

RESEARCH

Spring 2025

@worc



UNIVERSITY of
WORCESTER

WELCOME

I would like to welcome you to another edition of Research@Worc. Throughout this edition, we feature stories that highlight the real-world applications of our research, demonstrating its current and potential socio-economic, environmental and health impacts, nationally and globally. Translational and applied research is fundamental to our research strategy and our wider institutional mission to deliver public benefit.

Our feature story focuses on the work of our Molecular Plant and Microbial Sciences Research Unit to develop sustainable solutions to crop protection which will have environmental benefits by reducing the need for chemical pesticide use, deliver economic benefits for breeders and growers through enhanced productivity, and ultimately enhance global food security. Elsewhere in this issue, we see different environmental impacts emerging from the work of Dr Daniel Farrelly, a psychologist whose recent work has focused on understanding environmental behaviours.

In this issue, we also find out how our Biomedical Research Group has discovered a link between blood markers which predict heart disease and electrical functions in the heart as measured through an electrocardiogram (ECG). This research could mean that ECGs will replace comparatively costly blood tests as a clinical tool for predicting future cardiovascular risk, potentially reducing NHS costs and improving health outcomes.

Dr Muibul Haq's research on microbusinesses, particularly among ethnic minorities, highlights the value of these businesses to the UK economy and its culture but demonstrates the multiple challenges such businesses face in accessing funding and other support. His research points the way to how government and the business community can help these businesses to thrive with all the further socio-economic benefits that will follow.

Professor John-Paul Wilson
Pro Vice Chancellor Research



2 Welcome

Research and Knowledge Exchange News

- 3 In brief
- 3 Funding highlights

7 Doctoral School

Spotlight

- 10 Research Centres, Groups and Units
- 10 Postgraduate Research Students
- 10 Research Staff

19 Main Stories

A closer look at a number of the current projects being undertaken at the university.

24 Recent Publications

Publication highlights from the last 6 months.

Impact

- 33 Insight into one of the University projects utilising research impact through the RIDAP scheme.

35 Communicating our Research

Some of the recent public and community engagement highlights.

REVOLUTIONARY APP FOR PARENTS OF BABIES WITH HEART CONDITIONS

Life-saving support for babies with complex heart disease will soon be available at the touch of a button, thanks to the development of a new monitoring and reporting app for parents.

The project is co-led by **Dr Chris Bowers**, Principal Lecturer in Computing at the University of Worcester, and Birmingham City University's Kerry Gaskin, the UK's first Professor of Congenital Cardiac Nursing.

The Congenital Heart Assessment Tool mobile app – known as CHAT2MA – will revolutionise home monitoring by empowering parents to track, spot, and report early warning signs. They will be able to use the app to share live updates and upload photos, allowing them to access immediate help from their cardiac team.

Development of the app builds on the success of the paper-based CHAT diary, developed in 2012 with the support of families of babies undergoing specialist care at Birmingham Children's Hospital's Cardiology Service and the charity Little Hearts Matter with parent representatives.

Funded by an NIHR i4i FAST grant, the prototype CHAT2MA app was co-developed by Professor Gaskin and Dr Chris Bowers in 2022, in collaboration with Professor Jo Wray (Great Ormond Street Hospital), Dr Anna Seale and Dr Tristan Ramcharan (Birmingham Women's and Children's Hospital), and Suzie Hutchinson (Little Hearts Matter).

The BBC featured details of this [project](#) online in February.

The app is undergoing development and testing ahead of launch in 2026-27.

FILMS TO ADDRESS MENTAL HEALTH CRISIS IN GYPSY, ROMA, AND TRAVELLER COMMUNITIES

The films, released by the NHS Race and Health Observatory, contain candid testimonies from some of the 600,000 members of the community and highlight significant health inequalities.

The suicide rates within these communities are estimated to be up to seven times higher than all other communities.

In 2022, the University collaborated with the Observatory to explore how mental health services are engaging with Gypsy, Roma, and Traveller communities. Subsequently, the report 'Inequalities in Mental Health Care for Gypsy, Roma and Traveller Communities: Identifying Best Practice' was published in 2023.

Dr Peter Unwin, Principal Lecturer in Social Work at the University, led on the research. He said: *"It's very encouraging that this report has led to the videos and hasn't just sat on the shelf. I hope key policy makers take note of them, because they're hard hitting."*



ILLUSTRATOR ON INTERNATIONAL JUDGING PANEL

Tobias Hickey, Senior Lecturer and Course Leader for Illustration, was invited to judge the Bologna Children's Book Fair (BCBF), a world leading trade fair for the children's publishing industry held in Italy. The fair is both a celebration of picture book publishing and an industry leading event.

He sat on the international jury for selecting winning non-fiction books that respond to the United Nations' SDGs (Sustainable Development Goals). This is in line with some of the research he has done focusing on art to Explore environmental issues and in particular ocean literacy through the recent Sea Change project.

HISTORIAN FEATURED IN REPORT OF THE ARCHBISHOPS' COMMISSION FOR RACIAL JUSTICE

Dr Alice Kinghorn, Lecturer in History, was featured in the [Final Report of the Archbishops' Commission for Racial Justice](#), published in December 2024. Following three years extensive interrogation and questioning of the Church of England's willingness to embed racial justice in its structures and the practice of its ministry, the report highlights that a consensus about the need for change is not yet fully in place, and a strategy for bringing about change has not yet been adopted at all the front lines of the Church.

Dr Kinghorn's research was highlighted through her involvement with the Diocese of Truro's [podcast series](#) where she spoke about her work exploring the Church of England's involvement in the transatlantic slavery trade through the work of missionaries.



IHR APPOINTMENT

Neil Fleming, Professor of Modern History, has been appointed to the Advisory Council of the Institute of Historical Research (IHR) at the School of Advanced Study, University of London.

The IHR was established more than a century ago as the UK's national centre for history and plays a crucial role in not only training historians but also producing and facilitating innovative historical research.

Professor Fleming will now be part of a small and vital group on the IHR's Advisory Council shaping its future direction.

HOW POLICING AND AI MAKE BRITAIN SAFE FOR DEMOCRACY AND THE RULE OF LAW

On the 26th March, the University's Constitutions, Rights and Justice Research Group held their annual lecture, entitled 'How policing and artificial intelligence make Britain safe for democracy and the rule of law'.

Held in the School of Law, at the Jenny Lind Building on City Campus, the lecture was delivered by Professor Lawrence Sherman, the CEO of Benchmark

Cambridge, a global police reform organisation. Professor Sherman also served as Chief Scientific Officer of the Metropolitan Police Service (London) from 2022 to 2024.



INCLUSION IN HIGHER EDUCATION ONLINE MODULE

An output from the British Council funded project '*Strengthening Inclusion in Higher Education in Indonesia and the UK*' involved development of a free online professional development course for HE practitioners.

The modules, which can take about 4-6 hours to complete, were co-created by disabled students in both jurisdictions. Interactive content on the course provides insights into how practitioners can incorporate anticipatory inclusive design, that is mindful of learner diversities, in the formation and teaching of their disciplines.

To date, over 240 colleagues from universities and further education colleagues from across Australia, Belgium, Brazil, Indonesia, the UK, Iceland, Ireland, and the US have accessed the resources. According to **Seán Bracken** who is the principal investigator, 'The enthusiasm with which these resources have landed illustrates an appreciation that colleagues across the globe have for high quality professional enhancement in the field of inclusion and universal design'. The resources, which can be accessed on the INCLUDE website, were prepared by **Dr Emma Richardson** from the Institute of Sports and Science, along with **Helen Wilson**, who is a UW PhD student and Research Assistant on the project.

APPOINTMENT TO CSC

Dr Wendy Toon, Senior Lecturer in American History has been appointed as an Academic Adviser to the Commonwealth Scholarship Commission (CSC) in the UK. CSC Academic Advisers play a critical role in the selection of Commonwealth Scholars and Fellows.

FUNDING HIGHLIGHTS

STABILIZING CROP YIELD UNDER UNFAVOURABLE CONDITIONS BY MOLECULAR PRIM(E)ING

EPSRC

Principal Investigator: Prof. Mahmut Tor, School of Science and the Environment

Research Group/Unit: Molecular Plant and Microbial Biosciences Research Unit

[*CropPrime*](#) is a collaborative research programme under the Marie Skłodowska-Curie Actions (MSCA) Staff Exchange scheme, bringing together leading academic and industrial partners across Europe and beyond. The project aims to develop innovative, environmentally sustainable strategies to enhance crop resilience against abiotic and biotic stresses using biostimulants and RNA-based technologies.

The programme focuses on four main objectives:

1. **Discovery of Novel Biostimulants** – Identification and characterization of plant-derived and microbial extracts, including those from *Phytophthora* species and *Rosmarinus officinalis*, to improve plant stress tolerance.
2. **Optimization of Seaweed-Based Biostimulants** – Enhancing existing seaweed formulations (e.g., *Ascophyllum nodosum* and *Laminaria spp.*) to extend stress resilience and increase efficacy.
3. **Development of Biostimulants for Disease Resistance** – Investigating the role of elicitors and natural compounds in triggering plant immune responses against pathogens.
4. **RNA-Based Biopesticide Development** – Advancing dsRNA technologies to control fungal pathogens as a safer alternative to chemical fungicides.

UW will play a key role in the *CropPrime* consortium by leveraging its expertise in plant-microbe interactions, RNA-based crop protection, and microbial biocontrol. The activities at UW will focus on:

- **Mechanisms of dsRNA-Induced Gene Silencing:** Investigating how dsRNA formulations trigger gene silencing in fungal pathogens, with an emphasis on targeting major crop diseases.
- **Integration of Biostimulants and RNAi:** Exploring synergistic effects between dsRNA treatments and biostimulants to enhance plant defense mechanisms.
- **Molecular and Genetic Analysis:** Using small RNA sequencing, transcriptomics, and bioinformatics to understand plant-pathogen interactions and identify effective RNA-based disease control strategies.
- **Hosting Visiting Researchers:** Facilitating knowledge exchange through secondments, training sessions, and workshops on RNA-based plant protection technologies.

By combining fundamental research with translational applications, *CropPrime* aims to provide sustainable, science-driven solutions for modern agriculture, ultimately reducing reliance on chemical inputs and improving global food security.



NINEWELLS DEMENTIA MEETING CENTRE & TRAINING SPOKE

NHS Tayside Charitable Foundation

Principal Investigator: Dr Shirley Evans, School of Health and Wellbeing

Research Group/Unit: Association for Dementia Studie

The Association for Dementia Studies is undertaking a research study with Meeting Centres Scotland, to evaluate the first ever Meeting Centre for people living with dementia embedded within a hospital setting. The Meeting Centre will be located within the Royal Victoria Hospital, Dundee, funded by NHS Tayside Charitable Foundation.

The aim of the Meeting Centre is to provide a dedicated space within the hospital where people living with dementia and their families can receive support, engage in meaningful activities, and connect with others in a safe, understanding environment during their hospital stay. The Association for Dementia Studies will be evaluating the design and impact of the Meeting Centre on people living with dementia, visitors and members of hospital staff.

To find out more about Meeting Centres, please visit the ADS [webpage](#) and [Meeting Centres Scotland](#).



*Royal Victoria Hospital,
Dundee*

MACMILLAN EVALUATIONS

Herefordshire and Worcestershire ICB

Principal Investigator: Prof. Eleanor Bradley, School of Health and Wellbeing

Research Group/Unit: Living Well with Long-Term Conditions Research Group

Professor Eleanor Bradley, Dr. Catharine Rose and Jess Howdle are supporting Herefordshire and Worcestershire Integrated Care Board (ICB) with a new project run in partnership with Macmillan Cancer Care, which aims to improve access to cancer services for South Asian and Roma/Traveller communities. Current cancer services underserve these populations, and the project will use co-production to ensure service developments are informed by communities' lived experience, and through an iterative co-design process. A series of different co-production strategies will be embedded throughout the project. These will include community reporting sessions, co-production workshops, and community and stakeholder engagement events held in local venues, such as Redditch Mosque and the Kidderminster CO-LAB.

The University of Worcester team will evaluate the co-production process during the design phase, service implementation and initial uptake. The team will also develop a theory of change for the new service, enabling robust evaluation as the service is further rolled out and developed.

This evaluation is one of several that Professor Bradley's team has undertaken to explore work done by local healthcare services to reduce health inequalities and improve service design for patient benefit. The team is also undertaking complementary research to explore and develop the co-production concepts used in community health.

DOCTORAL SCHOOL



GRADUATION

March 2025

Congratulations to our recent graduates!

Dr Peter Ayling | Dr Karen David | Dr Ifeoma Idigbe | Dr Desislava Ohanians | Dr Jeremiah Olusola Adebolajo
Holly Roberts MPhil | Dr Linda Tyrrell | Dr Pengcheng Zhang | Chloe Baker MRes | Jane Cassidy MRes
Christos Clarke MRes | John Davies-Mourby MRes | Wendy Hill MRes | Edward Nock MRes | Lucy Robson
MRes | Leah Simkin MRes | Katherine Small MRes | Lucy Smith MRes | Joshua Thomas MRes
Faith Whiting MRes





Dr Linda Tyrrell

'Exploring open innovation and collaboration in University - Industry Partnerships' (PhD)

Supervisory Team: Dr Vessela Warren (DoS), Dr Ria Wiid

Since completing my MSc, I wanted to push my knowledge of understanding university-industry interactions and the benefits this can provide to universities, staff and students. Unfortunately, trying to find a university allowing students to study a PhD around a full-time job, on a part-time basis was problematic. Most universities wanted students to be on campus at least 30-90 days per year for supervisions, research training and progress meetings.

