

ISSUE E19

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# GRADUATE COLLEGE NEWSLETTER

The newsletter for the research student community



# Hidden gems

Taking new challenges, multiplying your skills

# NEWS

**Rising to the challenge** Fourteen Oxford Brookes students presented their postgraduate research projects to a non-specialist audience in just three minutes, gaining valuable skills in the process. They took part in this year's [Three Minute Thesis](#) competition, held on 18 June at Headington Campus and which challenges doctoral students to give a compelling spoken summary of their project - without props or multimedia and using only one static slide.

Maria Brown, Research Degrees Training and Events Coordinator, says: "The Three Minute Thesis competition is a fantastic way for doctoral students to hone their presentation and research communication skills, and to meet and network with students from other subjects. This year's participants were all brilliant, and it was fascinating to hear about research projects from across the University."

Two of the participants talked about their experience of taking part in this competition. Zeena Hicks (competition runner-up) - Professional Doctorate in Coaching and Mentoring says: "I took part in Three Minute Thesis because I love storytelling and wanted to challenge myself to distil my research into a short, concise presentation that engages those from any background or interest. As a researcher-practitioner with ADHD and dyslexia, being succinct is not

a natural strength, and I was keen to embrace discomfort and learn as much as I could from the experience and from watching others present. The competition was just two weeks before I was due to give two short presentations in Brisbane, Australia, so the experience was invaluable in preparing me for that event. The community here is incredible and I feel supported, suitably challenged, and confident that it's the right place for me to grow both academically and personally."

Kamran Zeb - PhD in Literature says: "I participated in the Three Minute Thesis competition a few years ago when it was all online, and as my research has progressed since then and I am nearing the end of my PhD, I thought it would be a good opportunity to revisit it. My research explores ideas of what it means to be human through the lens of depictions of dragons in literature. The Three Minute Thesis has helped me learn how to present my work in a succinct and very different format than I am used to. It has also been beneficial academically to think about my research in these terms - it forces you to focus just on the essentials. You can hear more about my research in a [recent episode of the Brookes Unscripted podcast](#)."

The judges Professor Susan Brooks, Dr Susannah Wright and Dr Sylwia Ciuk did a wonderful job of marking presentations with very little time to spare, just a couple of minutes between presentations. The prize winners for 2025 were: Anneka Fisher (Professional Doctorate in Education) - winner (recorded presentation), Zeena Hicks (Professional Doctorate in Coaching and Mentoring) - runner-up, Amy Poole (MPhil/PhD in Healthcare) - people's choice (shown in photograph) and Ruth Simpson (PhD in Coaching) - who received a special commendation. Join us in June 2026 for the next Three Minute Thesis competition, challenge yourself and test your presentation skills. More information and how to register in the [Three Minute Thesis webpage](#).





# NEWS

## Gaining Valuable Skills



This year, as part of the Research Degrees Placement Programme, Erkin Kurtoglu, a PhD Student from the School of the Built Environment, became the Public Engagement Officer in the Research, Innovation and Enterprise (RIE) Directorate.

Erkin joined the team

for six months, from January to June, supporting a wide range of activities that helped showcase Oxford Brookes' research to a broader audience. From the outset, Erkin brought enthusiasm, creativity, and a strong willingness to step outside of his academic comfort zone.

Erkin's line manager writes *"It was a pleasure to watch him grow in confidence across the placement. He engaged with a wide portfolio of work, including supporting public engagement planning for the Oxford Brookes Science Bazaar, contributing to the Oxford Brookes Unscripted podcast by hosting and editing episodes, and working on a visual impact report to capture key outcomes and lessons learned from our events. The latter is something he rightly said he was most proud of – its design and presentation now form a strong foundation for how we communicate our success with stakeholders and funders"*.

Erkin's background in architecture gave him an excellent eye for design and space, and this shone through when creating maps and signage for the Science Bazaar. This placement also gave him the opportunity to explore animation and video editing for the first time, taking on tasks he initially found challenging and turning them into strengths. His ability to quickly learn new tools, such as Adobe Animate, Premiere Pro and Canva, showed not only adaptability but a commitment to producing high-quality, engaging content.

One of the standout things Erkin took away from the placement was a broader understanding of

what public engagement with research involves. He arrived with a narrower sense of engagement, which was closely tied to interviews and academic outputs. However, through exposure to podcasting, informal conversations, live events, and internal collaboration, he began to see engagement as part of a wider dialogue between research and society. This is something that he noted would directly inform his own ethnographic research, particularly in terms of analysing qualitative data and engaging with participants more confidently in the field. Erkin became an invaluable part of the team and an



appreciative colleague, offering thoughtful reflections, enjoying the team's creative, collaborative environment and finding that simply working in a professional, engagement-focused space made him a more confident communicator. This placement experience highlighted the real benefit of offering roles like this to research students - not just as a form of training, but as a way for them to explore career paths beyond academia while still contributing meaningfully to university life. Erkin says:

***"this placement helped me to consider options within non-profit, social impact, or cultural sectors - roles that value both research skills and public-facing experience"***.

Erkin's manager says *"It was a real pleasure to work with Erkin, and I encourage other teams across Brookes to consider hosting a Research Degrees Placement student if possible. We gained a huge amount from his creativity and input, and I hope he left with tools, confidence and ideas that will continue to support his PhD journey and beyond"*.

# NEWS

## The Impact of Remote Mentoring in Global Health Partnerships

In global healthcare partnerships, mentoring is often seen as the “glue” that holds the partnership together across cultural and language barriers. However, despite its importance, remote mentoring in the context of global health partnerships is rarely given much attention in academic research. It is often mentioned briefly, but only as one of a long list of interventions, and is not explored in depth.

