

RESEARCH

July 2024

@worc



UNIVERSITY of
WORCESTER

CONTENTS

4	Welcome
5	Research & Knowledge Exchange News <ul style="list-style-type: none">In BriefPGR Success & GraduationPGR ConferenceFunding Highlights
12	Spotlight <ul style="list-style-type: none">Research Centres, Groups and UnitsPostgraduate Research StudentsResearch StaffResearch on Tour
20	Project Focus <ul style="list-style-type: none">A closer look at a number of the current projects being undertaken at the university.
26	Recent Publications <ul style="list-style-type: none">Publication highlights from the last 6 months
36	Public and Community Engagement <ul style="list-style-type: none">Some of the recent public and community engagement highlights

WELCOME

Welcome to the Summer 2024 edition of *Research @worc*. Our cover story focuses on Dr Jessica Mee's UKRI Future Leaders Fellowship (FLF) which started in April of this year and which looks at mitigating heat strain for women to improve health and performance. It is a fantastic achievement, for both Jessica and the University, to win one of these highly competitive and prestigious Fellowships and I am delighted to share that just as we went to press Dr Anna Muggeridge, on whom we shine a spotlight in this edition, has also been successful in winning a UKRI FLF which will start later this year. Her project, *Voices of Motherhood*, will focus on maternal activism in the 20th and 21st century. We will no doubt hear a lot more about this exciting and important research in future editions.

As we enter the summer, and conference and events season, this edition also focuses on the wide range of public and community engagement our researchers have engaged in. Key to our programme of events is the Hive, our university and community library at the heart of the City of Worcester. It is in this iconic building that many of our public lecture series and exhibitions have taken place, aligned with the Hive's overarching cultural programme. This gives our events real reach and ensures that a rich cross-section of people from the very young to the older generation engage with our research and expertise. However, you will see that our research has travelled further afield: for example, across the city through our Pint Of Science event and through the internationally important Hay Festival.

Professor John-Paul Wilson

Pro Vice Chancellor Research



HR EXCELLENCE IN RESEARCH AWARD

The University of Worcester has been successful in retaining the European Commission HR Excellence in Research Award at the 6-year external review point.

The award recognises progress towards providing a high-quality research environment for research staff and postgraduate researchers at the University. In order to gain the award, an analysis was carried out; led by **Prof. Lynn Nicol**, of UW practice against the principles set out in the Concordat to support the Career Development of Researchers. Subsequently, an action plan was developed to address gaps that emerged in this analysis. The action plan is available to view on the University [website](#).



HR EXCELLENCE IN RESEARCH

HISTORY PROFESSOR CONTRIBUTES TO MAJOR UNESCO PUBLICATION

Prof. Suzanne Schwarz has contributed two chapters to a new UNESCO volume, which marks the 30th anniversary of its Routes of Enslaved Peoples Project.

One of the initiatives developed to mark this occasion is the launch of three new volumes of UNESCO's General History of Africa, first launched in 1964.

Suzanne is among scholars from Africa, Latin-America, the Caribbean, America, Canada and Europe who have contributed to Volume X, entitled *Africa and Its Diasporas*, which was officially launched at the Global Forum Against Racism and Discrimination in São Paulo, Brazil in December.

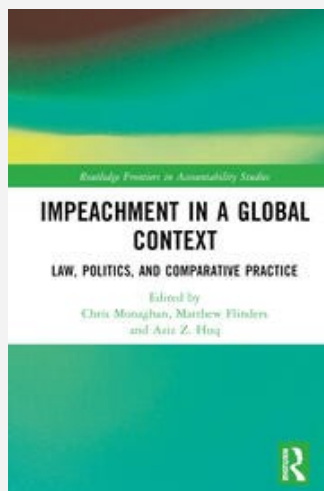
Suzanne has authored two chapters based on her research on 18th- and 19th-century Sierra Leone.

The series is published in 13 different languages, including Arabic, English, Portuguese, French, Fulfulde, Hausa and Kiswahili.

BOOK LAUNCH AT HARVARD UNIVERSITY

In February, Head of Law and Principal Lecturer in Law, **Dr Chris Monaghan**, spoke at Harvard University as part of the launch of his co-edited book *Impeachment in a Global Perspective* (Routledge 2024).

The online launch event, brought together a panel of leading scholars who contributed to the book, which explores impeachment focusing on issues like democracy, human rights and the law.



LECTURER FEATURED ON BBC PODCAST

In April, Lecturer in History, **Dr Anna Muggeridge**, was featured in a discussion of the history of 'the local' on a BBC national radio podcast.

Three academics spoke about their areas of research into local issues, from politics to the post office to newspapers, on BBC Radio 4's *Arts & Ideas* podcast – with the episode titled 'New Thinking - Exploring the local'. Dr Muggeridge told of her research into the history of women who moved into local politics in the early part of the 20th century. The discussion also touched on why it's important to study the local and the challenges that such research poses, such as a lack of records.

WORCESTER BUSINESS SCHOOL ACADEMICS WIN RESEARCH EXCELLENCE AWARD

Dr Catharine Ross and Prof. Lynn Nichol have been awarded the 2023 'Monica Lee Research Excellence Award' by the American Academy of Human Resource Development AHRD for their collaborative work on Critical Human Resource Development.