I was already working full time at UCL (on research projects) and was caring for my disabled parents, therefore I needed a university that would give me the flexibility to complete a written PhD. Instead of looking at a traditional university to study my PhD (Red Brick or Russell Group), which would not be flexible, I decided to look to enrol at a local university which would allow me to carry out my caring responsibilities and work around my job. I chose the University of Worcester, as they were flexible, supportive and offered a stimulating study environment. Additionally, as I was studying business, the conferences and training I had undertaken as part of my job, could be added with my research methods training to support my PhD development, as it interlinks theory and practice in business.

This interdisciplinary research study focuses on the creation of innovation through cross-sector collaboration and value-added factors between buyers (university academics) and suppliers (scientific equipment manufacturers) embedded in the context of a specific university's procurement tender process.

The findings are diverse including both buyer and supplier participants having previously engaged in collaboration. I have identified two new buyer types, the Individual Academic and Core Service Academic. Suppliers adopt a local market manufacturing approach to provide the value-added factors buyers require. That suppliers have embedded specific buyers into their innovation process and linked the buyer knowledge to a specific model, resulting in the development of new product ranges for the external market.

From the study's findings I theorised a visual model of university-industry collaboration, including the micro triple helix model, the value-added factors, CSC factors and tender recommendations to allow readers to understand the steps within the tender process that makes a collaboration a success. Finally, I made several recommendations to change the tendering documents and tender process, including adding equipment value-added factors to the tender specification template, a new value-added matrix, and a step-change to the tender process, to embed the value-added and CSC factors identified in this research study to make the tender process conducive to collaboration.

Deciding to study my PhD at the University of Worcester was one of the best decisions I have ever made. As the University of Worcester offered me the option to study in a way that would allow me to complete the PhD, around my caring and work responsibilities, the benefits for me studying at University of Worcester was:

- **Course flexibility**- arranging supervisions online to fit around my commitments, so I did not need to travel to meetings unless I wanted to visit Worcester. The course was tailor made to meet my development needs and support me to write the PhD thesis.
- **Expert and supportive supervisors** (Dr Vessela Warren and Dr Ria Wiid) - I had two supervisors, both experienced in my research area and when things did not go to plan, both provided me with excellent advice and guidance to overcome the problems and get me back on track.
- **Excellent disability support** – unfortunately during my PhD program, I developed diabetes, and this had an impact on my study. With the help of the Disability Support Team, the university provided me with adjustments to support my illness and remove stress to help me meet each PhD milestone.
- **Pastoral Support** – unfortunately in the last year of my PhD, my father passed away (after a long illness), the University of Worcester was wonderful with their support, they provided me with excellent pastoral support via First Point. Within the Department, Dr Catharine Ross, helped me navigate the university procedures to extend my PhD submission, allowing me time to get over my father's loss.

I would like to thank all the academic and professional service staff at the University of Worcester, for offering me a place to study my PhD, and I don't think I would be graduating without their excellent support.

After finishing my PhD, I have taken a new role of a Procurement Manager setting up the procurement department, policies and procedures. Allowing me to implement the value-added and CSC factors identified in my study into a university tender process.



Wendy Hill

'Alice: Out of the Shadow. A Life of Alice Elgar, 1848—1920'
(MRes)

Supervisor: Dr Anna Muggeridge

Wendy Hill, 81 years old from Ledbury, graduated with an MRes in History in March after researching the life of Alice Elgar. *"My message to other mature people who feel the need to achieve something academically is go to an Open Day and talk to people - students and tutors - who will welcome you and advise you,"* she said. *"I am very proud of myself!"*

The grandmother-of-three chose to focus her Master's studies on one of the less well-known historical people in the Herefordshire and Worcestershire region. She researched and wrote about Alice Elgar - wife of the world-famous composer Edward. Married in 1889, the couple lived in various locations including around Worcester and Hereford. Though Edward Elgar's works are well-known classical anthems today, including *Land of Hope and Glory* and *Nimrod*, Alice was also a published author in her own right of poetry and fiction. Some of her poems were set to music by her husband.

"She has one small book about her, but I wanted to explore more about her as a person," said Wendy. *"I had always been interested in Alice as so little was known and written about her and I felt she deserved more acknowledgement and recognition. I feel that her contribution to his creative genius has not been acknowledged properly in common with many wives, sisters, daughters and partners of creative people."*

Now, Wendy's thesis written for her Master's studies is set to be published in The Elgar Society Journal. Wendy has an undergraduate degree from another university which she achieved as a mature student. This was many years before while her children were studying for O and A levels, so she said they all studied together. But she was drawn back to education decades later. *"I loved being a student again - it gave my life a focus and, as a widow, I needed that to ground me again,"* said Wendy. *"I found everyone really helpful and kind. I was mistaken for a tutor a few times!"*

Wendy chose the University of Worcester for her studies partly due to its proximity to her hometown, but was also attracted by the course. *"I loved my year at the University of Worcester. My best memory of my time at the University is the kindness and having fun with my fellow students,"* she said.

Wendy has a longstanding interest in the Elgar legacy. She was Honorary Secretary of the Elgar Society from 1996 to 2006 and is currently Chairman of The West Midlands Branch of The Elgar Society. *"I have given lectures, study days and talks on Elgar and will continue to do so,"* she said. *"I have been asked to do various book reviews for The Elgar Society Journal and they will be publishing my thesis. I have no career plans, obviously, but I hope to continue with my very active membership of Ledbury U3A."*

ALUMNI NEWS

Three graduates from the Doctor of Business Administration course run with collaboration with Fachhochschule des Mittelstands (FHM) Bielefeld in Germany, have recently been made professors at their respective institutions - Professor Henning Duderstadt, Professor Christian Engelke, and Professor Christian Klein.

"I had previously spent several years doing academic research at the University of Hanover in Germany, but it was the English system that attracted me. From the very beginning of the doctoral programme, I had the strong feeling that I had made the right decision: structure, organisation, supervision - everything was exactly as I had imagined. Maybe that was the reason why I was able to succeed so early on."

My studies ran parallel to my entrepreneurship and it was only a few weeks later that I was offered the chance to become a Senior Research Fellow at UW. It's a very special accolade that I don't wear on my jacket, but I still have a connection with my university. The plan is to continue working with Robin Bell, my former supervisor."

But as life has its surprises, as Tom Hanks discovered long ago, it was a happy coincidence that Prof Wittberg from the University of Applied Sciences for Small and Medium Enterprises (FHM) asked: "Why don't you teach in Bielefeld? The FHM cooperates closely with UW in the DBA programme." So I started teaching management and strategic controlling and the following year I was appointed professor at the FHM." - Prof. Dr. Christian Engelke



SPOTLIGHT



**UNIVERSITY of
WORCESTER**

A SPOTLIGHT ON...

Inclusive Sport and Physical Activity Research Group

The Inclusive Sport and Physical Activity Research Group is a collective of passionate, supportive, community-oriented individuals, all working towards developing meaningful, ethically responsible, high-quality interdisciplinary research within and around the broad area of Inclusive Sport and Physical Activity.



Researchers, practitioners and students in this group bring unique critical and global insights, knowledge and experience regarding sport, exercise, physical activity and related areas, but have a shared vision of serving marginalised, disenfranchised and excluded communities. Each person, no matter how much or little experience they have in research or practice, has something to contribute and is a valued member of the group.

The research group consists of three key research themes:

- (1) Gender, Identity and the Body (led by [Dr Christian Edwards](#));
- (2) Inclusive Sports (led by [Dr Emma Richardson](#)) and (3) Politics of Sport (led by [Professor Győző Molnár](#)).

The **Gender, Identity and the Body** research theme focuses on critically exploring and understanding socio-cultural issues associated with sports, exercise, physical activity, and health. Our key aim is to generate high-quality socio-cultural research in relation to these key domains. We strive to develop research that is interdisciplinary, theoretically sound and informed by empirical evidence; and research that will influence wider society and aim to further develop our links with key stakeholders. Key research interests include: corporeal and sporting/exercise/physical activity identities, gender, sexuality, and corporeal drives and body projects.

The **Inclusive Sports** research theme focuses on experience and equity of inclusive sport and exercise through the physical activity spectrum (i.e., from recreation through to performance sport). Our key aim is to conduct and share impactful, applicable research regarding inclusion among marginalised populations within sport and exercise (e.g., disabled communities, women, older adults, etc.). Through excellent scholarship and meaningful practice, we strive to serve marginalised populations by exploring and creating equitable access to and opportunities for sport and exercise. We, thus, focus on engaging and working with communities, practitioners, scholars, teachers, stakeholders, coaches, and others to do meaningful work locally and globally. Key research interests include; social justice, social exclusion, critical dis/ablism, participatory/emancipatory research, adapted physical education, adapted/inclusive sport/ exercise/ recreation.

The Politics of Sport research theme centres around exploring and identifying historical and contemporary connections between sport and politics. Research in the theme is focused on exploring to what extent and in what ways sport has been inextricably linked to most if not all of those aspects of human society which political scientists regard as significant. Therefore, research carried out as part of this theme relates both to sport politics (i.e., political activity which takes place within sports organisations) and to the politics of sport (i.e., the ways in which sport and politics interact in different ways and at different levels of human society). Key research interests include: national identity, nation-states, minority identities, necropolitics, populist politics, fascism, political hegemony and soft power.

We have conducted numerous research projects with marginalised communities, and continue to work with groups such as supporting those on probation through CrossFit, exploring necessary mental health support among individuals with significant appearance concerns, and the development of training resources to support disabled individuals and gym instructors in leisure centres. Two funded projects that we have been involved in include one of our latest research projects is the evaluation of the 2023 Düsseldorf Invictus Games (Funded by the Royal British Academy). The research focused on the British team which for Düsseldorf Games will comprise of 59 competitors, 6 reserves, 11 lead coaches and a number of support staff, assistant coaches, ambassadors and medical personnel. More specifically, the project centred on the Invictus Game and related recovery experiences of three key groups: Competitors, Families and Coaches.



Invictus Games Düsseldorf 2023 | Photo credit: Royal British Legion

Another recently completed project focused on the ethnic categorisation of Gypsy, Roma and Traveller communities across the UK health services (Funded by Understanding Patient Data). This project was extensively informed by community engagement to explore the attitudes of Gypsy, Roma & Traveller communities toward collection and use of their ethnicity data in health services, and to develop recommendations for how we can do this better (see full report here: <https://understandingpatientdata.org.uk/equitable-data-collection-gypsy-roma-and-traveller-communities-health-services>).

One of our key objectives is expanding partnerships and community engagement which will be critical for the group's growth and impact. Building relationships with diverse stakeholders, including government agencies, local councils, schools, healthcare providers, and private industries, will enable co-designed



research projects that respond to real-world challenges. The group will also strengthen ties with international research networks to collaborate on global initiatives addressing health inequalities and sport accessibility. In parallel, deepening engagement with underrepresented and underserved communities will ensure that research outputs are inclusive, equitable, and relevant, driving tangible benefits for those most in need.

Dr Emma Richardson with Archie Eaton, Sports Coaching with Disability graduate, current Power2Inspire ambassador and boccia player and coach.



A SPOTLIGHT ON...

Dr Michael Lane

Lecturer in Law
School of Law
Institute of Arts and Humanities

m.lane@worc.ac.uk

"Higher education, has its own unique challenges, but perhaps most common is the prevalence of imposter syndrome. This is when we doubt our skills, achievements and experience, and feel unworthy or underserving of our success. In part, I think we (academics) feel this way because whilst we are 'experts', it is also our job to be constantly interrogating the fringe of human understanding. This will often involve exposing our ideas to critique and receiving difficult peer feedback or rejection. The scepticism of our own abilities is uncomfortable but to some extent a natural consequence of the role.

Because some uncertainty is inevitable, my advice is to try and surround yourself with people (colleagues, friends, family) who will inspire and encourage you when you're in doubt. Their support may be the difference between you having an article published in a leading journal, and not writing anything at all."

What is your professional background? I have an LLB (Law), LLM (International Human Rights) and a PhD (Law), all from Birmingham City University (BCU). The latter was funded by the Midlands4Cities Doctoral Training Partnership (UKRI), and joint-supervised with the University of Leicester. My thesis focused on the UN Universal Periodic Review (UPR), a process that reviews member states' human rights situations. It's an especially peculiar (and interesting) mechanism because the reviewers are other states; it's essentially a peer review which can make for some curious interactions. My thesis was particularly concerned with how the UK had engaged with this process, and the extent that it had any impact on the ground.

Throughout my PhD, I was a visiting lecturer at BCU, teaching mostly constitutional and administrative law, and I completed a course with the Geneva Academy of International Humanitarian Law and Human Rights. In 2022, I submitted a report to the UN on the UK's treatment of migrants and presented this to delegations in Geneva at the Human Rights Council. I also co-led a project funded by the Equality and Human Rights Commission which helped develop civil society capacity to engage with the UK's UPR. This included a conference with organisations, and an evidence session for Parliament's Joint Committee on Human Rights. I'm very grateful to have been involved in the project because it confirmed that an academic career with a focus on knowledge exchange was what I would be aiming toward.

I joined UW shortly after defending my thesis in 2023. Since then, I've taken on the role as research lead for the School of Law which involves supporting colleagues to engage in scholarly activity. I've tried to maintain a steady stream of publications and conference papers and have secured a book contract with Bristol University Press to publish my first monograph. Knowledge exchange has continued to be an exciting opportunity, too. Last year, Frederick Cowell (Birkbeck, University of London) and I translated our article in *Judicial Review* into a training session for lawyers in The Gambia. Most recently, I organised a conference on the theme of 'International Law in the UK' which attracted a healthy audience.

I'm really grateful and proud to be at the UW. I have many brilliant, thoughtful colleagues who are leading the way in teaching and scholarship. I know in the School of Law we're providing an exceptional legal education for our law and policing students, and our research is having a real impact. Worcester is a very exciting place to be an early career academic.