Dr Helen Crawley's PhD research focuses on the central relationships between remote mentors and mentees in global health partnerships, aiming to provide insights and guidance at the interpersonal level. In addition to her PhD, Helen is working with Global Health Partnerships (formerly THET) and Dr Becky Self, a research assistant, to develop new guidance at the organisational level. This guidance will support partnerships in setting up and delivering effective remote mentoring programmes. Although these two pieces of work are focused on healthcare, they could also benefit many other sectors that rely on remote international mentoring.

***"Trustees have told us they wish guidance like ours existed at the start of their careers."***

Traditionally, healthcare training follows an apprenticeship model, where a senior clinician trains a junior one. But in practice, mentor-mentee relationships can be much more complex, especially across different cultures and when working remotely. Helen's work provides much-needed advice to help organisations and individuals understand and support these relationships better.

Helen brings real-world experience to her research, having previously led international projects both as an International Medical Director of the Royal College of General Practitioners and as a volunteer, including remote work with Myanmar healthcare workers during geopolitical upheaval. Through her PhD, she aims to help build a more supportive, sustainable, and globally connected healthcare system.



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From Beats to Harmony: How Our Music Preferences Evolve with Age

Shannon Skeffington &  
Dr Adam Lonsdale

UNSCRIPTED  
PODCAST



## Public Engagement through your Research

A growing number of research students are using media platforms to showcase their research to the community. One example of this, are unscripted podcasts organised by Dr Ellie Beaman Public and Community Engagement Coordinator. This great idea brings together PhD students from across disciplines, talking about their research: from dark tourism to dragons and posthumanism. Some of the students who have engaged are Shannon Skeffington, Simon McFadden,



Into the Macabre: Tracing  
the Echoes of Dark Tourism  
and Fandom  
Simon McFadden

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Erkin Kurtoglu, Kamran Zeb and lately Bernardo de la Vega. If you would like to take this challenge please contact Ellie Beaman [ebeaman@brookes.ac.uk](mailto:ebeaman@brookes.ac.uk)

## Research Degrees Team

You can contact us on:

[rdt-researchdegrees@brookes.ac.uk](mailto:rdt-researchdegrees@brookes.ac.uk)



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# NEWS

## Rethinking Humanity through Myth and Posthumanism They

hoard treasure, breathe fire, and are often destined to be slain. But what if dragons aren't the monsters of legend, but mirrors held up to ourselves?

In the latest episode of [Oxford Brookes Unscripted](#), PhD researcher Kam Zeb invites listeners to see dragons not as beasts to be conquered, but as philosophical companions in our search to understand what it truly means to be human. Their research - fusing literary analysis with posthumanist theory - challenges the centuries-old idea of human exceptionalism through the lens of mid-19th to early 20th century literature.



“Dragons have existed in almost every culture throughout time,” Kam explains. “They may not have biological reality, but their imaginative reality is undeniable - and incredibly powerful.”

Their work spans everything from Norse sagas to Japanese philosophy, Victorian children's stories to modern ecological crises. At its core is a compelling argument: dragons are shape-shifting metaphors that help us question the human-centric worldview we've long inherited. In posthumanist terms, dragons become “prophets of the earth” - figures who collapse the boundaries between nature and culture, machine and body, myth and material.

Take Siegfried, for example, the dragon-slayer of Germanic legend who bathes in his victim's blood and becomes nearly invincible - except for the one spot a leaf touches his back. Or the reluctant dragon of Kenneth Grahame's tale, a poetry-loving creature who wants nothing to do with the violent role he's been cast in. In both stories, Kam sees a deeper narrative: “These are tales about transformation, about refusing the roles tradition gives us - and about reconnecting with something ancient, elemental, and nonhuman.”

At a time when climate change, AI, and mass extinction are forcing urgent rethinks of our place in the world, Kam believes dragons may offer unexpected guidance. Drawing on theories from thinkers like Rosi Braidotti and Tim Winter, they propose that dragons can act as a gateway into new modes of being - ways of living that are less hierarchical, more connected, and rooted in mutual care with the earth.

And it's not just metaphor. Kam references studies into animal communication, Indigenous cosmologies, and early religious philosophies that attribute intelligence, agency, and even spiritual capacity to non-human beings. In this world, dragons become a composite figure - part lizard, part bird, part machine, part divine - who symbolises the complexity of the planet itself.

“We've long used dragons to define the limits of human identity,” they say. “But what happens if we stop slaying them - and start listening to them instead?”

Their answer is as much about ethics as it is about literature. From Victorian anxieties about evolution and empire to today's debates over artificial intelligence, Kam argues that the dragon endures precisely because it refuses to be pinned down. “Dragons are the ultimate shapeshifters. They exist in stories as flexible, fluid beings - just like our own identities could be, if we allowed them to be.”

In an age where the dominant narrative still places humanity at the centre of everything, Kam Zeb's work is a timely reminder: the stories we tell about monsters often say more about ourselves than we realise. And perhaps the first step to imagining a different kind of future is to stop being the hero - and start being the dragon.