Dr Ross and Prof. Nichol having been working on collaborative research projects with colleagues from Europe's University Forum for HRD (UFHRD); Professor Jim Stewart, Liverpool John Moores University, Professor Carole Elliott, University of Sheffield and Professor Sally Sambrook, University of Bangor for a number of years and they are all delighted to be honoured by their peers in the US. The award was presented at the Academy's annual conference in Washington DC in February and is made annually for the most outstanding article in the journal Human Resource Development International.

The winning paper was, Ross C., Stewart, J., Nichol, L., Elliott, C., & Sambrook, S. (2023). Sustaining the critical in CHRD in higher education institutions: the impact of new public management and implications for HRD. Human Resource Development International, 26(4), 356-377. Available on line at [HRDI](https://www.hrdiv.org/).

HOUSE OF COMMONS RECEPTION

Senior Lecturer **Dr Pammie Murray** from Worcester Business School, attended a reception hosted by Siobhain McDonagh MP in the House of Commons in January as a contributor to *Preconception Care Strategy*, a report for the Children's Alliance, which is hoped to play a crucial role in enacting recommendations and establishing priorities in women's health, parental health and preconception health.

Dr Murray said of the event *"In the House of Commons we met one another with sincerity and optimism, acknowledging this worthy work can lead to the prevention of long-term illnesses throughout a person's preconceived life and thereafter. The valorized, collaborative opportunity to inform people, practices, and policies in preparing for healthy pregnancy and parenthood has been nothing less than a privilege for us all."*



L-R: Emma Bayou, Alison Murray, Pammie Murray, Viki Veale

VLOGGING WITH BBC PRESENTER ESME TODD

Senior Lecturer and doctoral student, **Andy Stevenson**, has been filming with Bristol-based production company, BA media, and BBC presenter Esme Todd, to showcase the newly created walking routes across the region between train stations as part of the Rail Trails project.



ACADEMIC DELIVERS KEYNOTE SPEECH AT 'SEXUAL SAFETY IN MEDICINE' EVENT

Dr Gill Harrop, Senior Lecturer in Forensic Psychology and lead for the University's Bystander Programme, delivered a keynote speech on bystander intervention at the NHS Midlands 'Sexual Safety in Medicine' event on the 6th February.

This event forms part of the regional NHS England WTE response to the 'Breaking the Silence' report on sexual harassment and assault in surgery and brought together organisational leaders from across the Midlands to discuss tackling sexually harmful behaviour.

PROFESSOR AWARDED PRESTIGIOUS HONOUR BY ROMANIAN UNIVERSITY

In May, **Nicoleta Cinpoș**, Professor of Shakespeare Studies and is the Director of the Early Modern Research Group, was awarded the title of Doctor Honoris Causa by the University of Craiova in her home country of Romania.

Prof. Cinpoș was awarded the honour by the university's Chancellor, Professor Cezar Ionuț Spinu, for her contribution to the University and her longstanding commitment to the city's International Shakespeare Festival. She has been working with the University and the Festival in Craiova since 2010, interpreting Shakespeare's plays and poetry and freeing them from decades of censorship in that part of the world.



She said: "I've gathered academics and specialists in Shakespeare studies to contribute to this project, and I have written introductions to plays in a way that students, teachers and theatre producers could read them in modern Romanian. A Doctor Honoris Causa title is something you read about in history books, about world-leading academics who have been honoured for their lifetime achievements in shifting science and knowledge boundaries, so it still feels very surreal to have received this title."

STUDY ON CHILD'S PLAY SUBMITTED TO GOVERNMENT INQUIRY

A government inquiry looking into 'Children, young people and the built environment' seeks to understand how planning and building and urban design in England could enhance their health and well-being, by looking at how they can use outside public spaces and move around their Neighbourhoods.

In response to a call for evidence for the inquiry, evidence was submitted by **Nicola Stobbs** and **Samantha Sutton-Tsang** from the Institute of Education, following a study conducted for Play Worcester in 2022.

As part of the study, children and young people aged 4-12 in Worcester were interviewed in order to better understand how they like to play. It addressed how they experience outdoor spaces and how these experiences vary across gender and age.

The research revealed that adventurous play and free play in natural areas were the most popular choices, indicating Worcester's children value challenge, safe-risk and self-directed play.

Nicola Stobbs said *"I am so pleased that this will be considered in this vital government inquiry and the voices of Worcester's children will influence national policy"*.

HR DEVELOPMENT IN A DIGITAL AGE

In June, a number of University staff members and students attended the Human Resources Development in a Digital Age conference in Portugal. The conference was run by the University Forum for Human Resource Development (URHRD) and provided delegates with the opportunity to learn, research and network. The following presentations were delivered:

Annika Hesse, DBA student - 'Developing a new framework for organisational performance in the post-pandemic world: A study of German Corporates'

Christian Rebehn, DBA student - 'Extracting the components of Psychological Contracts of Hotel employees in Northern Germany'

Prof. Lynn Nichol - 'Can adopting critical approaches to evaluation enhance the understanding and value of knowledge exchange?'

Whilst at the conference, Prof. Lynn Nichol was elected co-Chair of URHRD. The URHRD is an international member network for universities, for practitioner-researchers and for learning-orientated organisations. They aim to deliver leadership for Human Resource Development (HRD) academic and practitioner practice, which promotes inclusive, ethical and impactful learning and practice in research, education and people and organisational development.

GEOGRAPHY PROFESSOR DELIVERS KEYNOTE LECTURE IN SPAIN

Nick Evans, Professor of Rural Geography in the School of Science and Environment, was one of the keynote speakers at a workshop for BIP-GEO Granada 2024, held in Granada, Spain.