What are you currently working on? I am working on a few projects, the main one being my monograph, 'Assessing State Participation and Constitutional Actors at the Universal Periodic Review: Lessons from the UK'. The book draws on theory from law, international relations and political science to help understand the conditions which facilitate or hinder the success of the UPR in states. Its main contributions are a theoretical framework and method for scholars to observe states at the UPR, and an empirical analysis of how international human rights influences constitutional actors (government, parliament and the judiciary) in the UK. The book will be published open access with Bristol University Press, hopefully in 2026.

Building on the book, I'm also working on a funding bid to commence a

project that examines the possibilities for legal professionals to engage with the UPR. The project would involve interviews with lawyers and judges from across the world and would help clarify the legal and political barriers faced by these individuals when trying to engage in the process. I've also just submitted a book proposal along with two co-editors (Nina Hart, King's



Michael with speakers at the 'International Law in the UK' Conference, November 2024

College, and Dane Luo, Oxford) for an edited collection that builds on the 'International law in the UK' conference, held at the University in November 2024. Lord Mance, the former deputy president of the UK Supreme Court, has agreed to write the foreword.

Finally, my colleagues and I are in the very early stages of conceiving a project that involves students conducting a simulated parliamentary select committee inquiry. We're hoping to get experts involved as 'witnesses' and get local schools and colleges to make written submissions. The project will give our students a close to real-life experience of what goes on in Parliament, and how the accountability process works. Dr Chris Monaghan and I are also the co-convenors of the Society of Legal Scholars Public Law section, so we have the responsibility of running workshops and other events for members of the section, as well as managing the public law panel at the annual conference.

What is your biggest achievement to date? My biggest professional achievement is probably giving evidence at the United Nations Human Rights Council in 2022. I spoke with delegates from several countries about the rights of migrants that were at risk by virtue of the then-government's plan to deport asylum seekers to have their claims assessed in Rwanda. I said to delegations that the plan was in breach of article 3 of the European Convention on Human Rights on freedom from torture and inhumane, degrading treatment, a position the UK Supreme Court confirmed a year later in *AAA v SSHD*. When the UK's compliance with international human rights was reviewed by the Human Rights Council later that year, the countries I met with put these concerns to the UK delegation. I like to think I played a (very) small part in encouraging countries to exert pressure on the UK to abandon the plan, which it subsequently did last year.

So far as personal achievements are concerned, I'm perhaps just proud to have navigated life's challenges, and that I now have my own home, my wife, Steph, and my dog, Maxie, good friends, and a job I enjoy. They're simple things, but I'm very grateful for them.

Who has influenced you the most in your career so far? Academically, I've taken most inspiration from legal academics and political scientists who draw on law and political science to understand how human rights 'work'. During my PhD, the most influential academics whose ideas I drew on include Kathryn Sikkink (Harvard), Beth Simmons (Pennsylvania), Aileen Kavanagh (Trinity, Dublin), Murray Hunt (Bingham Centre for the Rule of Law), and André Nollkaemper (Amsterdam). I think Simmons' book, *Mobilising for Human Rights*, was possibly the most important text I read. Here, Simmons provides an important framework for understanding the impact of international human rights, by showing how domestic actors – civil society groups, lawyers, politicians – use rights as leverage to legitimise their claims for change. It is a convincing study which shows the potential of human rights, but also that they are not a panacea, and may only be useful under certain conditions.

Beyond academia, I took a lot of inspiration from my mom, who sadly passed in 2022. I grew up in a council house in Northfield, Birmingham, money was tight, and opportunities seemed limited, so naturally I didn't assume I would amount to very much. But mom was very proud of her children and wanted to us to do well despite the seemingly dismal circumstances. I think that encouragement was in large part the reason I pushed myself and succeeded academically. I owe a lot to her.



A SPOTLIGHT ON...

Holly Barnes-Bennetts

PhD Student,
Institute of Arts & Humanities

*"A Digital, Interactionist, Praxis
Study of Perception and
Communication of Positive
Sexual Consent"*

h.barnesbennetts@worc.ac.uk

Advice for future PGR students

Make sure you have a good work life balance - your research can become very dominant in your life and your sense of who you are and that can be really unhealthy. Put as much work and energy into your life outside your research as you do within it. Oh and don't buy into the toxic competitive culture - if we all celebrate each other we all win!

Research Area My research is exploring positive sexual consent from an interactionist perspective, inspired by Cultural Studies approaches. I believe the best way to improve relationship and sex education is to teach young people (and not so young people) what good consent looks like not just what not to do. To find that out I am gathering shared narratives from a diversity of people; asking couples to talk together about how they make consent work for them in their own sexual intimacy.

Why did you decide to undertake PGR study at UW? I had been working as an Associate Lecturer in Media and Culture at the university for a couple of years so it was the natural choice to research here as well but there were other reasons. What attracted me most was the university being part of the community and its commitment to accessibility. Of course it was also the possibility of working with my Director of Studies Dr Simon Hardy who's approach to academia really appealed to me. He's very knowledgeable but also doesn't adhere to the competitive nature of academia that sometimes makes it a toxic environment. Its more about collaboration and celebrating everyone.

What opportunities have you had during your time at Worcester? I've had the opportunity to build some fantastic relationships with colleagues, peers and other academics. I've also been able to incorporate my research interests into my teaching. It's been really wonderful to connect with students about the importance of consent, their experiences of sex education and how they think it could be better.

What has been the highlight of your PGR study so far? Without a doubt it has been developing and delivering positive sexual consent workshops and giving talks in the community . I've delivered workshops to students in the university as well as in local schools for year nine and ten students. I've also delivered a few talks at the Hive library and, probably the most fun, was Pint of Science. Knowing that my research is having a real world impact is the most important thing to me. There are hundreds of school kids and university students that might have a better perspective on consent and a many adults having more open conversations about consent because of my research. That's quite the highlight!



Holly delivering a consent workshop to secondary school aged children.

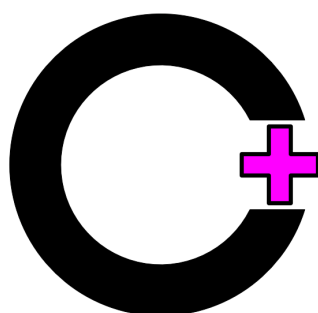
*Holly presenting at the
2024 Pint of Science
Festival at Arch Rivals Pub,
Worcester.*



What is your professional background? I've had such a varied career! I actually dropped out of sixth form college in the late 1990s and went into office work. After a few years of that I went travelling. When I returned I knew I wanted more from my career so I returned to learning. I did a one year Access Course and then went on to Southampton Solent University where I really fell in love with studying gender and sexuality. Whilst I was at university I set up a music and arts festival raising money for a local homelessness charity. That led me into events management continuing to grow the festival, doing events and PR in the third sector and then in local government. After that I took a big leap after that and opened a craft café with a friend -a lot of fun but a lot of hard work. After selling the café I finally found my way into teaching and postgraduate study. I really think my varied career and experience enriches my teaching and gives me a broader perspective on academia.

What is your biggest achievement to date ? Really it's a bit sappy but its got to be building myself a beautiful life in Worcester. Its such a great city, I love it here. I have so many wonderful friends, a gorgeous family and I really feel part of a community. I had a difficult childhood so things like that are really important to me.

Where do you see yourself after you have completed your course? Teaching will always be an important part of what I do. I try hard to have a positive impact on the world I live in and that's a major way I try to do that. I plan to extend and expand the Consent is Positive Project to deliver consent education in more schools and community settings. If I'm dreaming big I'd love to advise the government and schools on approaches to relationship and sex education.



THE CONSENT IS
POSITIVE PROJECT



To find out more about Holly's research, visit
the [Consent is Positive website](https://www.consentispositive.org/).



A SPOTLIGHT ON...

Prof. Nicoleta Cinpoes

Professor of Shakespeare Studies
Institute of Arts and Humanities

n.cinpoes@worc.ac.uk

What advice would you give to those looking at moving into an academic role?

No dream is too big, no idea is too small: it only takes the courage of your convictions. If you fail, 'no matter. Try again.

Fail again. Fail better', as Samuel Beckett put it. You are never alone: what you do always builds on what those before you had that courage to stand for and many times to stand against. Working in freedom is a huge privilege and a responsibility, owed especially to those who do not enjoy this basic human right.

Research Area While my specialism is broadly defined as Shakespeare Studies, my research has always been transdisciplinary and anchored in social transformation. Initially, the steps were small: from exploring the power of freeing knowledge in translation, to discovering the transformative agency of critical enquiry. Later, it entailed charting territories of Shakespeare-making: whether by adding the Romanian piece to the world Shakespeare puzzle, or by speaking up for Shakespeare beyond the written word, when contributing to the establishment of performance criticism. More recently, my research on Shakespeare Festivals in Europe has embarked on a new stage. Going beyond documenting the Festivals' role in healing after historical shifts (such as WWI, WWII, the Fall of the Berling Wall) and effecting mobility, exchange, collaboration, it argues that new Shakespeare Festivals are founded as sheer acts of survival and preservation of national heritage through ongoing trauma, as in the cases of the two festivals I have been fortunate to assist with launching: in Ukraine (June 2024) and in Moldova (October 2024).



Prof. Nicoleta Cinpoes celebrating the success of the 1st International Shakespeare Festival in Ukraine, June 2024

What is your professional background? I am no stranger to unsettled times – political, educational, cultural – such as those we are currently living through. I was born in Bucovina, in the scenic mountain-city of Suceava, and was raised in the years that effected the 'mini-cultural revolution' the Ceaușescu launched following their visit to China, a legislative and counter-information shift that straightjacketed Romanian cultural production (on the page, on the stage, in the classroom) and gagged all voices not towing the communist party line. I trained in what promised to be a successful career in accountancy and evaded the Orwellian daily real and televised life, like many in my generation, by avidly listening to radio theatre. The little battery-operated radio I proudly bought with a year's pocket money was my most prized possession and little subversive act: to begin with, against the regular electricity curfews, then to learn and dream more, when listening to Radio Free Europe. Unlike many Romanians, my late parents included, I was fortunate never to have to forfeit my dreams: the December 1989-Revolution literally changed my life. Mid-A Levels, I ditched the chemistry national competition and took up the literature one. Then I threw myself into volunteering – with the Red Cross, then the Scouts, too; they became much relished opportunities to enjoy new freedoms, meet international volunteers and rejoice in being able to practice my GCSE English without the fear of being arrested. These new worlds encouraged me to pursue a double honours' degree in Language and Literature (Romanian and English), in the Faculty of Philology at the Ștefan cel Mare University of Suceava, itself only just reopened after the 1989-Revolution. Upon graduation, I joined the Department of Germanic Languages at Suceava where I taught English literature, translation and critical interpretation until coming to the UK to pursue my interest in drama. During my MA in English and Comparative Literature, at the University of Warwick, I discovered my passion for all things Shakespeare, a passion that remains strong to this day.

How long have you worked at the University of Worcester? I arrived at the University of Worcester in the autumn of 2007, stepping out of a research post whose brief was digital innovation in teaching and researching early modern drama, and into the academic life of an institution that had proven its commitment to teaching and research two years prior, when it received the much-deserved university status. A newcomer not only to the UoW but also to the region, I embarked on the most adventurous exploration to date. Worcester has renewed my commitment to education as life-changing not only for the individual but also for the community and society at large. I've been fortunate to grow in and with the UoW, which has become the welcoming home of numerous, weird and wonderful teaching and research projects I have been involved in: from opening up the rich local archives in Renaissance modules to hosting the European Shakespeare Congress, for the first time in the UK, a decade ago; from seeing students grow in confidence and agency to putting Worcester on the Shakespeare map.

What is your biggest achievement to date?

Without a doubt, it is standing up for those whose voices are silenced, holding the education door open for anyone who wants to step into their better world, working collaboratively for change. Personally, making my family proud and seeing them enjoy what I – ‘the little sister’ – do at work. They have been my rock: when I regularly fret for one project or another and when I received my Doctor Honoris Causa for services to Shakespeare Studies in Romania, when the going gets tough and when we laugh and cry together in the theatre or cooking, at home.

Prof. Nicoleta Cinpoes receiving the Dr Hon Causa at the University of Craiova, May 2024



What are you currently working on? My current project focuses on Shakespeare resistance and activism. It engages with both the small steps, such as listening to, sharing knowledge and lending a hand, and the big leaps of faith you can enable others to take. In concrete terms, it has been offering Shakespeare Shelter to Ukrainian colleagues and friends regularly online, in an online forum that ensures they are heard and supported in continuing to fight, to teach, to believe in their work, on the one hand. On the other hand, it has been a joint effort to curate the volume Shakespeare Shelter for Ukraine which literally gives voice to Ukrainian Shakespeareana, with contributions on banned translations and executed translators, on diaspora efforts to preserve Ukrainian culture when at home it was erased, on attempts lost or cut short by occupation, on decolonising thinking and writing of the Soviet model, on an exciting digital museum: Hamlet 1943-2023, on decades of innovative Shakespeare translated and staged only now joining the global conversation, on Shakespeare as a refugee abroad and Shakespeare in bomb-shelters at home, and on the freshly launched Shakespeare Festival (June 2024) as survival mode and coming home. The volume is due out for the 2nd edition of the Festival (June 2025), so watch this space!

Who has influenced you the most in your career so far? Where does one begin? I have been immensely fortunate to encounter so many wonderful mentors who have, directly or indirectly contributed to my journey: from my A Level Maths teacher who warned me that despite my top results, my heart ‘was really in literature’ all those years ago; to my lecturers from Ștefan cel Mare University of Suceava, Romania, and the University of Warwick, who broadened by



horizon and opened my mind; to the acting community around the world who continue to share their work against all odds, whether from the comfort of peace and free speech or from the darkness of oppressive regimes, gagged culture or bomb shelters. Most of all, my students wherever I have been working – from Romania to the UK, Poland to Finland, France to Ukraine, Hungary to Sweden, Bulgaria to Spain. They have been inspirational companions who continue to teach me in new ways that curiosity, fun, courage, listening, resilience, dreaming *make* the journey, and that to ask is sometimes more important than to answer.