# CONGRATULATIONS

Bernardo de la Vega, PhD student at Oxford Brookes Business School was invited to deliver a seminar on his doctoral research at Universität Trier. Insightful discussions took place with the doctoral cohort at Tourismusgeographie Uni Trier on Bernardo's research entitled "Virtual Tourism in the Global South: Digital Tools for Heritage Conveyance and Community Resilience". Bernardo presented preliminary research findings on his field work in Brazil conducted alongside grassroots initiatives, highlighting the need for participatory application and bottom-up research strategies in decolonial settings. Beyond his presentation, Bernardo had the chance to join a field excursion to discuss the tourism and urban planning opportunities for the city, culminating in the long-awaited summer festival of Trier.

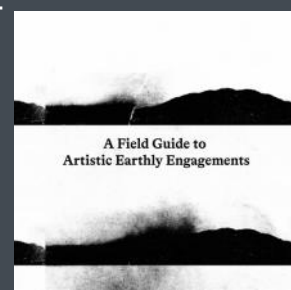


Congratulations to our Research Degrees Students who participated at the Local Policy Lab Fellowship 2025 - an exciting collaboration between Oxfordshire County Council, Oxford Brookes University and University of Oxford. This showcase event was held at the Blavatnik School of Government, University of Oxford, on Thursday 10 July, with some inspiring work presented by all Fellows.

Benjamin Margetts Oxford Brookes PhD student and

Local Policy Lab Fellow 2025 highlights: "The Local Policy Lab provided a fantastic opportunity to apply the research skills that I have developed over the course of my PhD. This was in a context where I could support Oxfordshire residents and make recommendations that will help shape Oxfordshire County Council's policy and strategy regarding Local Area Coordination (LAC). The LPL fellowship has provided me with a good intellectual challenge through the opportunity to engage with a topic that is outside of my usual area of research. I now feel better informed about how policy is developed and the challenges policymakers face in delivering public services. The fellowship has provided networking opportunities across the Universities and the County Council. I would recommend the LPL fellowship to any postgraduate students looking to broaden their research skills and apply them in a context where they can help the local community. The fellowship provides opportunities to work with experts in their fields, and you can make a tangible difference through the research you complete. It is exciting to see research collaborations between Oxfordshire County Council and the two universities emerging, and I hope this can build over time."

Katie Taylor PhD student in Fine Arts exhibited her work at Bridewell Studios and Gallery at 'The Inquiry Room' exhibition as part of the Indy biennial in Liverpool! The exhibition explored what it meant to remain unidentified after death and how art practice can highlight these issues amongst new audiences. Katie also delivered a talk about her human leather project at The Bell in London on the 29 July, while her research will be included in the book 'Soils Turn: A field guide to Artistic Earthly engagements' from @ecoartspace - highlighting the work of approximately thirty distinguished soil artists.



# CONGRATULATIONS



**Supporting apprenticeships** Grace Graham, currently undertaking a Professional Doctorate in Coaching and Mentoring at Oxford Brookes Business School, was invited to present her research design to apprenticeship industry professionals at Newham College on 11 July. Grace's research explores how coaching and mentoring contribute to apprentice achievement, focusing on the relationships between the apprentice, their workplace mentor, and their training provider coach. Her study takes a Constructivist Grounded Theory approach and examines how contracting and re-contracting practices influence trust, expectations, and collaboration in these tripartite *relationships*.

Reflecting on the experience, Grace said: "It was a really encouraging and enjoyable first step in sharing my research beyond the university. The feedback was not only positive but also thought-provoking. One colleague even raised the role of psychology in apprenticeship programmes — something I'm now curious to explore further. The experience also helped me think about how to adapt my presentation for different professional audiences."

Through this research, Grace hopes to contribute not only to improvements in apprenticeship policy and practice, but also to the wider academic understanding of coaching and mentoring in work-based learning contexts.



Leah Griffiths PhD candidate at the School of Biological and Medical Sciences, Dr Melanie Gibbs and Ivy Ng'iru spent the day chatting with visitors about research into farmland biodiversity and pesticide risks at RSPB Hope Farm Open Day Farm one Sunday in June. More than 60 visitors successfully identified moth caterpillars found in the farm using a paper-based DNA barcoding. The research at Hope Farm is one part of work for the EU-funded SYBERAC project, which aims to improve how we assess the risks of chemicals in the

environment and the planning and management of landscape protection measures.

**Keeping the momentum** Sajad Nafaji PhD student at the School of Engineering, Computing and Mathematics was awarded best poster presentation at the 2025 Oxford Brookes Postgraduate Research Symposium and then in July he presented his research on Digital Twin-Based Prediction of Battery System Predictions at the 2025 Oxford Battery Modelling Symposium (OBMS) held at the University of Oxford.



**Recognition** Aasia Rajpoot received two significant awards at the 2025 RCN International Nursing Research Conference. Her abstract, "*Exploring the experiences of internationally educated nurses who are working in England: An appreciative inquiry*" received the Best Student Abstract Award. This recognition highlights the importance of amplifying the voices of internationally educated nurses. Aasia was also selected for the Early Career Researcher opportunity, which includes a role on the Scientific Planning Committee, acknowledging her commitment to advancing nursing research. These achievements mark important milestones in her doctoral journey at Oxford Brookes University and provide valuable opportunities for collaboration within an international community of researchers.



# Past Social and Networking Events

The last two social networking events this academic year were great. In May a guided visit to the Oxford Botanical garden with the wonderful Dr Andrew Lack, and in July a guided tour to the Mini plant enjoyed by 11 students despite having some timing challenges. Happy faces all over, join us next year, bookings are now available at the [graduate college social and networking events](#) page.



## Students & Alumni latest publications

**de La Vega, B.** and Moraes, C.M. dos S. (2025) “Viajando sem passaporte, sem passagem de avião e sem bagagem,” *Caderno Virtual de Turismo*, 25(2), pp. 98–123.