He spoke to attending students about 'Farm livestock and the New Animal Geography' as part of the workshop on Interdisciplinary perspectives on extensive livestock systems and landscape'. Professor Evans' talk was based on his research into the geography of farm livestock.

BIP-Geo Granada is an Erasmus programme between universities in Italy, Portugal and Spain. It aims to introduce students to the field of protection, management and planning of landscapes in relation to current extensive livestock systems.

FROM THE BLUE LINE AND BEYOND: INAUGURAL EVIDENCE-BASED POLICING CONFERENCE

On Friday 17 May, the University hosted the inaugural evidence-based practice policing conference at the Arena. The event, organised by the Policing team in the School of Humanities, welcomed staff, students and local Criminal Justice Professionals to share their knowledge and research relating to a variety of important areas for contemporary policing. The focus of this year's conference was introducing an opportunity for a local evidence-based policing forum and platform for sharing research.



THERAPEUTIC LANDSCAPES: RITUAL, FOLKLORE AND WELLBEING



In March, a conference entitled 'Therapeutic Landscapes: Ritual, Folklore and Wellbeing' took place at the Art House. The event was jointly organised by **Dr John Cussans**, of the Arts and Health and Wellbeing research group and **Desdemona McCannon** of the Folk Cultures group at the University of Worcester.

Attendees at the conference heard from artists, health practitioners, academics and historians who, both formally and informally, are investigating the intersections of ritual, folklore, magic and landscape and their implications for emotional health and wellbeing. As well as talks from a variety of academics and practitioners, the conference also facilitated an exhibition of images of practice research and a number of workshops.

HONORARY DOCTORATE FOR UW PROFESSOR

Jo Smith OBE, Emeritus Professor at the University of Worcester and a prominent campaigner for the prevention of suicide in students, has been awarded an honorary doctorate from Middlesex University.

Prof. Smith co-authored and edited a guide to help senior leaders in higher education respond sensitively and quickly after a student death by suspected suicide along with David Malpas, Middlesex University's Director of Student Affairs.

Graduation

SPRING 2024

For the first time, a Spring graduation ceremony took place for students whose awards were agreed between 1 August 2023 and 31 January 2024. The Doctoral School would like to congratulate the following postgraduate research students on their graduation:

Dr Nurideen Al Hassan (PhD) *'An Exploration of Situational Leadership Influence and Impact on Ghanaian Small and Medium-sized Hotels'*

Supervisory Team: Prof. Robin Bell (DoS), Dr Scott Andrews

Dr Prakash Subedi (PhD) *'A Mixed Method Exploration of a Structured Certificate of Eligibility for Specialist Registration (CESR) Postgraduate Training Programme in Emergency Medicine.'*

Supervisory Team: Dr Theresa Mitchell (DoS),
Prof. Kay Mohanna

(Photo credit: Shakchyam Subedi)

Dr Colin Wood (EdD) *'An exploration of how primary school children's social values are influenced by their experiences during residential outdoor learning'*

Supervisory Team: Prof. Alison Kington (DoS), Dr Philip Woodward

Marcus Garner (MRes Sociology)

Director of Studies: Dr Luke Devine

Maddie Hale (MRes History)

Director of Studies: Dr Wendy Toon

Beth Hiatt (MRes Sociology)

Director of Studies: Dr Luke Devine

Sophie Pontillo (MRes Media and Culture)

Director of Studies: Katy Wareham-Morris



Dr Prakash Subedi and family with Prof. Kay Mohanna



POSTGRADUATE RESEARCH CONFERENCE

24-25 June 2024, Severn Campus

Under the theme of ICE – IGNITE.CONNECT.ENGAGE - the conference brought together postgraduate researchers from all disciplines, stages of research, and backgrounds, providing them with the opportunity to present and discuss their research in front of a supportive audience.

Over the two-day event, researchers were welcomed from across the university and beyond, with delegates travelling from partner institution in Germany - Fachhochschule des Mittelstands (FHM) - who are currently studying on the Doctor of Business Administration course in addition to PGRs from the Universities of Chester, Gloucestershire, Warwick and Wolverhampton.

The conference was opened by Prof. John-Paul Wilson, Pro-Vice Chancellor Research, with a keynote presentation from Prof. Győző Molnár; Professor of Sociology of Sport and Exercise, exploring 'Researcher Identity and Imposter Syndrome' followed by a roundtable discussion. The programme also included a session run by three University of Worcester doctoral graduates; Dr Annica Lau, Dr Hilary Causer and Dr Anna Muggeridge, reflecting on their careers after graduating. Presentations were also delivered by over 45 current doctoral students providing an overview of their studies and research so far.

For the first time, a gala dinner was held as part of the programme, and gave those in attendance the opportunity to socialise and network with colleagues from other disciplines and institutions.

"Attending the PGR Conference not only offered an opportunity to disseminate my research but it also gave me space to connect with other PGR students at Worcester and further afield. We all shared research experiences which were both validating and supportive. Listening to the journeys of doctors and professors, which gave insights to opportunities after the doctorate, were inspiring and encouraging. I've come away feeling motivated and energised for the next stage of my research."

For details and updates of the 2025 Postgraduate Research Conference, follow the Doctoral School on X @TwitterDS.