Bestowing the 1st tree for the Shakespeare Park at the end of the Chisinau Shakespeare Festival, October 2024.



A SPOTLIGHT ON...

Malina Yallanki

PhD Student,
Institute of Arts & Humanities
(Studentship funded by
University of Worcester in
collaboration with the George
Marshall Medical Museum)

*"African Identities and the
Transatlantic Slave Trade and
Slavery in the Eighteenth and
Nineteenth Centuries"*

yalm1_24@uni.worc.ac.uk

Advice for future PGR students

*"It may seem obvious, but
ensure your topic is one that
you are genuinely interested in
and passionate about! You will
be spending most of your time
with this research and having a
topic that you are motivated to
explore is crucial in helping you
navigate the inevitable ups and
downs of your academic
journey."*

Research Area My research focuses on reconstructing the life histories of 'Liberated Africans' who were forcibly relocated to Sierra Leone in the nineteenth century. It explores the Islamic influence on the colony and the development of Muslim 'Liberated African' populations.

Why did you decide to undertake PGR study at UW? I have always had a strong passion for studying history, and from an early stage, I knew I wanted to engage in research that would contribute to a deeper understanding of the past. This studentship offered an incredible opportunity to pursue research that aligns with my commitment to uncovering the voices of those who were historically marginalized. Additionally, the chance to work under the supervision of leading scholars in the field was an invaluable aspect of the opportunity.

What opportunities have you had during your time at Worcester? I'm grateful for the many opportunities I've had this year, but one that stands out for me is attending the Endangered Archives Programme conference at the British Library. Attending this event in the first month of my studies was both exciting and inspiring. It provided me with valuable insight into the different efforts made by researchers from around the world to preserve endangered archives, helping me better situate my own research. Additionally, I've had the opportunity to support undergraduate courses which has involved various exciting field trips to places such as Bath, Worcester Cathedral, and Windsor Castle.

What has been the highlight of your PGR study so far? The highlight of my PGR study so far has been the opportunity to develop as a researcher through the PGR courses. The beginning of your studies can be overwhelming, but the PGR courses have provided me with the tools to navigate my academic journey with greater confidence and offered valuable insight that has helped me approach my study with more clarity. Also, the opportunity to become a part of a community of researchers through the research school space has been incredibly helpful in building a supportive network.

What is your professional background? I completed an MA degree in International Relations in Historical Perspective, which included an internship with a Decolonization Podcast. I continued to work with this podcast after my degree. I then worked in administrative roles within universities while volunteering as a researcher on an archival project at Brown University.

What is your biggest achievement to date ? I feel incredibly fortunate to have started this PhD studentship. For many years I have hoped to work in the archives and to contribute to meaningful research, so I feel very grateful for this opportunity. This studentship has already provided me with many valuable skills that have shaped how I approach challenges and opportunities, both personally and professionally. I'm excited to continue learning and growing throughout my studies, and I look forward to making the most out of the opportunities ahead.

Where do you see yourself after you have completed your course? I would love to stay in research in some capacity, whether that's through teaching, engaging with public history, or exploring other research-driven roles.



INNOVATION IN HEART DISEASE DETECTION

Dr Allain Bueno | School of Science and the Environment | a.bueno@worc.ac.uk

Research carried out at the University of Worcester has discovered a potentially significant link between markers in the blood and electrical functions of the heart which could transform the way heart disease is detected. The study could mean that ECG (electrocardiograph) tests could replace blood tests as a quick and cost-effective tool to predict future cardiovascular risk.

A study of healthy pre-menopausal women found that a particular marker on ECG tests, used to monitor the functioning of the heart, corresponded directly to levels of a particular substance in the individual's blood. This substance is known to be an indicator for the likelihood of developing serious conditions in the future, including heart disease and type 2 diabetes. The findings have now been published in the *Journal of Clinical Medicine*. If the study can be widened out and the same link substantiated in other parts of the population, this could signal a breakthrough in the way we detect and try to prevent these future health issues.



"Heart disease is one of the biggest killers in this country, nothing kills more men than heart disease and it's the second leading cause of death for women," said Dr Allain Bueno, Principal Lecturer in Human Biology and Human Nutrition, who led the study, alongside [Human Biology Master's](#) student Georgie Sherrard who conducted data collection and expert computer analysis by Sao Paulo Federal University. *"These diseases may occur later in life, but, if we can find ways to prevent them from happening in the first place, people will live longer, better, and healthier lives."*

Docosahexaenoic acid, also known as DHA, is an omega-3 fatty acid found mainly in cold-water fish, like salmon, and is present in the membrane of human cells. People with low DHA blood levels have a higher risk of developing cardiovascular (disorders of the heart and blood vessels) and metabolic conditions, including strokes, heart attacks, blood vessel disease and Type 2 diabetes.

ECG readings measure the electrical activity of the heart. The QRS complex, a key hallmark of the ECG, measures the electrical activity of the ventricular chamber of the heart when it contracts to pump blood around the body. The more efficient the heart is in pumping blood around the body, the better in terms of long-term health, and the lower the electrical activity detected (in normal conditions).

In the study, researchers found the two measures directly corresponded – so when the levels of DHA detected in the blood were higher, the QRS measure was found to be lower - and vice versa. DHA levels can only be detected through a blood test. Dr Bueno says there are advantages of estimating its levels in a different way. Testing via the blood is very time consuming, complicated and therefore expensive, and not routinely available on the NHS. In comparison, an ECG machine is available and used daily in most GP surgeries and is relatively easy to operate by health professionals.

Dr Bueno said: *"It is crucial to expand our research to confirm our findings in other populations, including men, the elderly, and those at risk of, or already suffering from, heart disease. If the association we have identified in healthy women can be replicated in other groups and in large clinical trials, ECG could potentially be used as a quick and cost-effective tool to predict future cardiovascular risk. This could have significant implications for NHS healthcare strategy nationwide, but this is the very beginning of a long journey. One really important point is that we have to still have an active lifestyle. Regular physical activity is necessary to maintain heart health."*

MOLECULAR BIOLOGY OF PLANT -PATHOGEN INTERACTIONS

MOLECULAR INNOVATIONS FOR SUSTAINABLE AGRICULTURE

In the face of climate change, emerging plant diseases, and the increasing demand for sustainable food production, researchers at the University of Worcester are developing innovative solutions for crop protection and improvement. The Molecular Plant and Microbial Sciences Research Unit, led by Professor Mahmut Tor, integrates molecular biology, biotechnology, and microbiology to enhance plant resilience and reduce reliance on chemical pesticides. Their work focuses on four key areas: (1) understanding the molecular mechanisms of downy mildew, a common plant disease, (2) developing biopesticides using RNA, a genetic building block essential for most biological functions, (3) utilizing beneficial microbes for disease suppression, and (4) accelerating crop breeding using molecular markers. Through national and international collaborations, partnerships with breeding companies, and the exchange of knowledge with visiting scientists, this research is being translated into real-world agricultural applications.



Figure 1. Downy mildew symptoms on pea, lettuce and grapevine leaves (from left to right).

UNRAVELLING THE BIOLOGY OF DOWNY MILDEW PATHOGENS

Downy mildews are devastating plant diseases that threaten many economically important crops, including peas, lettuce, and grapevines. Professor Tor explains: "Unlike many fungal pathogens, these cannot be cultured in the lab, making traditional genetic studies challenging. Our group employs double-stranded RNA (dsRNA) technology to silence specific genes in these pathogens, allowing us to identify those essential for their growth, infection, and reproduction. By understanding the molecular mechanisms that drive disease progression, we can uncover novel targets for disease control".



Figure 2. Downy mildew spores germinate on glass slides (left and middle), but dsRNA treatment inhibit germination (right).

DEVELOPING RNA-BASED CROP PROTECTION STRATEGIES

Building on work with dsRNA, the Unit is pioneering the development of RNA-based biopesticides. Professor Tor states: “dsRNA molecules can be designed to target key genes in pathogens, disrupting their ability to infect plants. Unlike chemical pesticides, which often have negative environmental impacts and contribute to resistance development, dsRNA-based approaches are highly specific, biodegradable, and environmentally friendly. Our research has demonstrated that dsRNA applied to plant surfaces can effectively reduce pathogen growth, offering a promising alternative to conventional fungicides. We are currently optimizing formulations for large-scale application, including seed coatings and sprays, in collaboration with industry partners to ensure stability and efficacy under field conditions”.

UTILIZING BENEFICIAL MICROBES FOR PLANT HEALTH

Plants naturally interact with a diverse community of microbes, some of which enhance growth and suppress diseases. The Unit’s research also explores the potential of beneficial bacteria, such as *Bacillus* and *Pseudomonas* species, to protect crops from pathogens. By studying what antimicrobial compounds are produced by these beneficial microorganisms and how they suppress plant pathogens, the Unit aims to develop microbial-based solutions that can complement or replace chemical pesticides. Professor Tor notes: “Our recent studies have shown that certain microbial strains can significantly reduce pathogen infection rates, opening new avenues for sustainable disease management. We collaborate with plant breeding companies to integrate these findings into practical agricultural solutions”.



Figure 3. Pea plant infected with downy mildew (left) and a plant treated with beneficial bacteria (right).

ACCELERATING CROP IMPROVEMENT WITH MOLECULAR MARKERS

In addition to disease control, the Unit works on improving crop resilience through marker-assisted breeding. Traditional breeding methods for developing disease-resistant crop varieties are time-consuming and labour-intensive. By identifying genetic markers linked to desirable traits, such as disease resistance or drought tolerance, this research will help breeders select superior plants more efficiently. The Unit has successfully developed molecular markers for key resistance genes in legumes and leafy vegetables, enabling faster and more precise breeding of improved varieties, working closely with plant breeders to apply these markers in crop improvement programmes.

COLLABORATION AND KNOWLEDGE EXCHANGE

Professor Tor highlights the importance of working collaboratively and globally: “Scientific progress thrives on collaboration, and our research is strengthened by partnerships with national and international scientists, breeding companies, and industry stakeholders. Through these collaborations, we share knowledge, access diverse expertise, and develop solutions that are globally relevant. We also host academic visitors in our research unit, providing opportunities for knowledge exchange, training, and joint research initiatives. These interactions enrich our research environment and contribute to the development of future leaders in plant science.

TOWARDS A MORE SUSTAINABLE FUTURE

The Unit’s research sits at the intersection of fundamental science and applied agriculture, with the goal of providing practical solutions for farmers and the wider agricultural industry. By integrating RNA-based technologies, microbial solutions, and molecular breeding tools, the Unit’s research is contributing to a future where crop protection is more sustainable, effective, and environmentally friendly.

At a time when global agriculture faces unprecedented challenges, this research offers innovative strategies to enhance plant health and productivity. Professor Tor concludes: “By continuing to push the boundaries of plant science, we strive to develop sustainable solutions that support both farmers and the environment”.



ETHNIC MINORITY MICROBUSINESSES

Dr Muhibul Haq | Worcester Business School | m.haq@worc.ac.uk

Dr Muhibul Haq is a Senior Lecturer in Enterprise and Entrepreneurship at Worcester Business School. His research focuses on various aspects of microbusiness in general and ethnic minority microbusinesses in particular, providing insights into how microbusinesses contribute to the local economy and social fabric. His research highlights opportunities for growth through innovation, niche markets, and community collaboration, contributing to broader discussions on diversity, inclusion, and economic development in the UK's super diverse and multicultural society.

Microbusinesses, enterprises with fewer than 10 employees, have been traditionally ignored, by policymakers and mainstream business and management, including entrepreneurship, scholars. This neglect is largely attributed to the misperceptions that data on microbusinesses is less accessible and deemed less valuable compared to data from larger organisations. These misperceptions are rooted to the small size of microbusinesses. Many microbusinesses are run by non-employer self-employed people and most of them are informal family businesses. However, according to recent statistics from The National Statistical Institute of the UK ([ONS.gov.uk](https://ons.gov.uk)), over 82% of all private sector businesses in the UK are microbusinesses. Collectively, microbusinesses contribute 19 to private sector employment and 14 private sector economic turnover.



Ethnic minority microbusinesses are one sector within this domain which are even more neglected by financial institutions, policymakers, and business and management scholars. This is primarily due to structural discrimination, in addition to the above-mentioned misperceptions. These ethnic minority microbusinesses contribute to more than 11% national startups, and they are 50% more likely to start their own businesses compared with ethnic majority. To highlight the contribution of microbusiness in general and ethnic minority microbusinesses in particular, Muhibul has explored in recent years the entrepreneurial activities and cultural dynamics and the factors that influence the development and sustainability of microbusinesses within ethnic minority communities. His research reports that cultural values, traditions, and community networks shape economic activity within this niche business community. His research also informs that microbusinesses, both ethnic minority and majority, are heavily embedded in the local communities and that survival of one (the enterprise and the community) depends on the survival of the other.



In view of the potential contribution of microbusinesses to social and economic development and to stimulate economic growth, microbusiness-friendly policymaking is needed in the post-COVID-19 era and in the wake of a continuous global economic downturn. Policymaking can address the challenges that microbusiness, including ethnic minority microbusiness, face in the form structural discrimination, access to finance, and market competition. To encourage more entrepreneurial activity, policymakers and support organizations can better assist microbusinesses through offering tailored financial products, training programmes, and networking opportunities.