**Bekaert, S., Duman, M** and Cook, G. (2025) “The effectiveness of UK-based interventions to reduce school exclusion. A systematic review. *Children and Youth Services Review*, Volume 178.

**Oliveira de Almeida, J.**, Lugosi, P., and Quinton, S. (2025) “Child viewers’ engagement with social media influencers: exercising socialisation-driven agency. *Journal of Business Research*, Vol 200.

**Hassan, N. R. A.**, and Reeve, A. (2025) “Rethinking Liveable Heritage: From the Experts’ Perspectives”. *Malaysia Architectural Journal*, 7(6), pp. 129–145.

**Wilde, N.**, Foxcroft, D. and Davies, E. (2025) “Exploring mental health literacy and help-seeking behaviours at university—a survey of UK undergraduate students considering the COM-B model. *Journal of Further and Higher Education*, 1-16.

Jones, A.K., Song, Z., Huang, Q., Mao, X., Jia, Z., Jiang, J., **Dandu, T** and Zhao, C. (2025) “The cys-loop ligand-gated ion channel gene superfamilies of the Lepidopteran species, *Bombyx mori* and *Chilo suppressalis*. *Insect Biochemistry and Molecular Biology*, 182.

**Wilde, N.**, Foxcroft, D., & Davies, E. (2025). Feasibility and acceptability of CoMUni: a social media-based intervention to increase mental health help seeking in UK undergraduate students. *Advances in Mental Health*, 1–22.

**Michie, C., Free, H.**, Nijman, V., and Kanda, RK. (2025) A novel endogenous retrovirus in slow lorises (*Nycticebus*) and its role in species identification, *Virology*, Volume 610.

**Wright, B.H.**, Jones, P.G.W., Antrobus, M.R., and Baross, A.W. (2025) Validation of a novel multi-exercise approach to isometric resistance training in normotensive adults. *European Journal of Applied Physiology*.

**Priyadarshi, A.**, Kaur, A., Khavari, M., Morton, J.A., Tyurnina, A.V., Ghorbani, M., Prentice, P., Mi, J., Pericleous, K., Lee, P.D., Eskin, D.G., Tzanakis, I. (2025) Role of shock waves in materials processing: Fundamentals and Applications. *Ultrasonics Sonochemistry*, Volume 120.



# RESEARCH STUDENT PROFILES



**Doaa Muhammad**

School of Architecture

**Thesis title:** Effect of Cultural Identity on Preference of Urban Parks: Case Study Greater Cairo, Egypt

My PhD research explores how cultural identity influences people's preferences for and engagement with urban parks in Greater Cairo. Urban parks are vital in densely populated cities—not only for offering access to nature, but also for fostering social interaction, psychological well-being, and a sense of belonging. However, in Greater Cairo's compact core, the advantages of these green spaces are often limited—not just due to their scarcity, but also because many existing parks are underused or fail to attract users.

This research begins with a simple but important question: Why are some parks in Greater Cairo not used or visited regularly, despite their availability? While much of the existing discussion around urban green spaces in Egypt focuses on low green space per capita, there has been less attention on how these spaces are actually experienced, and why certain parks are embraced while others are overlooked—even when they are accessible.

My study proposes that cultural identity plays a central role in shaping how individuals perceive and use urban parks. Cultural identity can influence a person's preferences and emotional connection to a place. It acts as a cognitive filter through which people interpret and engage with the landscape.

To explore this relationship, I am conducting a sensory ethnographic study that combines direct field observation, in-depth semi-structured interviews, digital content analysis (Netnography), and historical research. This multi-method approach allows me to understand both users' lived experiences and to build a clearer picture of how cultural identity—both of people and of place—shapes the ways in which parks are used, avoided, or preferred.

In addition to addressing a thematic gap—the under-researched role of cultural identity in shaping human-environment interaction—this study also responds to a geographical gap in landscape research. Much of the global literature on landscape preference has focused on Western cities. Greater Cairo, like many cities in the Global South, has its own historical, cultural, and social context that needs to be understood on its own terms. By focusing on Greater Cairo, this research helps bring forward knowledge from a part of the world that has been underrepresented in international studies on landscape preference and public green space use.

This research builds on my long-standing academic interest in improving the quality of life in Egyptian cities through green space design. My doctoral work refines this focus, with a stronger emphasis on the cultural dimensions of public green spaces.

My future plans involve continuing in academia and becoming part of a research lab that prioritizes user-focused urban landscape studies. I hope to be a part of a meaningful network of researchers and professionals who work towards designing landscapes that reflect and support community needs.

**Cultural identity can influence a person's preferences and emotional connection to a place.**

# RESEARCH STUDENT PROFILES



**Erkin Kurtoglu**

School of the Built Environment

**Thesis title:** Saving Artist Communities: An Existential Struggle in the Post-Industrial City.

My research addresses a persistent gentrification cycle that repeatedly targets and displaces artists in post-industrial districts. In cities such as New York and London, artists often settle in neglected, affordable post-industrial areas, transforming vacant factories and warehouses into spaces for living and creating art through practical and innovative methods. Their efforts revitalise these areas, enhancing their vibrancy and appeal. This, in turn, attracts property developers eager to capitalise on the area's artistic identity by marketing it to higher-income, high-culture professionals – a process popularised through Richard Florida's notion of the 'creative class.' As a result, the very artists who reclaimed these spaces are eventually priced out by rising rents, forcing them to relocate to yet another affordable district, only to face the same cycle again. For convenience, I refer to this

repeating pattern as the 'Artists' Feedback Loop'.