Prof. Győző Molnár



Dr Annica Lau



Dr Hilary Causer



Dr Anna Muggeridge

FUNDING HIGHLIGHTS

CLIMATE ADAPTATION AND RESILIENCE STRATEGIES (CLARS): SOCIO-ECONOMIC VULNERABILITIES AMONG URBAN MIGRANTS IN THE LAKE VICTORIA BASIN AND GREAT LAKES REGION

UKRI: New Frontiers in Research Fund - International 2023

Principal Investigator: Dr Cedric Nkiko, Worcester Business School

Research Group/Unit: Sustainable Organisations Research Group

Value: £248,757

MEETING CENTRES UK SUSTAINABILITY ACTIVITY

The Shaw Foundation

Principal Investigator: Dr Shirley Evans, School of Allied Health and Community

Research Group/Unit: Association for Dementia Studies

Value: £39,361

UNDERSTANDING PATIENT DATA IN GYPSY, ROMA, & TRAVELLER COMMUNITIES: EQUITABLE DATA COLLECTION

NHS Confederation

Principal Investigators: Dr Peter Unwin, School of Allied Health and Community

Prof. Gyozo Molnar, School of Sport and Exercise Science

Research Group/Unit: Inclusive Sport and Physical Activity Research Group

Value: £33,806

DEVELOPING A THERAPEUTIC, MEDICAL DEVICE OR DIAGNOSTIC AIMING TO SOLVE AN UNMET CLINICAL NEED

SPARK

Principal Investigators: Dr Chris Bowers, Worcester Business School

Research Group/Unit: Digital Innovation and Intelligent Systems Research Group

Value: £18,868

MEASURING EXECUTIVE FUNCTIONS IN ATHLETES: NEW METHODS, NEW HORIZONS

FIFA

Principal Investigators: Dr Jack Brimmell, School of Psychology

Value: £10,000

SPOTLIGHT



**UNIVERSITY of
WORCESTER**

A SPOTLIGHT ON...

Living Well with Long Term Conditions Research Group

Who are we?

The Living Well With Long-Term Conditions (LWLTC) Research Group, includes staff from the School of Allied Health and Community and the Three Counties Medical School, and is led by Professor Dez Kyte and Dr Kostas Papadopoulos. It aims to facilitate research aimed at helping people with long-term conditions and their families to live well.

What do we do?

Approximately 15 million people in England, representing 1 in 4 adults, have one or more long-term conditions (LTCs). A LTC is an illness that cannot be cured, but may be controlled with medicines or other treatments.

People living with LTCs face considerable challenges around the management of their long-term physical and mental health. The combined resource cost of treatment and care of people with LTCs is substantial. LTCs account for half of all GP appointments, over 60% of all outpatient appointments, more than 70 per cent of all inpatient bed days and £7 in every £10 of health and social care costs. For individual patients, and their families/carers, the burden of LTCs and associated treatments can be particularly debilitating.

The LWLTC Research group has 3 aims:

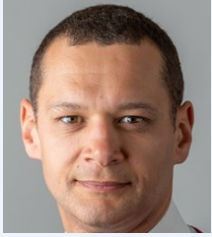
- To facilitate high-quality research, targeted at helping people with long-term conditions and their families to live well.
- To enhance research collaboration, both within the university and with external stakeholders, such as patients, carers, clinicians and health & social care professionals.
- To support the development of students and early career researchers, to train the next generation of LTC researchers.

An infographic poster designed by second year Graphic Design student, Henry Idowu, to illustrate the outcomes of the project 'Global Symptom Burden and Quality of Life in Chronic Kidney Disease (CKD)'. The project was carried out by LWLTC lead Prof. Kyte and external partners.



What have we achieved?

LWLTC members have conducted nationally and internationally recognised research across a wide range of LTCs including: allergy, arthritis, cancer, chronic kidney disease, heart disease, mental health conditions, musculoskeletal disorders and many others.



Professor Dez Kyte, *Professor of Physiotherapy, School of Allied Health & Community*

Prof. Kyte has published over 70 papers in some of the world's leading health journals and his work has informed European Medicines Agency guidelines. He is working with colleagues in the UK and internationally to improve the care of patients with chronic kidney disease and heart disease through the use of app-based symptom monitoring.



Dr Kostas Papadopoulos, *Principal Lecturer, School of Allied Health & Community*

Dr Papadopoulos focuses on musculoskeletal conditions, with research focusing on issues around knee ligament rupture, ankle injuries and the benefits of strength training and physiotherapy.



Dr Berenice Mahoney, *Principal Lecturer in Psychology and Social Science Lead Three Counties Medical School*

Dr Mahoney has published widely in the field of LTCs, with a focus on allergy and breast cancer, transdisciplinary approaches to research and knowledge, and self-diagnosis of physical and mental health conditions.



Professor Rebecca Stack, *Professor of Student Success and Medical Assessment, Three Counties Medical School*

Prof. Stack conducts research exploring the impact of beliefs about treatment and illness on wellbeing and behaviour, the way that people interact with health services including help seeking behaviour and adherence to medicines, and the impact of stress on self-management of chronic illness.



Professor Eleanor Bradley, *Director of Research and Knowledge Exchange, College of Health, Life and Environmental Sciences*

Prof. Bradley focuses on the application of health psychology across different healthcare settings and patient experiences. Her research spans many areas, including how delays in primary care have affected patients with arthritis, the role of early intervention in psychosis, and the impact of providing support and care for severe mental illness on informal carers.

What next?