EVOLUTIONARY PSYCHOLOGY, PRO-SOCIAL BEHAVIOUR & THE ENVIRONMENT

Dr Daniel Farrelly | School of Health and Wellbeing | d.farrelly@worc.ac.uk

Dr Daniel Farrelly's academic journey began with a psychology degree from the University of Liverpool, followed by a master's in evolutionary psychology and a PhD at Newcastle. In January 2014, Daniel joined the University of Worcester as a Senior Lecturer in Social Psychology. Over the years, he has taken on various roles, including course leader for undergraduate programmes and head of what was the Performance Health and Wellbeing department. Currently, he serves as a Principal Lecturer in Psychology, balancing his time between teaching and research.

Daniel's research interests primarily revolve around evolutionary psychology. He explores how evolutionary principles can explain human behaviour, particularly in the context of pro-social behaviour, relationships, and attractiveness. He also explores environmental behaviour and climate change, focusing on altruistic and co-operative actions that benefit the environment, in order to help people to understand the active role they can have in affecting change. Daniel is currently working on several research projects that explore these interests further.

Daniel has previously engaged with research centred around how we measure environmental behaviour. As part of this, he has created an online task that utilises the environmental cost of sending emails, the Email Conservation Task. This innovative approach also aims to highlight the hidden environmental costs of everyday digital activities and encourage more sustainable digital practices. He said; *"there's a carbon footprint or approximately 4 grams of carbon dioxide for every email. So this can be used to look at people's likelihood of incurring the cost of not sending an email by instead incurring a personal cost, such as wasting their time or effort. By being able to measure when environmental gains are greater than personal costs, this task allows us to show that people are behaving in environmentally-friendly ways."* The aim is eventually to have it as a free resource that can be utilised by undergraduate and postgraduate students to increase the focus of sustainability within their projects.

Another significant project of his focuses on the impact of nature immersion on well-being. In collaboration with colleagues at the University of Worcester and the Royal Agricultural University, Daniel seeks to quantify the psychological benefits of spending time in nature, such as reduced stress and improved mood, supporting the idea that connecting with nature can have substantial positive effects on mental health. This research will examine the psychological and physiological responses to different environments (urban, rural, natural), aiming to provide insights into how environmental design can promote better mental health. Initially, this has taken the form of recording footage from different areas of the 'Wild about Worcester' Way to assess how people engage with different parts of the route.

A strong advocate for public engagement, Farrelly emphasizes the importance of making research accessible and engaging. He often uses pop culture references (albeit badly and over the heads of his students!) and current affairs to communicate his findings, believing that psychology has a crucial role in explaining and influencing behaviour across various aspects of life. He plans to disseminate his research findings through workshops and public events with the hope of influencing people and policy with sustainable practices.



Dr Daniel Farrelly at the Gone Wild Festival 2023, presenting in The Attraction Lab in the Science Tent.

RECENT PUBLICATIONS

A selection of research outputs published since December 2024.

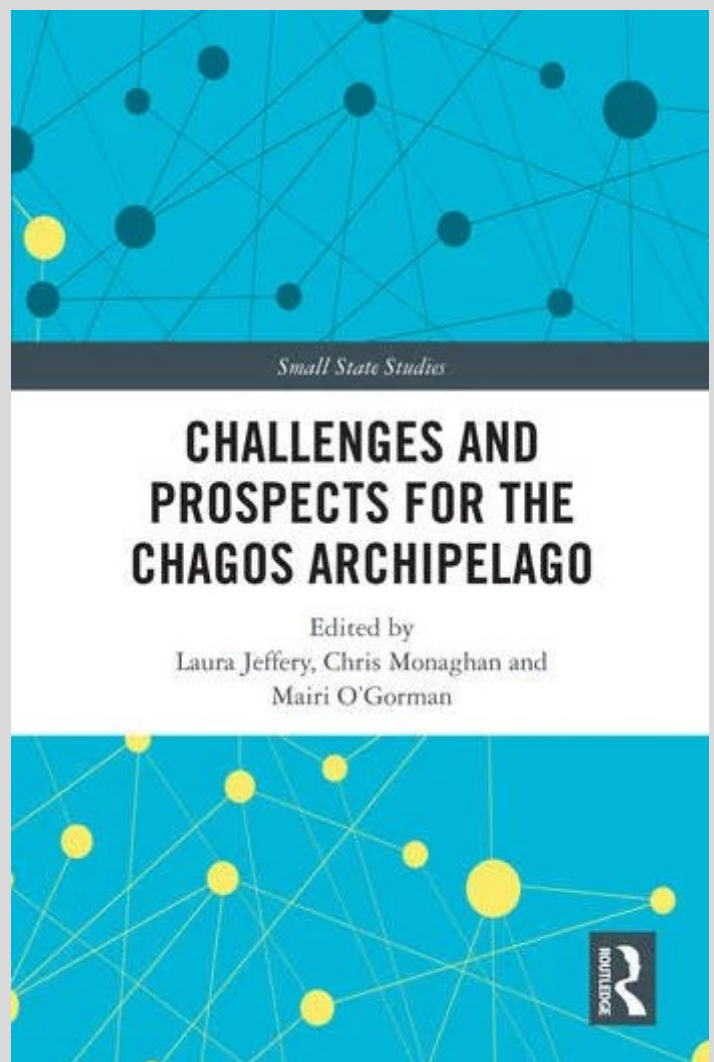
MONOGRAPHS

Monaghan, Chris, Jeffery, L. and O'Gorman, M. (2024) **CHALLENGES AND PROSPECTS FOR THE CHAGOS ARCHIPELAGO IN THE INDIAN OCEAN**. Routledge, Abingdon.

Challenges and Prospects for the Chagos Archipelago considers the origins, challenges and future of Chagos, bringing together leading experts and academics specialising in differing aspects of the Chagos dispute.

In 1965, as part of negotiations leading to Mauritian independence in 1968, the UK government excised the Chagos Archipelago from the colony of Mauritius to form part of a new overseas territory, the British Indian Ocean Territory (BIOT). The UK then set about removing the population of the Chagos Islands in order to allow the United States to construct a military base. As a consequence of the UK's acquisition of the Chagos Islands and the expulsion of the Chagossian population, there has been wide ranging litigation brought by Mauritius and the Chagossians. This has reached the International Court of Justice, the United Nations General Assembly, the European Court of Human Rights and the UK Supreme Court. This book offers a wide-ranging debate between experts and practitioners, including those of Chagossian and Mauritian heritage, touching upon key developments and offering an inclusive approach that transcends traditional disciplinary silos. Issues such as international and constitutional law, human rights, colonialism and decolonisation, using creative writing to express the experience of banishment, international relations, environmentalism, and globalisation, will be explored as part of a dialogue that sheds new light on the Chagos dispute. Edited by experts on Chagos, the contributors are drawn from across the globe, and all have a distinctive take on what has happened, what it means for the world and the region, and how Chagos will both shape and be shaped by the future.

This book will be of great interest to students, academics and researchers from across the humanities and social sciences, including political science, international relations, law, sociology, socio-legal studies, human rights, social anthropology, indigenous rights, history, colonialism, postcolonialism, and cultural studies, as well as practitioners, policymakers and general readers who are interested in Chagos.

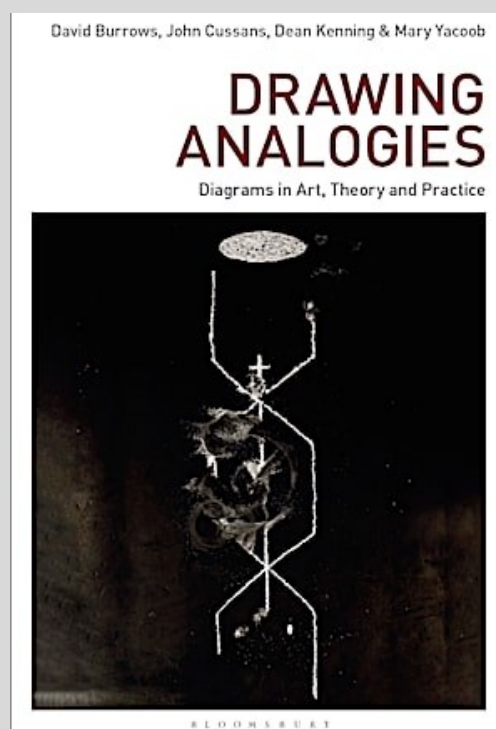


Burrows, David, Cussans, John, Kenning, Dean, and Yacoob, Mary (2024) **DRAWING ANALOGIES: DIAGRAMS IN ART, THEORY AND PRACTICE**. Bloomsbury Open Access, Bloomsbury Visual Arts, London.

By exploring diagrams, diagramming and the diagrammatic across a range of disciplines and arts-led practices, this open access book addresses the gap between diagrams as a widely valued mode of visual representation and their under-examined status within arts and art education.

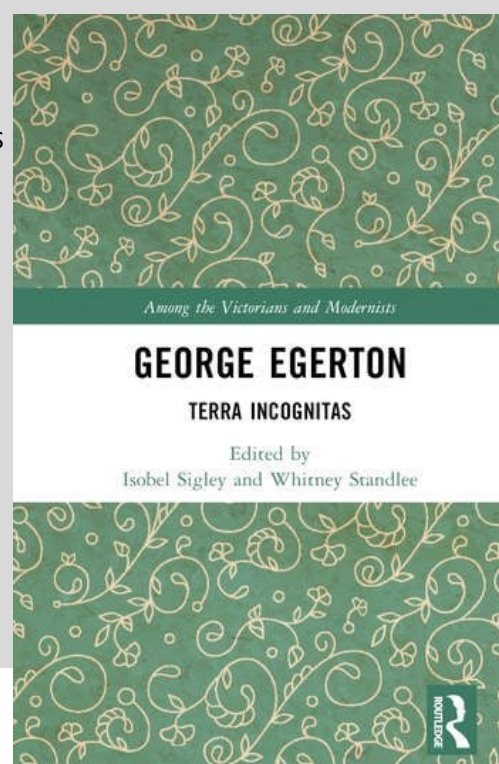
Informed by Charles Sanders Peirce's understanding of a diagram as an analogy of relations, *Drawing Analogies* draws on its authors' creative use of diagrams as artists, educators and arts researchers, and on fields of inquiry that bring the arts into alignment with other disciplines – most notably anthropology, critical theory, pedagogy, philosophy, psychology, semiotics and the physical and life sciences. This range of disciplines is evident in the artists and writers discussed, such as Gregory Bateson, Black Quantum Futurism, Salvador Dali, Phillipe Descola, Aristotle, Hilma af Klint, Rosalind E. Krauss, Yayoi Kusama, Louis Hjelmslev, Susanne Leeb, Jacques Lacan, Pauline Oliveros, and George Widener.

While the authors approach diagramming as both a technical and poetic activity, their emphasis is on creative, embodied and exploratory modes of diagramming practices, which are capable of engendering new forms, thoughts and experiences. By taking an artistic approach to diagrams and diagramming, by incorporating diagramming as a method of enquiry within chapters, and by exploring their interdisciplinary and multi-perspectival potentials, *Drawing Analogies* proposes giving new life to the art of diagramming and widening the arena of artistic practice and creative research.



Sigley, I. and Standlee, Whitney (2024) **GEORGE EGERTON: TERRA INCOGNITAS**. Routledge, Abingdon.

George Egerton: Terra Incognita is the first published work to focus solely on Egerton and her literary legacy. It covers the range and extent of Egerton's life and literary career from her emergence into the milieu of London publishing in 1893 to her dramatic works (both original and in translation) and their performance history into the 1920s. This work is an essential addition to ongoing recovery projects and is the first to focus on her 'lost' and unpublished works, mentorship of younger writers, her experiments with characterisations and themes, sociopolitical stances, innovations with form and content, and ultimately, her literary legacy. In doing so, *George Egerton: Terra Incognita* reassesses Egerton's broader contribution to fin-de-siecle and early-twentieth-century literature and drama and repositions her as among the most important of the literary innovators of period, and a noteworthy precursor to later female literary modernisers, including Katherine Mansfield, Dorothy Richardson, Elizabeth Bowen and Virginia Woolf.



SUSTAINABLE FUTURES

JOURNAL ARTICLE: Okechukwu, Emeka Chibuzor , Jimenez-Quiros, Catherine , Baysal, Omur , Kocamaz, S. , Arıkan, Burhan , Webb, A. , Wood, T. , Arora, S. , Domoney, C. , Studholme, D. and Tör, M. (2025)

PEA-SAVING PARTNERS: BACILLUS AND PSEUDOMONAS COMBAT DOWNY MILDEW IN PEA CROPS. bioRxiv. pp. 1-46.

Downy mildew (DM) is a destructive disease that significantly reduces the yield and quality of important pulses (legumes) and horticultural crops, particularly during humid and cool seasons. This disease is caused by obligate and host-specific oomycete pathogens. Controlling the pathogen is challenging due to its long-term survival as spores and its rapid mutation. Use of chemical pesticides has been the most effective method to control DM pathogens, but their environmental hazards are a global concern. Current research is focused on exploring the potential of microbial biological control agents (MBCA), particularly rhizobacteria strains of the genera *Bacillus* and *Pseudomonas*, which have shown suppression of plant pathogens. However, to date, no MBCA has been reported to be effective against DM pathogens in pulses. We investigated the effectiveness of *Bacillus* and *Pseudomonas* strains as potential biopesticides against the pea downy mildew pathogen *Peronospora viciae* f. sp. *pisi* (Pvp).