The existing literature largely addresses this loop through top-down frameworks designed to guide stakeholders, such as developers and local councils. While these approaches are valuable, their effectiveness remains limited, as developers are often under no strict obligation to follow such guidelines, resulting in inconsistent implementation. By contrast, there is a clear opportunity to develop a grassroots framework rooted in pragmatic, artist-led, and activist strategies for resisting gentrification in post-industrial districts. At its core, this opportunity highlights a deeper gap in the literature: the relational dynamics among stakeholders, particularly in the context of post-industrial urban regeneration, remain underexplored.

In exploring these relationship dynamics, I propose that the Artists' Feedback Loop can be disrupted through mutualism – both within artistic communities and between artists and other stakeholders, such as non-artist residents and local councils. These mutually-beneficial relationships may offer an effective grassroots strategy to resist displacement and preserve the cultural fabric of post-industrial districts, providing a more balanced and transferable alternative to market-driven urban regeneration.

Being a research student presents an interesting paradox for me. I both love and struggle with the independent study approach – the very aspect that sets a research degree apart from a standard taught course. I love the flexibility it offers: the freedom to carve my own path, make my own decisions, and take full control of my progress. But at times, this same independence can be challenging.

My primary goal has always been to stay in academia. I view a postdoctoral opportunity as the most likely next step, enabling me to deepen my research in urban sociology before ultimately securing a permanent role in research, teaching, or a combination of both. I have also come to realise that there may be meaningful opportunities beyond academia. Given that my research engages directly with sociological issues and activism, it is equipping me with experience that aligns closely with the work of many non-profit and community-based organisations.

**I have also come to realise that there may be meaningful opportunities beyond academia.....**



# RESEARCH STUDENT PROFILES



**Muhammad Shahzad**

School of the Built  
Environment

**Thesis title:** Visualisation of Digital Twin Real-Time Sensor Data for the Operation and Maintenance of Buildings.

This research project explores the integration of Digital Twin (DT) and Mixed Reality (MR) technologies to improve how real-time sensor data is visualised and used in the operation and maintenance of buildings. The aim is to develop an interactive, immersive framework that allows building performance data, such as temperature, humidity, and air quality, to be understood more easily and acted upon more efficiently by facility managers and stakeholders.

The operation and maintenance phase of a building's lifecycle is the most resource-intensive, accounting for up to 80% of total costs. Yet, traditional methods for managing building systems often rely on manual processes and static tools like dashboards and charts. These methods can make it difficult for non-technical users to interpret and respond to issues in a timely manner. While Digital Twins offer real-time virtual representations of buildings using IoT sensor data, the visualisation of this data has not advanced enough to match the potential of the technology.

This research proposes that by incorporating MR into DT frameworks, data can be presented in more intuitive and interactive ways. Mixed Reality enables users to enter a virtual version of a building and experience live sensor data in three dimensions. For instance, visual cues like colour-coded particles or animated overlays can indicate temperature levels or air quality in specific areas, helping users identify problems quickly and understand conditions spatially.

The project includes the creation of a digital twin for a real university building, equipped with live IoT sensors. Using platforms such as Unity or Unreal Engine, the virtual model will display real-time data using advanced 3D visualisation techniques. These include the use of 3D metaphors, visual representations of abstract data, designed to improve comprehension and usability for a range of users, not just technical professionals.

The research follows a design science methodology, combining conceptual development, system implementation, and iterative user testing. Facility managers and industry professionals will provide feedback during the validation phase to refine the framework. The goal is to produce both a functional system and practical guidelines for applying MR-enabled Digital Twins in building maintenance settings.

By enhancing the way data is presented and understood, this work supports smarter, more sustainable building management. It enables quicker responses to maintenance issues, improves communication among stakeholders, and advances the broader digital transformation of the built environment. The research contributes to the growing body of knowledge in smart buildings, immersive technologies, and data-driven decision-making.

**The operation and maintenance phase of a building's lifecycle is the most resource-intensive....**

# RESEARCH STUDENT PROFILES



**Sajad Najafi**

School of Engineering,  
Computing & Mathematics

**Thesis title:** Digital Twins for Solar-Battery Systems: An In-Operando Optimisation

Digital Twin technology is revolutionising how we monitor and manage complex engineering systems. Simply put, a Digital Twin is a virtual replica of a physical device or system that runs in real time alongside its physical counterpart. This allows for continuous monitoring, performance prediction, and optimised control without the need for costly or invasive physical interventions.

In the battery industry, Digital Twins are increasingly vital due to the rapid growth of renewable energy systems. The UK's solar and battery storage capacity is expected to reach up to 40 gigawatts by 2030. Efficiently managing these systems is essential to maximise their performance, extend their lifespan, and reduce operating costs.

One of the challenges in advancing battery technology is implementing smart control strategies that adapt to real-world conditions. These strategies rely heavily on accurate prediction of battery states, such as State of Charge (SoC) and State of Health (SoH), which can be difficult due to the complex and nonlinear nature of battery behaviour. The solution lies in combining large datasets gathered from real-time monitoring with machine learning techniques to create models that can accurately predict battery performance and degradation.

This research project is a collaboration between the Centre for Batteries, Electric Vehicles and Electronics (CBEVE) and the Architectural Engineering Research Group to develop an innovative Digital Twin framework for solar-battery systems. The goal is to optimise load profiles and minimise energy costs by integrating cloud-based data storage, advanced modelling, and smart control algorithms.