Working in partnership with colleagues across the UK and internationally, the LWLTC research group are continually working to secure research funding to support innovative projects that will make a real difference to the lives of people with LTCs. We are also partnering with NHS trusts and Integrated Care Services across the region to move the LTC agenda forwards for the benefit of all stakeholders. We are keen to collaborate with individuals and organisations that share our passion for LTC-focused research activity. We would encourage anyone interested in working with us to visit our [website](#) and to reach out to any of our members for further information about our group.



A SPOTLIGHT ON...

Jane Cassidy

MRes Student,
School of Humanities

"We are often the subject but never the voice': Counter-narratives, andragogy, and the reframing of contemporary sex work within podcast media."

casj1_20@uni.worc.ac.uk

Advice for future PGR students

It may seem obvious, but choosing an area of research that you are passionate about over one which may be popular or 'current' would be my advice for anyone considering embarking on an MRes. I believe any postgraduate study should be a labour of love, so choosing a subject you are personally invested in will ensure your research project never feels like a chore or obligation to complete.

Supervisory Team:

Dr Simon Hardy (DoS)

Why did you decide to undertake PGR study at the University of Worcester?

Having completed the first year of my undergraduate degree at Worcester University amidst the COVID-19 pandemic, it felt as though I'd been robbed of almost a year of in person study with my fellow students. For this reason, in addition to the incredibly supportive and encouraging environment fostered by the Sociology and Media & Culture departments, were the pivotal deciding factors in continuing my studies at Worcester University.

What opportunities have you had during your time at Worcester?

During my studies at Worcester University, not only have I had the opportunity to study alongside some truly amazing students and lecturers, I've also had the opportunity to attend a unique and interdisciplinary range of extra-curricular lectures, trips and social gatherings, including a trip to the Houses of Parliament which was funded and facilitated by the Sociology department.

I was lucky to be given the opportunity to present an area of my research to a public audience at the Hive library in February. Although terrifying, it was fantastic to be able to disseminate my current studies to not only fellow students and colleagues, but to members of the public. I was grateful for the challenge and to receive constructive feedback, and it is a definite highlight of my post-graduate journey so far.

What is your professional background?

Prior to re-entering education after a twenty-year absence, I worked as a jeweller for almost a decade. Alongside this occupation, I was also an internationally published alternative model for a range of publications, clothing brands and lifestyle companies.

What is your biggest achievement to date?

In a professional context, my biggest achievement to date would be the completion of my undergraduate degree. I had never considered myself academically minded prior to studying at Worcester University, so managing to not only complete a degree, but to gain a first-class honors will forever invoke an enormous sense of pride. In a personal context, my greatest achievement is without doubt my children. They are both wonderful and inspire me daily.

Where do you see yourself after you have completed your course?

I don't have a definitive career objective upon completing my MRes, however I do feel specifically drawn to the charity sectors. Having spent over a decade as a volunteer for various charities, it's a space where I feel the strongest affinity and greatest sense of 'belonging'.



Jane presenting her research during the 'Lightning talks: Current Research into the Fantasy Genre' event at the Hive in February 2024.



A SPOTLIGHT ON...

Andrea Tapia-Arenas

PhD Student,
School of Science and
the Environment
(Studentship funded by University
of Worcester and the
Bumblebee Conservation Trust)

*"Remote sensing detection of
bumblebee habitat traits at different
spatial resolution in wildflower
meadows"*

c.tapia-arenas@worc.ac.uk

Advice for future PGR students

Enjoy the journey and embrace your mistakes. Few people can truly understand the challenges you will face, and having PhD colleagues who become friends will help you navigate them.

Supervisory Team:

Dr Kate Ashbrook (DoS),
Dr Fleur Visser,
Dr Richard Comont

Why did you decide to undertake PGR study at the University of Worcester?

Ever since high school, I dreamed of studying abroad. Coming from a third world country, I knew my chances were slim, so I dedicated myself to studying hard. During my undergraduate studies, I met professors who had completed their PhDs in Brazil, Germany, and the USA. Their experiences inspired me to follow a similar path.

At 30 years old, I chose to become a mother, which seemed to close the door on pursuing a PhD abroad. However, my life took an unexpected turn, prompting me to reassess my life choices. Driven by my passion for ecology and remote sensing, I decided to apply for a PhD program one last time. I found the perfect opportunity at the University of Worcester, where a fully funded PhD position was available to study bumblebee habitat using remote sensing data.

What is your biggest achievement to date?

Fulfilling my dream of pursuing a PhD abroad with a fully funded scholarship. I feel extremely fortunate and elated to share this experience with my son.

What is your professional background?

Since graduating as a forestry engineer, I have worked extensively in Geographic Information Systems (GIS) and Remote Sensing. I have experience in both the private and academic sectors, having worked as a lecturer and researcher for 10 years with a focus on GIS and hydrology.

Additionally, I am an international consultant specializing in Climate Risk and Vulnerability Assessment. This role has allowed me to contribute to various global climate assessments as part of an interdisciplinary team.

What opportunities have you had during your time at Worcester?

I have participated in two international short courses, one of which was in Croatia, where I had the opportunity to present and share my project with colleagues from different countries.

What has been the highlight of your PGR study so far?

Winning first place in the Images of Research (public's choice) in 2022, and more recently winning third prize in the Research Pitches Contest of the Compostela Group of Universities.

Where do you see yourself after you have completed your course?

I have a very curious mind and a passion for research. I love challenging myself and I am highly focused on problem-solving, so I would like to continue working in research.





A SPOTLIGHT ON...

