: Evidence from Ireland**

**Supervision Team: Dr Stephen Onakuse, Dr Wendy Rowan and Dr Emma Beacom.**

The Irish government has implemented supportive measures to enhance the participation of women in entrepreneurship with international growth potential. There has been a global transformation in technology innovation that plays an important role in the rapid growth and scaling of businesses. These technologies include but not limited to digital, information and e-Commerce solution technologies. Previous studies have predominantly relied on economic indicators to assess the impact of entrepreneurship, and there has been a one-size-fits-all approach in evaluating women, disregarding the embedded heterogeneity associated with individuals even when they appear similar. This variation can be social or economic, shaping the attitudes, perceptions, and approaches of individuals in business. Notably, there is lack of information regarding these embedded differences among women and how they shape women entrepreneurs’ choices to utilize technology and the subsequent impact on entrepreneurship based on non-economic indicators, which mostly defines women’s approach to innovation adoption. This study, therefore, will focus on assessing the effect of technology use on economic and non-economic indicators among women entrepreneurs while considering the differences that exist between them. A mixed-method approach will be used in the study. Quantitative data will be obtained from the Department of Enterprise, Trade and Employment while qualitative data will be collected from randomly selected women entrepreneurs using a semi-structured questionnaire administered online. Cluster analysis will be adopted to group the women entrepreneurs based on their socioeconomic characteristics for analysis. Endogenous treatment effect (ETE), instrumental variable estimators (IVE) and difference-in-difference (DID) will be used to assess the impact of each technology on each economic and non-economic indicator across each demographic group. ETE ensures that impact values are neither overestimated nor underestimated, as the model accounts for self-selection associated with the Irish government support measure for women entrepreneurs. IVE will be used to validate the instruments used in the ETE. DID will be used to get the mean difference of economic indicators between T0 and T0+I to ascertain the actual impact of digital, information and e-Commerce solution technologies on women entrepreneurs economic and non-economic indicators. Technical efficiency models will be used to determine the level of and factors affecting technical and market efficiencies, while total factor productivity will be used to measure productivity of Irish women entrepreneurs. The outcome of this study will bring to limelight the impact of Irish government supportive measures on women entrepreneurship for policy recommendations that will ensure inclusiveness and show further directions for future studies.