The project has two key phases:

First, detailed battery data such as voltage, current, and temperature are collected from battery systems on the NHHB campus. This real-world data, combined with laboratory datasets, supports the development of hybrid models that integrate physical knowledge with data-driven machine learning approaches.

In the second phase, these models will be integrated into a Digital Twin ecosystem operating in parallel with the physical battery system. The system will continuously update its predictions using live data, enabling intelligent control strategies that adapt to battery degradation and usage patterns. This adaptive approach aims to improve battery health predictions, enhance efficiency, extend battery lifespan, and reduce operational costs.

This research not only advances the scientific understanding of battery management but also supports the practical application of sustainable energy technologies in real-world settings. By creating intelligent, adaptive battery systems, Oxford Brookes University is contributing to the future of renewable energy integration and smart infrastructure.

**The goal is to optimise load profiles and minimise energy costs by integrating cloud-based data storage, advanced modelling, and smart control algorithms.**



# Graduate College Training Programme

Research student training sessions to look out for the academic year 2025-2026

## Sessions in Semester 1 - 2025

- Finding information for your research
- Research ethics process for PhD students
- Introduction to Knowledge Exchange
- AI and Research - Everything you need to know
- Top ten tips for making the most of your Research Degree
- An Introduction to impact
- How to make a preposterously pathetic poster
- Using AI for your literature review
- Commercialising an Idea, StartUps & Spin-Outs
- An Introduction to Public and Community Engagement with Research
- EDI Best Practice in Research Engagement
- An Introduction to Intellectual Property
- Endnote Training - Managing information overload
- Effectively Managing the Stresses and Challenges of a Doctoral Student
- An Introduction to Commercialisation of Research
- How to give a truly terrible talk
- Applying a Gender Dimension in Research
- Time Management for Researchers
- Tackling the writing up stage of the research degree
- Engagement Tools: Pitching your Research

## Sessions in Semester 2 - 2026

- An Introduction to Building Engagement with Business
- Researcher Career Pathways Event
- Personal branding for academics
- Academic Blogging - Raising the Profile of your Research
- Growing Funding Income: Consultancy
- Keeping up to date with your research
- Growing Funding Income: Contract Research
- Research ethics process for PhD students
- Growing Funding Income: Knowledge Transfer Partnerships (KTPs)
- Growing Funding Income: Continuing Professional Development (CPD) and Continuing Education (CE)
- Imposter syndrome or How to Feel Better About Feeling Worse
- Tools for Impact Evidence Collection
- Tools for Evaluating Public Engagement activities
- How to get the most out of conferences
- What can Open Research do for you?
- Managing your supervisor and building a good working relationship with your supervisory team
- Engagement Tools: Optimising Engagement through Social Media
- Endnote training - Managing information overload
- Strategies for successful networking
- Engagement Tools: Infographics, Podcasts and Working with the Media
- Research degrees – strategies for successful part-time study

All these sessions can now be booked in the graduate [college training page](#).

# CONGRATULATIONS

To all our research students on the successful outcome of their vivas and conferment of their degrees and awards for the period September 2024 - August 2025.

## Oxford Brookes Business School

### Doctor of Philosophy

#### Abdelrahman Abudirbala

'The Determinants of Climate Change Risk Practice and Disclosure: An Analysis of Institutional Investors in the UK Using a Mixed Method Approach'

#### Vitalie Bumacov

'Joint use of poverty scoring and credit scoring: advantages and limitations of a new technique for socially oriented and sustainability-minded microfinance institutions'

#### Timothy Hughes

'Refugee labour market transition and the role of third sector practitioners'

#### Wachuku Johnson

'An Empirical Analysis of the Effect of the Corporate Governance Framework on UK Banks' Performance: 2007-2021'

#### Reginald Kadzutu

'The Interplay between Exchange Rate Regimes and Asset Prices: A Comprehensive Investigation'

#### Allison Oliveira de Almeida

'Online Engagement Among Child Consumers of Children-Produced Youtube Content'

#### Masrura Ram Idjal

'The influence of decentralisation on tourism development in decentralised rural communities'

#### Ruth Simpson

'Group Coaching for Leaders in Transition to Senior Leadership Positions'

#### Geeta Sinha

'Mining led industrialisation and gender-based violence amongst indigenous communities in Odisha, India'

#### Hannah Tornow

'A multi-level analysis of gender-inclusive innovation in Oxfordshire'

#### Stephen Workman

'A Pythian Exploration of the Corporate Social Responsibility/ Sustainability Reporting Requirements of Millennial Leaders'

### Doctor of Coaching and Mentoring

#### Andrew Bird

'The roles that coaching and mentoring play in addressing the leadership challenges of charity CEOs'

#### Lesley Brodie

'Exploring the perceived impact team coaching has on a team's ability to be mindful'

#### John Fox

'How do team members and team coaches perceive their sessions to be productive, and what influences perceptions of the most and least productive parts of their coaching sessions?'

#### Nelia Koroleva

'Coaching support for leadership identity work among senior leaders: expert coaches' perspectives'

## School of Arts

### Doctor of Philosophy

#### Laurence Colbert

'Experiential Encounters with Architecture and Sound: The Use of Styli in Urban Field Recording, and Lefebvre's Rhythmanalysis'

## School of Education, Humanities and Languages

### Doctor of Philosophy

#### Maira Bakenova

'Your Self Again: Clones, Originals, and True Selves of Science Fiction'

#### Sally Howard

'A Cross-Phase Exploration of 'Inquiry' Based Science: Primary and Secondary Teachers' Conceptions and Practice Augment-



ed by Pupil Perspectives and Research Observation of Their Decision-Making Experience’

### **Rosella Miles**

‘The Saga of a Whole People’: Louis Golding’s rendering of Twentieth-Century Ashkenazi Jewish Experience in the Doomington novels 1920-1954’

### **Joanna Skelton**

‘How can translanguaging be used to support the development of conceptual understanding of division with 8-9 year-old learners in an English-French bilingual education context?’