Heather Chapman

PhD Student,
School of Allied Health
and Community

"An examination of the nutritional advice received by mobility-impaired adults during their chronic transmission and subsequent habitual use of a wheelchair"

chah1_20@uni.worc.ac.uk

Advice for future PGR students

Go for it! I, professionally, didn't need to do this research; I NEED to do this research to aid those who may have the same journey with disability as I. If you have an area of research you are passionate about, then why not be the person to fill that knowledge gap? Get prepared by carefully selecting supervisors and building a database of current research in your area.

Supervisory Team:

Prof. Derek Peters (DoS),
Dr Allain Bueno

Research Area

As a wheelchair user, I wanted to explore the under-researched areas of disability and nutrition. I am in my first year of PhD study and hope to develop a mixed methods study looking into the nutritional advice received by mobility-impaired adults during their transmission and subsequent habitual use of the wheelchair.

Why did you decide to undertake PGR study at the UW?

I did my MSc in Nutritional Therapy course at UW. My first assignment and dissertation on the course determined me to progress to a PhD. I love the warm and friendly atmosphere at Worcester, plus the small campus is well set up for access. Although I am from Sheffield, and we have two universities, I found the academic buzz at Worcester more in line with my way of thinking and in terms of pursuing Allied Health studies rather than Food Science.

What opportunities have you had during your time at Worcester?

I was the student rep and the BANT student rep for my MSc course, which allowed me to have a closer relationship with the regulatory body for my profession. I continue with the voluntary role of the Student Network Team Lead for BANT.

What has been the highlight of your PGR study so far?

I thoroughly enjoyed the PG Cert lectures and the meeting of minds among my fellow students. I love the library sessions and the PGR micro-courses and webinars which help you build on your research skills and knowledge.

What is your professional background?

I spent around 20 years working with the British Red Cross and other organisations on ambulances and delivered first aid at festivals such as Reading, The Bulldog Bash, Phoenix and V. I then set up an award-winning Health and Safety business with my husband, training first aid. Around 12 years ago, I ended up in my wheelchair due to a fall from my horse and the deterioration of a neurological condition. I started a writing business but always wanted to return to helping people. My own experiences in the wheelchair, gaining and eventually losing weight and reducing medication using dietary changes led me towards a career in Nutritional Therapy. The Covid lockdowns were the final push to urge me to study.

What is your biggest achievement to date?

Every day, I have minor triumphs over my disability. One example is overcoming considerable lifestyle changes after my accident and my achievements since then, including two awards, one for my nutritional therapy business, Wheely Healthy, and another for inspiring young people in education with SEND.

Where do you see yourself after you have completed your course?

I am developing my nutritional therapy company, Wheely Healthy, into a charity. This charity will raise funds to enable me to become a visiting researcher and provide nutritional therapy to wheelchair users free of charge.



A SPOTLIGHT ON...

Dr Anna Muggeridge

Lecturer in History,
School of Humanities

anna.muggeridge@worc.ac.uk

How long have you worked at the University of Worcester?

I began my PhD at the University in 2016. Since then, I have worked as an Associate Lecturer and Research Fellow, and was appointed to my current role in August 2022.

What is your professional background?

In addition to my academic roles, I have worked in the heritage sector in a number of different local museums.

What are you currently working on?

I'm currently working on a history of women in interwar local government, which expands on and develops my doctoral research and will hopefully form the basis of my first monograph.

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

Collaborate! I've developed most as a researcher through working collaboratively with others, inside and outside of academia. With big projects, it's always helpful to have people to share the load with to avoid being overwhelmed. And to complain to, when things go wrong!

What is your biggest achievement to date?

When I first began as a PhD student, the idea of public speaking—at a conference, or even teaching—was absolutely terrifying. Now, although I do still feel nerves (particularly before delivering a paper!) they are much more manageable. I think my biggest achievement is to have pushed through on occasions when I felt I couldn't do it, because it really is true that the more you do something, the easier it gets...

Who has influenced you the most in your career so far?

Everyone whose work developed women's history as a discipline, and particularly those who don't mind junior scholars who come in and claim that's there's things they've forgotten, overlooked or got wrong...!

LEFT: Anna's entry to the 2018 annual Images of Research exhibition, entitled 'A Black Country Kitchen and the History of the Domestic'.

RIGHT: Anna at her Doctoral graduation at Worcester Cathedral in 2021.



ULLSWATER, LAKE DISTRICT

Rank Prize Symposium

Theresa May, *Doctoral Student, School of Science and the Environment*

Thesis Title: "Are non-invasive methods of detecting cardiovascular disease effective indicators for other mild chronic inflammatory and metabolic diseases? The InDiCo Study"



The Rank Prize, founded by Lord Rank in 1972 celebrates research in the areas that he loved most, nutrition and optoelectronics. The foundation offers grants, prizes and symposia. A key feature of their symposia is bringing together early career researchers (ECR) with the most reputed researchers in their fields. This synergy is thought to stimulate new visions and support current and developing research. Often individuals attending Rank Prize events establish break through ideas and practical applications which have strong global impact.

Therefore, it was an honour and a privilege to be selected and invited to attend the Rank Prize Symposium on Low Carbohydrate Diets, 7-10 May 2024 in Ullswater, Penrith in the Lake District. Whilst my research, The InDiCo Study (In- inflammation, Di-diet, Co-composition) is on dietary fat, specifically essential fatty acids, omega three and omega six consumption and not carbohydrates, it is pertinent as those individuals consuming low carbohydrates need to replace that caloric intake with both proteins and fats. Currently a majority of the individuals who adopt low carbohydrate diets are those who suffer with a mild chronic inflammatory disease such as type 2 diabetes mellitus (T2DM), obesity and/or a cardiovascular disease (CVD) (Hansen CD et al., 2023, Saslow LR et al., 2023 and Valsdottir TD et al., 2020). Thus, the quantity and quality of fat consumed should be carefully considered.