In our study, in vitro bioassays showed 100% inhibition of Pvp spore germination compared to the control. In planta antagonism assays further demonstrated significant suppression (>80%) of Pvp sporulation in pea plants sprayed with strains of *Bacillus velezensis* or *P. fluorescens* or their filtrates. The drench application also showed significant effects where either a *Pseudomonas* or cold-adapted *Bacillus* strain was used. We observed a synergistic effect for the dual foliar application of the microbes compared to individual application (27.6 to 46.7% suppression). Furthermore, the results from the molecular biomass analysis were consistent with the results of the sporulation assays. This demonstrates the strong interactive and promotive benefits of using *Bacillus* and *Pseudomonas* as biocontrol agents. Based on these results, we conclude that these MBCAs could be effective in combatting Pvp infections in the field.

DIGITAL INNOVATION

JOURNAL ARTICLE: Casado, A., Hornillos, A., Foster, C., Ranieri, L., Renfree, Andrew and Dominguez, R. (2024)

PERFORMANCE AND PSYCHOPHYSIOLOGICAL EFFECTS OF LIGHT-GUIDED PACING DURING A 5000-M RUN. International Journal of Sports Physiology and Performance, 20 (1). pp. 149-155.

Purpose In world-class middle- and long-distance running races, a 'Wavelight' signal has recently been used as a pacing guide for setting records. The aim of the present study was to compare performance and psychophysiological effects between light-guided, drafting and non-assisted pacing conditions in distance runners.

Methods Fifteen male middle- and long- distance runners of national and regional standard ran three 5000-m time trials in a counterbalanced order with the following pacing distribution: the first 4000-m and last 1000-m were covered at submaximal and maximal intensities, respectively. The three trials (conditions) were: a) self-paced, b) guided by a light signal, and c) guided by a cyclist in front (drafting condition). Pace, heart rate (HR), Rating of Perceived Exertion (RPE), and affective valence were recorded every 500-m.

Results No statistically significant differences were found between pacing light and self-paced conditions. Running time was shorter in the drafting vs. self-paced condition in the final 500-m section ($p = 0.031$; $d = 0.76$). No differences were found between drafting and light conditions. Similarly, whereas nine out of ten significant differences in terms of lower HR or RPE or higher affective valence responses were found in the drafting vs. self-paced condition ($p = 0.004$ - 0.041 ; $d = 0.63$ - 1.39), only four were found across the tests in the drafting vs. light condition ($p = 0.005$ - 0.016 ; $d = 0.66$ - 0.84).

Conclusion Light-guided pacing did not influence performance or psychophysiological responses in distance runners during a 5000-m test, but drafting produced a large effect.

JOURNAL ARTICLE: Panagiotaropoulou, G., Hellberg, K., Coleman, J., Seok, D., Kalman, J., Mitchell, P., Schofield, P., Forstner, A., Bauer, M., Scott, L., Pato, C., Pato, M., Li, Q., Kirov, G., Landén, M., Jonsson, L., Müller-Myhsok, B., Smoller, J., Binder, E., Brückl, T., Czamara, D., Van der Auwera, S., Grabe, H., Homuth, G., Schmidt, C., Potash, J., DePaulo, J., Goes, F., MacKinnon, D., Mondimore, F., Weissman, M., Shi, J., Frye, M., Biernacka, J., Reif, A., Witt, S., Kahn, R., Boks, M., Owen, M., Gordon-Smith, Katherine, Mitchell, B., Martin, N., Medland, S., Jones, Lisa, Knowles, J., Levinson, D., O'Donovan, M., Lewis, C., Breen, G., Werge, T., Schork, A., Ophoff, R., Ripke, S. and Olde Loohuis, L. (2025) **IDENTIFYING GENETIC DIFFERENCES BETWEEN BIPOLAR DISORDER AND MAJOR DEPRESSION THROUGH MULTIPLE GENOME-WIDE ASSOCIATION ANALYSES.** The British Journal of Psychiatry. pp. 1-12.

Background Accurate diagnosis of bipolar disorder (BPD) is difficult in clinical practice, with an average delay between symptom onset and diagnosis of about 7 years. A depressive episode often precedes the first manic episode, making it difficult to distinguish BPD from unipolar major depressive disorder (MDD).

Aims We use genome-wide association analyses (GWAS) to identify differential genetic factors and to develop predictors based on polygenic risk scores (PRS) that may aid early differential diagnosis.

Method Based on individual genotypes from case-control cohorts of BPD and MDD shared through the Psychiatric Genomics Consortium, we compile case-control cohorts, applying a careful quality control procedure. In a resulting cohort of 51 149 individuals (15 532 BPD patients, 12 920 MDD patients and 22 697 controls), we perform a variety of GWAS and PRS analyses.

Results Although our GWAS is not well powered to identify genome-wide significant loci, we find significant chip heritability and demonstrate the ability of the resulting PRS to distinguish BPD from MDD, including BPD cases with depressive onset (BPD-D). We replicate our PRS findings in an independent Danish cohort (iPSYCH 2015, N = 25 966). We observe strong genetic correlation between our case-control GWAS and that of case-control BPD.

Conclusions We find that MDD and BPD, including BPD-D are genetically distinct. Our findings support that controls, MDD and BPD patients primarily lie on a continuum of genetic risk. Future studies with larger and richer samples will likely yield a better understanding of these findings and enable the development of better genetic predictors distinguishing BPD and, importantly, BPD-D from MDD.

JOURNAL ARTICLE: Wang, Y., Wang, Y., Khan, Zaki Ahmed, Huang, A. and Sang, J. (2025) **MULTI-LEVEL FEATURE FUSION NETWORKS FOR SMOKE RECOGNITION IN REMOTE SENSING IMAGERY.** Neural Networks, 184 (107112).

Smoke is a critical indicator of forest fires, often detectable before flames ignite. Accurate smoke identification in remote sensing images is vital for effective forest fire monitoring within Internet of Things (IoT) systems. However, existing detection methods frequently falter in complex real-world scenarios, where variable smoke shapes and sizes, intricate backgrounds, and smoke-like phenomena (e.g., clouds and haze) lead to missed detections and false alarms. To address these challenges, we propose the Multi-level Feature Fusion Network (MFFNet), a novel framework grounded in contrastive learning. MFFNet begins by extracting multi-scale features from remote sensing images using a pre-trained ConvNeXt model, capturing information across different levels of granularity to accommodate variations in smoke appearance. The Attention Feature Enhancement Module further refines these

multi-scale features, enhancing fine-grained, discriminative attributes relevant to smoke detection. Subsequently, the Bilinear Feature Fusion Module combines these enriched features, effectively reducing background interference and improving the model's ability to distinguish smoke from visually similar phenomena. Finally, contrastive feature learning is employed to improve robustness against intra-class variations by focusing on unique regions within the smoke patterns. Evaluated on the benchmark dataset USTC_SmokeRS, MFFNet achieves an accuracy of 98.87%. Additionally, our model demonstrates a detection rate of 94.54% on the extended E_SmokeRS dataset, with a low false alarm rate of 3.30%. These results highlight the effectiveness of MFFNet in recognizing smoke in remote sensing images, surpassing existing methodologies.

PROFESSIONAL EDUCATION

JOURNAL ARTICLE: *Sheehy, Amanda (2025)* **CHANGING ATTITUDES: TEACHER REFLECTION AS A TOOL TO PROMOTE GENDER EQUALITY IN PRIMARY SCHOOLS.** Education 3-13 International Journal of Primary, Elementary and Early Years Education. pp. 1-15.

Teachers' discussions about their life histories and their practice were analysed to evaluate the possible application of reflection as a useful tool to promote gender equality. In semi-structured interviews, 14 teachers from English primary schools reflected on the influences which had shaped them, their exposure to gender stereotypes and how these may have contributed to their own pedagogic approaches and interactions with pupils. Findings suggest that this approach can be a powerful tool in changing attitudes; the teachers in the sample demonstrated a

willingness to alter their practice, changing their behaviour, language, choice of resources, approaches to curriculum and management of the learning environment. The data suggest that inviting teachers to reflect on their personal experiences and their potential implications for their professional practice, may trigger long-lasting attitudinal change which can be effective in promoting equality to the benefit of pupils at an important stage in their gender construction.

JOURNAL ARTICLE: *Peek, Russell (2024)* **DANCES WITH DOVES, HAWKS AND EAGLES: REALISING THE POTENTIAL OF EMOTION DURING SIMULATION.** Medical Education. pp. 1-3.

"The Learner approached the steep white steps leading down to the simulation suite, hastily scribbled notes under her arm, her mind alive with the task ahead. As she pushed through the door, she was greeted by the familiar sights and sounds of the almost-clinical space. The Learner offered a hesitant smile to her fellow students and silently rehearsed the simulation mantra, planning her strategy as this week's team leader. Her mind wandered to who would be facilitating the session. Would it be the

Dove, supportive and kind, ready to extend an olive branch if things got out of hand? Or the Hawk, intense and expectant, introducing unanticipated twists and turns if it all seemed to be going too well. Perhaps it would be the Eagle, steadfast and reliable, inscrutable until it was all done bar the talking. In the end, did it really matter? She would get through it, and there would be time to reflect on what was, and what could have been. A, B, C, D, E ..."

JOURNAL ARTICLE: *Lau, Annica, Haist, J. and Hewett, R (2025)* **IMPACT-DRIVEN SCHOLAR, REFLECTIVE PRACTITIONER, OR PRACADEMIC? CONCEPTUALIZING HYBRID ROLES TO BRIDGE THE RESEARCH-PRACTICE GAP IN HRM.** Human Resource Management Review, 35 (2). pp. 1-13.

Bridging the gap between theoretical concepts relating to human resource management (HRM) and practical application of research insights is essential for creating important, relevant, and therefore high impact management theories about work and organizations. Pracademics, who actively participate in both research and practice activities, cross boundaries between domains, so play a critical role in bringing theories into practice. However, the role of pracademics is conceptually underdeveloped and ambiguous, limiting our understanding of how actors engage in bridging the research-practice divide. We propose a continuum of research-practice roles,

recognizing that hybrid roles are often fluid in nature. We explain how hybrid professionals hold different identities; as impact-driven scholars, reflective practitioners, or pracademics. These roles have implications for individuals' activities, identity work, career, and collaboration. Drawing on three contemporary challenges in HRM, we illustrate how hybrid professionals can align HRM theory and practice and help close the research-practice gap. As well as theoretical and managerial implications, we also highlight implications of the continuum of roles for policy makers and funders.

JOURNAL ARTICLE: *Norman, Kay, Lewis, Alison and Carter, Louise (2025)* **THE ROLE OF THE NURSE LEADER IN FACILITATING EFFECTIVE SUPPORT AND COMMUNICATION TO RAISE CONCERNS.** *British Journal of Nursing*, 34 (3). pp. 2-6.

This article examines several factors that can affect how raising of concerns can be supported. Nurse leaders have a vital role in this process to maintain patient safety and act accordingly within the NMC Code. Considerations are provided to explore how the nurse leader can facilitate communication with

all team members to influence organisational culture, where colleagues feel confident in voicing concerns. Professional responsibilities pertinent to this process are highlighted which include the nurse leader as an advocate and supporting constructive challenge.

JOURNAL ARTICLE: *Gilbert, Beverley (2025)* **EXAMINING PEER MENTORING WITH WOMEN WHO EXPERIENCE MULTIPLE AND COMPLEX DISADVANTAGE: A FEMINIST ETHICAL MODEL OF PRACTICE.** *Journal of Gender Studies*. pp. 1-14.

Despite the recognized strengths and benefits of peer mentoring as a process, this practice remains an underexplored area for women in communities who experience multiple and complex disadvantage linked to trauma. This article explores the perspectives of those who deliver and receive peer mentoring, with the aim of building a more comprehensive understanding of such practice in developing a model of peer mentoring based on feminist ethics of care. Three women's organizations located in England participated in this study and in-depth, semi-structured interviews were undertaken with decision makers (n = 5), peer mentors (n = 11) and mentees (n = 8). This research is framed within feminist

qualitative research where reflexive thematic analysis considered the findings from the data collected from 24 interviews (Braun & Clarke, 2022). The findings from this study identify that peer mentoring is a complex form of community level support that provides a welcome approach from the more formal, statutory, community provision many women with multiple and complex disadvantage experience. A feminist ethical model of delivery is devised within this article to be considered within women's sector community practice. The elements of the model being: community strength, meeting expressed need and having clear feminist ethical foundations of trust and care.

SOCIAL EXCLUSION, CULTURE AND IDENTITY

JOURNAL ARTICLE: *Edwards, Christian, Mahoney, Berenice, Richardson, Emma and Lowe, Rebecca (2024)* **"STAYING ISOLATED INDOORS MEANS THAT NOBODY SEES ME": ONTOLOGICAL (IN)SECURITY AND LIVING WITH SIGNIFICANT APPEARANCE CONCERNS BEFORE, DURING, AND 'SINCE' COVID-19** *International Journal of Qualitative Studies on Health and Well-being*, 19 (1). pp. 1-14.

Purpose Though a worldwide period of uncertainty (COVID-19) has 'ended', there exists a legacy of maladaptive experiences among people with significant appearance concerns (SAC) that requires care and attention.

Methods Using Giddens' concept of ontological security, we explored how people experienced their SAC before, during and "since" COVID-19. Qualitative surveys allowed us to capture diverse perspectives from individuals transnationally, analysed with deductive reflexive thematic analysis using ontological security as our theoretical foundation.

Results Themes named "More Mirror(ed) Time" and "Locked Out, Shut Down, and Shut Out" gave a contextual grounding for the embodied experiences

of this group through times of social restrictions, and the theme "Redefining Relevance" explored the continued legacy of COVID-19 – and continued global uncertainties such as economic hardship and warfare – that impact the wellbeing of people with SAC.

Conclusions People with SAC are still 'locked out' from essential healthcare support as those providing healthcare are overworked, under-resourced and rely on efficient interactive methods such as tele-health that may be triggers for people with SAC. Care providers may consider expanding appearance concerns verbiage, look to involve trusted others in the care-seeking process, and utilize modalities beyond digital health to support people with SAC.