### **Adam Tate**

‘Being a ‘model’ student: the impact of affective influences on full-time undergraduate student behaviours and practices in the current Higher Education context in England’

### **Doctor of Education**

### **Anneka Fisher**

‘Motivations to attend school: Exploring the perspectives of primary school children’

### **Hossein Sadeghi-Movahed**

‘Behind the Curtain: An examination of dyslexic students’ responses to feedback on their written summative assignments’

### **PhD by Published Work**

### **Ben Walker**

‘How can approached to personal tutoring in higher educa-

tion be enhanced by action research? Developing and disseminating a framework of professional development’

### **MA by Research**

### **Devin King**

‘The Letters of Ronald Johnson and Jonathan Williams, edited with a biographical and critical introduction, by Devin King’

### **School of Law and Social Sciences**

### **Doctor of Philosophy**

### **Grace Foreman**

‘The dynamics of the online wildlife trade in mammalian species on Instagram and Facebook in Indonesia’

### **Benjamin Klinkenberg**

‘Conflicts surrounding the establishment of wild boar (*Sus scrofa*) in the Forest of Dean, UK’

### **Sophie Manson**

‘Quantifying the value of wildlife and wildlife-friendly farming for coffee agriculture’

### **Carl Mohr**

‘Through the Looking Glass: Evaluating Chinese Influence in Kazakhstan and Kyrgyzstan in the Age of the Belt and Road Initiative’

### **Miranda Strubel**

‘Shared Landscapes: Exploring the Relationship between People and Red Kites in the

UK’

### **Michael Wenborn**

‘Local ecological knowledge on the population dynamics of elephants (*Loxodonta Africana*) in the Highlands of Northwest Namibia’

### **Master of Philosophy**

### **Fabiana Ciccarella**

‘The interplay between online hate speech and intermediary liability in EU and UK law’

### **Terence Patrick McDonald**

‘The Manx Bar - The History and Development of a Unique Legal Profession (Barr Vannin - Shennagha as Aase Lught y Leigh - Er – Iheh

### **MA by Research**

### **Tara Ferguson**

‘Investigation of the Presentation of Ainu Identity in British Museums and Exhibitions’

### **Madeline Hawkins**

‘The Pursuit of Happiness: Using Hellenistic and Romantic Foundations to Demedicalise and Demystify Modern Therapeutic Approaches Regarding Depression’

### **School of Medical and Biological Sciences**

### **Doctor of Philosophy**

### **Molly-Anne Hair**

‘Flagellum assembly in protozoan parasites’

**Amber Harper**

'Head and protocerebral patterning in the spider *Parasteatoda tepidariorum*'

**Joanna Cull**

'Investigations into the Functional Significance and Plasticity of O-linked Glycosylation'

**Rebecca Whitla**

'Using Museomics to Investigate Extinction and Decline in British Butterflies'

**Master of Science (Research)**

**Bethy Airstone**

'The role of cancer cell and extracellular vesicle surface proteins and their role in cancer metastasis development'

**Grace Duffy**

'The role of transition fibre proteins in regulating CEP164C assembly and localisation to the flagellum in the African Sleeping Sickness parasite *Trypanosoma brucei*'

**David Hotwagner**

'Are Post-Transcriptional RNA Modification Events in the Glutamate-Gated and GABA-Gated Chloride Channels of *Anopheles minimus* and *Anopheles dirus* associated with Ivermectin Insensitivity?'

**Kate Murray**

'Developing a new efficient CRISPR-Cas9 base Homology Directed Repair oriented gene editing plasmid for *Streptomyces*'

**School of Sport, Nutrition and Allied Health Professions**

**Doctor of Philosophy**

**Bonita Corrie-Lunn**

'Antisemitism in British Football: Examining Good Practice in Anti-discrimination Educational Initiatives'

**Helene Eisenhut**

'Developing volunteering as an intervention for social isolation in those with long-term neurological conditions'

**Connor Humphries**

'Anderson's Model of Homohysteria: A Cohort Analysis of Two Generations of Athletes and Employees'

**Foivos Papastaikoudis**

'Challenge and Trauma on the Talent Development Pathway'

**Robyn Stiger**

'Cancer prehabilitation: Developing a complex intervention for patients undergoing upper gastrointestinal surgery'

**MA by Research**

**Harriet Little**

'Why do Channel 4 and the BBC portray disability and disability sport differently? Analysing the production processes and audience reception of mediated sport'

**Aafreen Zamaan**

'Examining the Culture of British South Asians and its impact on sports participation'

**MSc by Research**

**Alexandra Spurr**

'The Effects of Photobiomodulations (PBM) on Recovery: A 10-week trial comparing duration of DOMS before and after the use of PBM with the use of BIODEX'

**Oxford School of Nursing and Midwifery**

**Doctor of Philosophy**

**Hilary Brown**

'OPTIMISTIC: Optimising care and support for people with inoperable pancreatic cancer and their family carers'

**Julie Cooke**

'Academic nurse educators' experiences and perceptions of supporting adult nursing students in clinical placements in nursing homes. An interpretative phenomenological analysis'