Dietary fats have displayed their ability to amplify or dampen acute inflammation (Norris, PC et al., 2018 and Fayh APT et al., 2018). The omega six to omega three ratio therefore could impact whether acute inflammation develops into mild chronic inflammation, changing tissues and their environment with the presence of immune cells. The InDiCo Study aims to observe free living healthy adults void of any mild or major chronic inflammatory or metabolic diseases to establish if a correlation exists between one's essential dietary fat ratio and one's body composition measurements to detect early signs of mild chronic inflammation. This is based on the information that most individuals that consume a Western diet have omega six to omega three ratios in the region of 17:1 or higher, and the known healthy ratios are between 1:1 up to 4:1 (Simopolous AP, 2008). The InDiCo Study proposes there maybe existing correlations which can potentially be utilised by the healthcare system and general practises to prevent the onset of mild chronic inflammatory diseases which currently plague public health.

I was able to share this information, as well as my preliminary pilot study data with an audience of peers and approximately ten senior investigators and practitioners. Whilst initially the presentation seemed daunting, it became much more bearable as I spent time with everyone during our short stay at Ullswater.





The Rank Prize administrators provided us with an incredibly detailed agenda of the three and a half days, as well as information about travel, the venue and meals provided. They also arranged a local tourist business, Hiking Highs, to take those members interested on an excursion of Ullswater for our first afternoon in attendance. I partook in this as I'm naturally inclined to spend time outdoors and it gave me the opportunity to speak with others attending in a more relaxed setting.



The remainder of the days of the conference were very intense and focused on the topic at hand. Much of the time was spent exploring current randomised control trials and epidemiological studies of low carbohydrate diets and their impact on overall health, in healthy individuals and in diseased individuals such as those with T2DM, obesity and CVDs. Many presenters questioned whether low carbohydrate diets alone impacted weight loss or whether mechanisms such as ketoacidosis or increased protein facilitated improvement in health for those who were diseased or suffered from blood sugar and insulin imbalances. Personally, I found much of the research highly stimulating. It aided me in expanding my perspective of the diseases which also align to my own research but from a different position clearly emphasising how multifaceted health and disease is in humans.

I am grateful for the financial support and the experience I had with the Rank Prize and hope to not only remain in contact with many whom I had met, but to potentially pursue research collaborations together in the future.

References

- Fayh, A. P. T., Borges, K., Cunha, G. S., Krause, M., Rocha, R., de Bittencourt, P. I. H., Moreira, J. C. F., Friedman, R., da Silva Rossato, J., Fernandes, J. R., & Reischak-Oliveira, A. (2018). Effects of n-3 fatty acids and exercise on oxidative stress parameters in type 2 diabetic: a randomized clinical trial. *Journal of the International Society of Sports Nutrition*, 15, 18. <https://doi.org/10.1186/s12970-018-0222-2>
- Hansen, C. D., Gram-Kampmann, E.-M., Hansen, J. K., Hugger, M. B., Madsen, B. S., Jensen, J. M., Olesen, S., Torp, N., Rasmussen, D. N., Kjærgaard, M., Johansen, S., Lindvig, K. P., Andersen, P., Thorhauge, K. H., Brønd, J. C., Hermann, P., Beck-Nielsen, H., Detlefsen, S., Hansen, T., & Højlund, K. (2023). Effect of Calorie-Unrestricted Low-Carbohydrate, High-Fat Diet Versus High-Carbohydrate, Low-Fat Diet on Type 2 Diabetes and Nonalcoholic Fatty Liver Disease. *Annals of Internal Medicine*, 176(1), 10–21. <https://doi.org/10.7326/m22-1787>
- Norris, P. C., Arnardottir, H., Sanger, J. M., Fichtner, D., Keyes, G. S., & Serhan, C. N. (2018). Resolvin D3 multi-level proresolving actions are host protective during infection. *Prostaglandins, Leukotrienes and Essential Fatty Acids*, 138, 81–89. <https://doi.org/10.1016/j.plefa.2016.01.001>
- Saslow, L. R., Kim, S., Daubenmier, J. J., Moskowitz, J. T., Phinney, S. D., Goldman, V., Murphy, E. J., Cox, R. M., Moran, P., & Hecht, F. M. (2014). A Randomized Pilot Trial of a Moderate Carbohydrate Diet Compared to a Very Low Carbohydrate Diet in Overweight or Obese Individuals with Type 2 Diabetes Mellitus or Prediabetes. *PLoS ONE*, 9(4), e91027. <https://doi.org/10.1371/journal.pone.0091027>
- Simopoulos, A. P. (2008). The importance of the omega-6/omega-3 fatty acid ratio in cardiovascular disease and other chronic diseases. *Experimental Biology and Medicine* (Maywood, N.J.), 233(6), 674–688. <https://doi.org/10.3181/0711-MR-311>
- Valsdottir, T. D., Øvrebø, B., Falck, T. M., Litleskare, S., Johansen, E. I., Henriksen, C., & Jensen, J. (2020). Low-Carbohydrate High-Fat Diet and Exercise: Effect of a 10-Week Intervention on Body Composition and CVD Risk Factors in Overweight and Obese Women—A Randomized Controlled Trial. *Nutrients*, 13(1), 110. <https://doi.org/10.3390/nu13010110>

PROJECT FOCUS

IMPROVING FEMALES' HEALTH AND PERFORMANCE BY MITIGATING HEAT STRAIN

In December 2023, Dr Jessica Mee (Senior Lecturer in Sport and Exercise Science) was awarded almost £1m in funding from the UK Research and Innovation (UKRI) as part of its Future Leaders Fellowship award to undertake research into how heat affects females and offer advice on ways to manage it. Dr Mee provides us with an overview of what the project will cover.