BOOK SECTION: *Arnold, Lucy (2024) 'THIS IS A PLACE FOR THE DEAD': READING THE GHOST CHILD IN JESMYN WARD'S 'SING, UNBURIED, SING'.* In: *The African American Novel in the Early Twenty-First Century. European Perspectives on the United States*, 12 (Ch.14). Brill, Netherlands, pp. 268-286.

In this analysis I contend that the spectral children present in Jesmyn Ward's *Sing, Unburied, Sing* (2017) act to offer instruction for witnessing those whose loss is unacknowledged, via their re-organization of conventional modes of perception and of knowing. Furthermore, I demonstrate that these alternative modes of seeing (possessed by children whose own visibility and social acknowledgement is radically

compromised), in contrast to the "uninstructing dead" invoked by Derek Walcott in the novel's epigraph, give rise to potentially "instructing" narratives of seeing and being seen which do not end but rather which must continue to be told and retold, in order to shift in ways which accommodate the narratives and experiences of future generations alongside those of their forebears.

JOURNAL ARTICLE: *Ojwang, S., Foster, Rebecca and Odiango, R. (2025) EXPLORING LIVED EXPERIENCES OF KENYAN PARA-ATHLETES: TURNING BARRIERS INTO POSSIBILITIES.* *Journal of Sport for Development*, 13 (1). pp. 1-15.

Background: In developing countries, participation and success in elite para-sports are relatively low primarily because of the numerous barriers para-athletes face. The objective of this study, which focused on elite para-athletes from Kenya, was to investigate their lived experiences and how they overcome these barriers to participate and excel at the international level.

Methodology: A qualitative research approach was employed to collect data from the participants through virtual interviews. Five participants (three females and two males) were selected using a purposive sampling strategy and interviewed using semi-structured questions. The data obtained were analyzed using Interpretive Phenomenological Analysis (IPA).

Findings: Based on the gathered data, four primary themes emerged: local para-sports events, a supportive environment, media, and international aid. These factors play a crucial role in enabling para-athletes to excel in their respective sports and achieve international recognition.

Conclusion: The lived experiences of para-athletes shed light on strategies for approaching and overcoming barriers to para-sports participation, ultimately leading them to compete at the highest levels of para-sport events. This study provides valuable insights for para-sport practice, policy, and research and can guide the development of intervention programs for para-athletes in developing countries.

HEALTH AND WELLBEING

JOURNAL ARTICLE: *Monte Nero, D.S., Lira, C.R.N., Paz, C.L.S.L., Costa, P.R.F.C., Cunha, C.M., Bueno, Allain, Jesus, R.P. and Oliveira, L.P.M (2024) EFFECT OF PHYSICAL ACTIVITY ON DEPRESSION, ANXIETY, AND STRESS IN WOMEN SURVIVING BREAST CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CLINICAL TRIALS.* *Journal of Health Psychology*. pp. 1-19.

Breast cancer treatment can lead to psychological distress, including depression, anxiety, and stress. We systematically investigated the effect of physical exercise on these factors in women surviving breast cancer (WSBC). Eight databases were searched to identify eligible randomized controlled trials (RCTs). Data extraction and bias risk analysis were conducted using standardized tools, with meta-analysis performed using RevMan® software. Out of 3529 documents initially identified, 15 RCTs were included, comprising 2756 WSBC (1284 in intervention groups and 1472 in control groups), with 2082 participants

in depression analyses, 513 in anxiety analyses, and 161 in stress analyses. Meta-analyses showed that physical exercise promoted significant reduction in depression and anxiety. Subgroup analyses showed greater reduction in anxiety when aerobic and resistance exercise were combined. Only two studies investigated stress, with less robust data suggesting improvement when combining aerobic and resistance interventions. Future RCTs with standardized intervention protocols are needed to confirm these findings.

JOURNAL ARTICLE: Ye, W., Zhang, R.S., Hosang, G.M., Fabbri, C., King, N., Strauss, J., Jones, I., Jones, Lisa, Breen, G., Kennedy, J.L., Vincent, J.B. and Zai, C.C. (2024) **ASSOCIATION OF NTRK2 GENE WITH SUICIDALITY: A META-ANALYSIS.** *Psychiatric genetics*, 34 (6). pp. 124-133.

Background Previous studies have shown that genes in brain development pathways may have important roles in affecting risk of suicidal behaviors, with our previous meta-analysis supporting a role of the brain-derived neurotrophic factor (BDNF) gene. NTRK2 is a gene that encodes the neurotrophic receptor tyrosine kinase 2, which is a receptor for BDNF. In the current study, we aim to examine the potential association between NTRK2 single nucleotide polymorphism (SNPs) and suicidal ideation/behaviors.

Methods We first conducted a literature search using keywords like 'NTRK2', 'TRKB', and 'suicid*' to identify papers on NTRK2 SNPs and suicidal ideation/behaviors. In addition, we have individual-level genotype data for all the identified SNPs in literature search. We used the R meta package to perform meta-analyses on both the genotype count and the

allele count data. Moreover, we performed meta-analyses on specific haplotypes within each haplotype block.

Main results Following our literature search and meta-analyses on 20 NTRK2 SNPs across up to 8467 samples, we found three SNPs, rs10868235 [N = 5,318, odds ratio (OR) = 1.34, P = 0.02], rs1867283 (N = 5,134, OR = 0.73, P = 0.04), and rs1147198 (N = 5,132, OR = 1.36, P = 0.03) to be nominally associated with suicidal attempts. Those three findings, however, did not survive multiple-testing corrections. Also, none of the haplotype blocks showed significant involvement in suicidality.

Conclusion Our results suggest that the NTRK2 gene may not have a major role in suicidality. Future efforts, however, should explore gene-gene interaction and pathway analyses.

JOURNAL ARTICLE: Cook, Matthew, Shan, Yusen and Willems, M. (2025) **EFFECTS OF NEW ZEALAND BLACK CURRANT EXTRACT ON EXERCISING SUBSTRATE UTILIZATION AND POSTEXERCISE BLOOD PRESSURE IN MEN AND WOMEN.** *International Journal of Sport Nutrition and Exercise Metabolism*, AOP. pp. 1-12.

New Zealand blackcurrant extract (NZBC) has been shown to increase fat oxidation during exercise and the post-exercise blood pressure in males and females. The change in fat oxidation by NZBC has also been shown to be correlated to body composition in males and females. There has never been a comparison of sex responses within the same study. Twenty-two participants (11 males and 11 females, age: 29±8 years, maximal oxygen uptake ($\dot{V}O_{2max}$): 44±9 mL·kg⁻¹·min⁻¹, body fat: 18±6 %) had resting blood pressure measured for 2 hr (no exercise). In a double-blind, placebo-controlled (PLA), randomised crossover design, participants completed one hour of treadmill exercise at 50% $\dot{V}O_{2max}$ with expired gas measurement, followed by 2-hr resting blood pressure measurement with 7-days of NZBC or PLA. Average fat oxidation was different between the

conditions (NZBC: 0.27±0.11, PLA: 0.21±0.12 g·min⁻¹, P<0.001), but the response between males and females was not different. When combined, there was no relationship (P>0.05) between body fat percentage and change in fat oxidation (Δ FATOX) (r=-0.079), with males also demonstrating no relationship (r=-0.069), but females did demonstrate a relationship (r=0.691, P<0.05). In the 2-hr rest, systolic pressure delta change was larger with NZBC than PLA (no exercise vs. NZBC: -5.5±5.4, vs. no exercise vs. PLA: -2.9±5.1 mmHg, P<0.001) but was not different between males and females. A 7-day intake of NZBC extract increases fat oxidation during moderate-intensity exercise and decreases post-exercise blood pressure in males and females. The magnitude of change in fat oxidation in females is correlated to body fat percentage.

JOURNAL ARTICLE: *Jones, Lisa , Perry, Amy , Gordon-Smith, Katherine and et, al. (2025)* **GENOMICS YIELDS BIOLOGICAL AND PHENOTYPIC INSIGHTS INTO BIPOLAR DISORDER.**

Nature. pp. 1-28.

Bipolar disorder is a leading contributor to the global burden of disease¹. Despite high heritability (60–80%), the majority of the underlying genetic determinants remain unknown². We analysed data from participants of European, East Asian, African American and Latino ancestries (n = 158,036 cases with bipolar disorder, 2.8 million controls), combining clinical, community and self-reported samples. We identified 298 genome-wide significant loci in the multi-ancestry meta-analysis, a fourfold increase over previous findings³, and identified an ancestry-specific association in the East Asian cohort. Integrating results from fine-mapping and other variant-to-gene mapping approaches identified 36 credible genes in the aetiology of bipolar disorder.

Genes prioritized through fine-mapping were enriched for ultra-rare damaging missense and protein-truncating variations in cases with bipolar disorder⁴, highlighting convergence of common and rare variant signals. We report differences in the genetic architecture of bipolar disorder depending on the source of patient ascertainment and on bipolar disorder subtype (type I or type II). Several analyses implicate specific cell types in the pathophysiology of bipolar disorder, including GABAergic interneurons and medium spiny neurons. Together, these analyses provide additional insights into the genetic architecture and biological underpinnings of bipolar disorder.

JOURNAL ARTICLE: *Lau, J., Cations, M. , O'Malley, Mary, Stamou, V., Oyeboode, J. , Parkes, J., Carter, J. and Loi, S. (2024)* **ESTABLISHING GOLD STANDARD ASSESSMENT FOR YOUNG ONSET DEMENTIA: A MODIFIED E-DELPHI CONSENSUS SURVEY BASED IN AUSTRALIA.**

International Journal of Geriatric Psychiatry, 39 (12). pp. 1-15.

Objectives A modified e-Delphi was used to explore subject-expert consensus to create a minimum & gold standard assessment for young-onset dementia (YOD) for clinicians based in Australia.

Methods A list of 72 statements adapted from an international study, O'Malley et al. 2020, was included in an online survey that was distributed to clinical experts in the field. Respondents were asked to rate statements on a Likert scale of 1–7 (ranging from '1' being 'not at all important' to '7' being 'absolutely essential'). The mean and standard deviation (SD) were calculated for each statement. Full consensus, designated as 'minimum standard' was defined as 100% of respondents rating statement(s) as 'absolutely essential' (7) or 'very important' (6), while high consensus, designated as 'gold standard' was defined as 80% (16 out of 20) of respondents rating statement(s) as either 'absolutely essential' or 'very important' in the assessment for YOD. The statements that had overall mean scores below 6 did not reach consensus.

Results Full consensus was achieved on 13 statements ('minimum standard'), 80% consensus was reached on 37 statements ('gold standard'), and no consensus was reached on 35 statements. Most clinicians agreed that the diagnosis of YOD is largely based on history, with less emphasis placed on

aspects of the examination and investigations conducted. History of first-degree family members with YOD and any past psychiatric symptoms were reported to be potential triggers for a YOD diagnosis. There was agreement that the routine dementia blood screen and baseline structural imaging should be a part of the diagnostic assessment criteria of YOD. Comparisons were made between the results of this Australian-based study to the original international study, which found that 55/72 statements (76%) were similarly rated.

Conclusions Based on the results of this modified e-Delphi study, full and high consensus was reached on 37 statements which were comparable to results in an international study. This suggests that in general, clinicians in Australia have agreement with international experts about what is important for the assessment and diagnosis of YOD. Because the statements used in the international study were used in this Australian study, consideration of what issues may be specific to the Australian context such as YOD in Aboriginal Australians and rurality may have not been ascertained. In spite of this, these results may be useful to aid clinicians in their assessment for YOD but consensus statements may change over time as development in knowledge and available tests increases.

IMPACT

NAVIGATING THE ELECTRIC PLAYGROUND



Dr Pamela Murray

Senior Lecturer in Leadership
Worcester Business School

On November 6th 2024 Dr Sarah Davis coordinated the [Interpersonal Relationships & Wellbeing Research Group Conference: Discover & Connect](#). The event aimed to raise awareness of our University work and foster new collaborations in [Customer Interactions](#); [People & Work](#); [Trauma & Violence Prevention](#); [Wellbeing for life](#):- <https://irwbresearch.wp.worc.ac.uk/>

As a member of the People & Work research and knowledge exchange group, I was really pleased to have the chance to try and articulate my ideas hitherto discussed with peer-collaborator Dr Alison Murray (of the University of Stirling). Sarah was delighted to encourage 'works in progress' as well as completed bodies of work ready for sharing. Signing up for the Discover and Connect Conference established a clear goal helping to make tangible the working notions in mind.

Whilst this first 'outing' of the anticipated work was somewhat generic, the direction of travel and fundamental detail did emerge, namely the essence of the workshop design which was to be based on my leadership theory, 'en vivo leadership', to be applied to underpin the upskilling of children's critical thinking capabilities when playing online. This theory was conceptualised when deconstructing dilemmas facing military personnel and shown to signify and influence metacognition under certain performance conditions (Murray, 2003, <https://eprints.worc.ac.uk/id/eprint/14604>; 2006 cited in <https://eprints.worc.ac.uk/id/eprint/14101> ; 2020, <https://eprints.worc.ac.uk/14116/>).