**Melanie Diggle**

'Bereaved Caregivers' Experiences of End-of-Life Care for People with Heart Failure: An Interpretative Phenomenological Analysis'

**Sara Matthews**

'Interpretations of patients' and informal caregivers' psychosocial experiences and needs for support following oropharyngeal cancer (chemo) radiotherapy'

**Georgia Young**

'Understanding the experiences of caregivers for patients with Chronic Traumatic Encephalopathy'

## **MSc Nursing Research**

### **Victoria Betteridge**

'To what extent is wound care perceived to be a fundamental of nursing care? A sequential exploratory mixed methods collective case study'

## **School of Psychology, Social Work and Public Health**

### **Doctor of Philosophy**

#### **Julie Bennett**

'Nostalgia and wellbeing in autistic and non-autistic young adults'

#### **Fiona Matley**

'Reducing Consumption Levels of Alcohol in Midlife (ReCLAIM): The development and testing of a theory and evidence-based online intervention targeting automatic processes'

#### **Natalie Wilde**

'The feasibility of CoMUni: a co-developed intervention to increase mental health help-seeking intentions in UK undergraduate students'

## **School of Architecture**

### **Doctor of Philosophy**

#### **Farhad Salek**

'Techno-economic modelling and optimization of second life battery packs, with a particular focus on accommodating inhomogeneities and module-to-module variations'

#### **Orit Sarfatti**

'Communal Child Rearing in

Kibbutz Beit Alpha 1920-1940: A Case Study Approach to the Study of the Relations between the Built Environment and Ideologies'

## **School of Engineering, Computing and Mathematics**

### **Doctor of Philosophy**

#### **Adriano Goncalves**

##### **Schommer**

'Power Estimation for High-Performance Lithium-Ion Batteries'

#### **Edward Hopkins**

'CFD Modelling of Down-Sized GDI Engines: Fuel Injection, In-Cylinder Phenomena and Correlation to Engine-Out PN Emissions'

#### **Mashaël Kamran**

'Investigating Environmentally Sustainable Pathways for Passenger Vehicle Fleet in the UK'

#### **Alla Kitov**

'AR you trained yet? Evaluating multidimensional spatial interfaces in training environments'

#### **Shireen Kudukkil Manchingal**

'Epistemic Deep Learning: Enabling Machine Learning Models to 'Know When They Do Not Know''

#### **David Onstenk**

'First Principles Development of the Efficiency Limits of Roto-Compound Engines'

#### **Ozdemir Ozerem**

'A Thermomechanical Motor-sport Tyre Model Applicable for

Real-Time Driver-in-the-Loop Simulations'

## **Master of Philosophy**

### **Caitlin Lukow**

'Effect of Stack Pressure on High Performance Lithium-Ion Batteries'

## **MSc by Research**

### **Muhammad Imran Herman**

'k-Label Dependent Evolutionary Distance Weighting for Software Defect Prediction'

### **Rasoul Mirghafari**

'Image-based Quantification and Coupled PNM-FEM of Architecture, Deformation, and Fluid Dynamics in Biological Porous Media Under Mechanical Loading'

## **School of the Built Environment**

### **Doctor of Philosophy**

#### **Bin Mahat Noorsaidi**

'Determinants of Green Construction Adoption in the Malaysian Housebuilding Industry'

#### **Longwei Chen**

'Urban Street Design of Mid-size Chinese Cities: The Case of Lishui'

#### **Sheila Isabel Irigoyen Zozaya**

'Defining and restoring the cultural landscape and place-identity of historic cities; the case of Merida, Yucatan, Mexico'



## .....and more

### Research Degrees Placement Opportunities 1-3 months placement

opportunities for Research Degrees Students.

You will:

- Gain direct experience within industry and or other organisations - even outside of your discipline.
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- Engage with different audiences and interact with external stakeholders.

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### Upcoming Events (book online in our events and networking [page](#))

- Monday and Saturday writing retreats throughout the year.
- Oxford City Guided Tour, Wednesday 15 October 2025, 3pm
- Oxford Ghost Tour, Monday 3 November 2025 at 6.30pm
- Ashmolean Museum Highlights, Monday 26 January 2026, 3pm
- Behind doors at the Oxford Natural History Museum, Wednesday 11 February 2026, 1:30pm
- Bodleian Library printing press, Wednesday 18 March 2026, 2pm
- Annual Research Student Exhibition, Tuesday 14 April 2026, The Forum, 10am to 4.30pm
- Oxford Botanical Garden Guided visit, Wednesday 13 May 2026, 3pm
- Three Minute Thesis Competition, 3 June 2026, 11am at JHB 301
- Oxford Mini Plant tour, July 2026 day and time to be confirmed later in the year.

### Discover more with

### Public Engagement with Research (PER)

The **Public Engagement with Research (PER) Team** is part of the **Directorate of Research, Innovation and Enterprise (RIE)** at Oxford Brookes University. We are pleased to share that we have recently updated our social media strategy, with a renewed focus on enhancing our presence on Instagram - an area that has previously received less attention. As part of this effort, we will be reaching out to postgraduate research students and actively showcasing the PGR experience at Oxford Brookes through a series of posts, reels, and stories. **Follow us on Instagram (@obuengagement)**. We also have a very active LinkedIn page and X (formerly Twitter).



Follow us on



If you would like to be featured or get involved in shaping our refreshed social media presence, we invite you to **get in touch with us**.

**Public Engagement Team** [publicengagement@brookes.ac.uk](mailto:publicengagement@brookes.ac.uk)