The 'en vivo leadership' methodology was deemed a viable fit for conditions of strife such as associated with being online engaged in play when under the gaze of would-be predators. The creation of an intervention to address such times of online predatorial lure was targeted as the workshop presentation took shape:-

Murray, P. and Murray, A. (2024) *An integrative design for equipping caretakers & staffs performance acuity & empathy to match the demands of children's navigating the electric playground*. In: Interpersonal Relationships & Wellbeing Research Group Conference: Discover & Connect, 7th November 2024, St John's Campus, University of Worcester <https://eprints.worc.ac.uk/id/eprint/14380>

To take the work to its next stage of conceptualisation we were delighted to deliver at The Centre for Research into the Education of Marginalised Children and Young Adults (CREMCYA) Practice for Policy Poster Conference hosted by Lord Hastings of Scarisbrick CBE, House of Lords:- <https://www.stmarys.ac.uk/events/2024/insights-from-practice-for-policy-poster-conference>; <https://eprints.worc.ac.uk/14503/7/insights-from-practice-for-policy-booklet-updated.pdf>

The Centre for Research into the Education of Marginalised Children and Young Adults (CREMCYA) seeks to nurture positive relationships with stakeholders to positively impact children and young adults' lives by supporting and informing policies concerning them, and the practitioners who work with them. At the event we were joined by invitees including children and their teachers from local schools, sector practitioners, academics, researchers, representative from business and industry, along with other interested stakeholders and Members of the respective Houses of Commons and Lords.

The progression in the articulation in our acquisition of resilience and capacity to counter predatorial lure work was elicited by the requirement for cogency by the Poster format. This turned out to be a super

medium to focus our thinking and identify next steps:

Murray, Pamela, Murray, A. and Howells, K. (2025) *The interruption and deconstruction of lure through 'play fake' behaviours using the en vivo leadership time-phased intervention methodology to affirm children's agency when under online predatorial duress*. In: Education: Insights for Policy from Practice and Research. The Centre for Research into the Education of Marginalised Children and Young Adults (CREMCYA) at St Mary's University Poster Conference & Information Exchange Event., January 21st 2025, House of Lords Cholmondeley Room.

The essence is to work with children and their caretakers to identify the social and sociological influences of play according to the children's context. This will create a salience to each child's acquired 'readiness' for online play. Importantly this willingness to join in along with would-be online playmates, would not have been established in real life settings under forms of (plain sight) safeguarding. The online play seems to benefit from unearned social capital resonant in the formative years where children have been encouraged to get along with others. In our work the would-be online 'play fake' gains an unwarranted place of trust when engaged in virtual play which increases the likelihood of a child's play being 'hijacked' by mal-intended manipulated play behaviours from a disingenuous proponent fluent in gaming conventions and their disruption.

The workshop aims to offer a series of inputs designed to establish bespoke antecedents for each child affirming identity, values, resourcefulness and awareness of the child/young person and their caretakers. It will also oversee 'lived experience' scenarios along with skills derived to meet the challenges and hear from specialists in 'what to do' when things are out of kilter when online playing. From the premise of the workshop, research will be conducted to explore whether an individual's agency and critical thinking make a difference to child's awareness of online patterns as per the *en vivo* leadership's time phases. This will be used to equip a child and their caretaker for all phases of the time activated in terms of risk heightened by unwelcome virtual company.

Ultimately the work is hoped to contribute to children's life education and training for online safety. It is expected to partner and follow-on from the collaborative work we are currently involved with:- 'THE ELECTRIC PLAYGROUND. The Pervasive Electrification of Childhood, Its Consequences and the Resolutions'. This latter work is earmarked for submission later this year to the House of Commons as appointed by the Alliance 4 Children in association with the Children's Alliance.

As a keen participant on the University's Research Impact Development and Acceleration Programme (RIDAP), I have been guided in how to align and synergise my scholarly and practitioner effects to better appreciate and realise their (would-be) impact. This has been useful in my resetting the orientation of my professional scholarly activities.



Dr Pamela Murray with Baroness Frances D'Souza, former scientist, politician, active member of the House of Lords and Honorary President of the Children's Alliance and The Alliance 4 Children, and Dr Alison Murray.

THE JEWISH EXPERIENCE IN NAZI GERMANY: PERSPECTIVES FROM THE DIARY OF VICTOR KLEMPERER WITH DR PADDY MCNALLY

Monday 27 January 2025, the Hive

To mark Holocaust Memorial Day 2025 and the 80th anniversary of the liberation of Auschwitz-Birkenau, Dr Paddy McNally, Principal Lecturer in History and Politics, delivered a talk on The Jewish Experience in Nazi Germany. The talk examined the observations of Victor Klemperer, a Professor of Romance Languages at the Technical University of Dresden.

Klemperer was born to a Jewish family, he converted to Protestantism and married Eva Schlemmer, an 'Aryan'. Klemperer kept a secret diary between 1933 and 1945, recording the progressive persecution of the German Jewish population.

Dr McNally said: "When we think about the Holocaust, we often think about the numbers of people killed. Sometimes it's helpful to focus on the experiences of individual people because that can bring home the reality of how individuals were affected. Victor Klemperer is a hugely important figure, and his diary is unique. It records from the beginning of the Nazi regime up to the end of the war, and whenever a historian writes about antisemitism at this time, virtually all of them will refer to his diary because it was so comprehensive."

THE MYSTERIES OF THE SHAKESPEARES' MARRIAGE WITH PROF NICOLETA CINPOES, REV DR PAUL EDMONDSON AND TOM MANDALL

Tuesday 11 February 2025, the Hive

Internationally renowned Shakespeare experts explored the mysteries of Shakespeares' marriage documentation, held in The Hive, with Worcestershire Archives & Archaeology Service, as well as marriage in the period and the plays, and cultural depictions and afterlives of this marriage in Shakespeare's work and biographies.

The session was led by Rev Dr Paul Edmondson ; Head of Research for the Shakespeare Birthplace Trust, an Honorary Fellow of The Shakespeare Institute at the University of Birmingham, and Prof. Nicoleta Cinpoes, is Professor of Shakespeare Studies and International Experience Lead for the Institute of Arts and Humanities at the University, and Doctor Honoris Causa of the University of Craiova, Romania.

WHAT'S HAPPENING WITH DIEGO GARCIA AND THE CHAGOS ISLANDS? BOOK LAUNCH AND DISCUSSION

Wednesday 12th February 2025, Online

In February, Dr Chris Monaghan, Principal Lecturer in Law , launched the release of a book he co-edited '*Challenges and Prospects for the Chagos Archipelago in the Indian Ocean*', with an online discussion event involving Chagossians, lawyers, diplomats, poets, and academics from New York, Mauritius, and Great Britain.

The book explores the international controversy over the future of the Chagos Islands; Britain's last colony in the Indian Ocean.

HONORARY PROFESSOR PRESENTS AT INTERNATIONAL CONFERENCE

20-21 February 2025, Facultad de Ciencias de la Comunicación at the Universidad de Málaga, Spain

Honorary Professor of Geography, David Storey, recently presented at the 3rd International Congress of SPRING, hosted by the Facultad de Ciencias de la Comunicación at the Universidad de Málaga, Spain.

His paper was titled: *Nationality Choices and Sporting Citizenship in Football: Conflicting Allegiances*.

SPRING is the sport and politics research international network, of which David is a founding member.

The event was attended by researchers drawn from a range of countries and contributions covered a variety of political, cultural and media themes drawn from a variety of different sporting contexts.

BAROQUE WALKS

Wednesday 26th February 2025, St. John's Campus, University of Worcester

On 26th February, Dr Danial Somerville, Senior Lecturer and Practice Researcher in the Department of Theatre, Film and Media Production, presented a practice as research event, Baroque Walks, ahead of LGBTQ+ History Month 2025.

"Baroque Walks is a movement-based performance resulting from a contemplation of Baroque art, performance and environment and how that intersects with contemporary aesthetics, fashion and sensibilities. Two performers from different movement disciplines share their vocabularies and techniques with each other and playfully embody queer identities past and present in a search for beauty, joy, artifice and connection. An outcome of Practice Research, Baroque Walks takes the audience on a journey from research to revelation as the performers tumble into a fictional world of theatrical gender play and confusion. Weighed by the gender expectations and religious oppressions of the era, they escape to safety in the fantastical realm of the opera and theatre. Ultimately, the work acknowledges the problematics of the era while celebrating the excess, elaborate decorativeness and not so subtle queerness with which it also resonates, ending in an achingly beautiful duet of queer pathos."



DOCTORAL DIRECTIONS FOR INCLUSION EVENT

Tuesday 11th March, Online

In March, three Doctoral students showcased their PhD research at a Doctoral Directions for Inclusion event as part of the Inclusion by Design Research Group workshop series. Ana Kennett shared her insights regarding a heuristic inquiry that proposes the development of trauma-informed HEIs. Helen Wilson spoke of using lesson study to inform the development of digital accessibility curricula for KS2 students and Alison Double delivered a talk about her project using an action research approach to strengthening sensory awareness for primary teachers that considers the needs of all learners, especially those with autism.

SHAKESPEARE WEEK: THE GREAT SHAKESPEARE SHOWDOWN PANEL DISCUSSION

Wednesday 26th March 2025, The Hive

A panel of University of Worcester staff (and friends) made up of Shakespeare experts and enthusiasts made a case for their favourite Shakespeare plays during this panel discussion. Audience members were invited to share their thoughts and pitch their own favourites, and vote for the 'Hive's Favourite Shakespeare Play'. Panellists included:

Ginny Lemon - local icon, self-proclaimed "part-time drag queen" and Shakespeare enthusiast.

Dr Daniel Somerville - an artist practitioner, senior lecturer and practice researcher at the University of Worcester. His research interests are in the fields of performance, theatre, gender and opera studies.

Professor Nicoleta Cinpoes - Professor of Shakespeare Studies and International Experience Lead for the Institute of Arts and Humanities at the University of Worcester. Her recent work has focussed on European Shakespeare Festivals, especially on their role of empowering communities, facilitating mobility and engendering exchange.

Tom Mandall - Academic Liaison Librarian in the Institute of Arts and Humanities at the University of Worcester. He has been a Shakespeare enthusiast for as long as he can remember and has degrees in English Literature, including postgraduate study at the Shakespeare Institute University of Birmingham).

DARWINIZING THE BATTLE AGAINST CLIMATE CHANGE

Friday 28th March 2025, City Campus, University of Worcester

Understanding environmental issues from an evolutionary perspective

As part of Dr Daniel Farrelly's ongoing research using evolutionary psychology, this workshop focussed on how evolutionary theory can be applied and used to help us address the challenge of climate change. Via a collection of presentations from researchers active in this area, this workshop provided a great introduction to the potential links between the evolutionary human sciences and environmental behaviour.

This event was a collaboration between the University of Wolverhampton and the University of Worcester, funded by the European Human Behavior and Evolution Association.

MAPPING BRITAIN'S COASTAL RAILWAY AND WALKING ROUTES

Online Resource

Building upon his research centred around psychogeography, Senior Lecturer in Graphic Design, Andy Stevenson, has been part of a group of volunteers who have been working to get people out walking while also using the railways. The innovative scheme has seen the release of a series of free maps detailing Britain's coastal railway and walking routes.

The coastal walks project is now live on the [Railwalks website](#) and brings together lots of different people's knowledge and resources. The website lists stations either on or adjacent to the coast of Britain in regions, with walking distances in between. It also contains linked files for walking apps that users can navigate by, allowing people to easily plan a day or more's excursion.

Andy said "Railwalks is the first organisation in Britain to map out the regions of Britain where you can see the coastal railways, all the different stations and the linked coastal paths. We're in there early as an organisation and it's an idea that has huge potential, it's already starting to gain interest at a national level. There's a huge push to grow sustainable tourism in Britain and our coastal railwalks project tallies neatly with that thinking."

"As a graphic designer, you would probably think I would be doing much more design of products, packaging or promoting things. I think what I'm doing here though is a really good example though of how graphic design today as a means of communication is a really broad church."

PRESERVING DOCUMENTARY HERITAGE TO RECONSTRUCT LIFE HISTORIES OF ENSLAVED PEOPLE

Online Conference Recording, British Library Endangered Archives Programme

A British Library conference that took place 31 October - 1 November 2024 has recently been made available online. The event entitled '*Timeless Archives, Timely Connections: Preserving Endangered Documentary Heritage and Inspiring Collaboration*' saw University of Worcester Professor of History; Suzanne Schwarz, contribute to a panel session – '*Preserving documentary heritage to reconstruct life histories of enslaved people*'. During this panel, chaired by Bonnie Greer, Professor Schwarz and Albert Moore (Senior Government Archivist at the Sierra Leone Public Archives) discussed the impact of preserving documentary heritage in Sierra Leone. The panel also included readings on the human consequences of the slave trade by the poet Remi Graves.

This session followed research carried out by Prof. Schwarz whereby she led a team digitising endangered archives relating to the slave trade held at Freetown, West Africa, in collaboration with the archival team at the Sierra Leone Public Archives.

As one of 15 ongoing projects under the Endangered Archives Programme (EAP), run by the British Library, details of the work were on display alongside other current work in celebration of the Programme's 20th anniversary, available for conference delegates to view.

The Director of International at the British Library and the Head of the Endangered Archives Programme subsequently thanked Professor Schwarz for her contribution to the panel preserving documentary heritage to reconstruct life histories of enslaved people, a panel which they described as "invaluable".

The conference, including Prof. Schwarz's panel session, is available to view on the [Endangered Archive Programme website](#).



L-R: Bonnie Greer, and Prof. Suzanne Schwarz

MIDWIVES PERCEPTIONS AND EXPERIENCES OF HOME BIRTH

Matflix Online Video Resource

Ahead of the publication of a recent study, Consultant Midwife, Susan Hughes, from the School of Nursing and Midwifery, was asked to share details of her research on Matflix's Maternity & Midwifery Hour. Matflix is an online video resource for midwives, student midwives & healthcare professionals.

Susan's small qualitative study; 'Midwives Perceptions and Experiences of Home birth' is due to be published in Midiris Journal in June.



Research, Innovation and Impact Office / researchoffice@worc.ac.uk

Doctoral School / research@worc.ac.uk

Ethics (existing applications) / ethics@worc.ac.uk

Ethics (general enquiries) / ethicshelp@worc.ac.uk

Researcher Development / researcherdevelopment@worc.ac.uk