Climate change refers to the long-term shift in global temperatures, which may occur naturally, but human activities relating to burning fossil fuels is considered a main driver. As a result, the frequency and intensity of heat waves is increasing, exposing humans to unseasonable and dangerously high temperatures which harms human health. In the UK during the five heat-periods in 2022, where temperatures exceeded 40°C, 3,271 excess deaths were reported which is estimated to increase to over 7,000 by 2050. Furthermore, audits reveal six cases of heat illness per 100,000 in an occupational setting, two cases per 1,000 in military personnel, and nine cases per 100 in athletes.

Heat illnesses are largely avoidable with the implementation of appropriate, effective, accessible, and sustainable heat mitigation strategies combined with appropriate education for more susceptible individuals. To prepare for heat stress, consensus recommendations suggest individuals should exercise in the heat, for up to 14 occasions for >60-min, where core and skin temperatures are elevated, and sweating is initiated. This requires relocation to a hot climate or access to an environmental chamber, which can be costly and impractical. The widespread use of air conditioning is another approach widely used to help mitigate heat strain. However, the use of air conditioning is not accessible to some of the most vulnerable, in areas of poverty, and in occupations involving outside activity. Collectively, these heat mitigation strategies increase greenhouse gas emissions contributing to global warming and increasing the risk of future extreme heat events. An improved understanding and utility of heat mitigation techniques, that are more sustainable, accessible, time efficient, and simple to administer, has become an urgent research priority.

Males and females differ in their responses to heat stress (i.e., external heat load) largely due to females having a reduced sweating capacity, especially during periods of high heat loss requirements (i.e., during high intensity exercise). As such, females may reach dangerously high body temperatures quicker than males and consequently, have been more frequently diagnosed as heat intolerant. Hormonal fluctuations associated with the menstrual cycle modify responses to heat strain. For example, elevated progesterone concentrations during the luteal phase of the menstrual cycle (i.e., after ovulation before next period) increases resting body temperature, the onset threshold for sweating and the shift of blood to the skin surface for heat dissipation. Furthermore, perimenopausal and menopausal females experience additional heat sensitivities, with the occurrence of hot flushes and night sweats which elevate their thermal discomfort. Despite known sex differences, audits reveal an under-representation of females as study participants, as such, heat mitigation guidelines, are underpinned almost exclusively by research conducted in men, without consideration of issues associated with the biological and phenotypical sex differences.



Dr Jessica Mee

Project Aims

The overarching aims and objectives of this proposal is to support females to navigate extreme heat episodes. This will be achieved by assessing strategies to help females adapt and manage heat strain and by developing bespoke female heat mitigation guidelines. There are five core objectives for this programme of research, which are referred to as work packages 1 to 5.

Work Package 1: Confirm research priorities through auditing existing heat mitigation literature and working in health, occupational, and sporting settings to outline applied priorities.

Work Package 2: Investigate the adaptive responses of females of varying fitness states, body fat percentage, and menstrual status to passive heat acclimation.

Work Package 3: Investigate the responses of females of varying fitness states, body fat percentage, and menstrual status to cooling strategies.

Work Package 4: Using the robust data collected in objectives 1, 2 and 3, produce evidenced based heat mitigation guidelines that are bespoke for females.

Work Package 5: Develop educational resources to support the dissemination of the research findings and to support females to navigate extreme heat episodes.

Climate change will continue to increase the heat-related hazards and associated morbidity and mortality, with extreme heat events becoming a more regular feature in summer months worldwide. Whilst mitigating climate change is an essential step, heat related illnesses are largely avoidable with the implementation of appropriate, effective, accessible, and sustainable heat mitigation strategies combined with appropriate education.

To alleviate heat strain, training in an environmental chamber which can simulate heat, or cooling with the use of air conditioning is recommended, however this overlooks the reality that the most vulnerable populations and those who are required to work outside e.g., farmers, firefighters, and military personnel will not have access to such facilities. Furthermore, these activities further exasperate the global warming issue with the associated increase in greenhouse gases. Identifying and assessing the effectiveness of more sustainable and accessible heat mitigation strategies is a key feature within this proposed programme of research.

Furthermore, existing heat mitigation guidelines are underpinned by research conducted almost exclusively in men, without consideration of issues associated with the biological and phenotypical sex differences such as the menstrual cycle, and menopause. Making steps to reduce this social exclusion of females is an essential priority for sex equality and this proposed programme of research.

The findings from this proposed programme of research would have scope to directly influence local, regional, national, and international public health heatwave plans, to reflect the bespoke heat mitigation strategies for females. By disseminating the research findings to charities and other industry sectors, practitioners will be better informed to provide guidance to females on how to better cope in the heat. The research findings will also have the potential to feature in sporting heat policy developments both in the UK and internationally.



INTERACTIVE DISPLAYS TELL FORMER HOSPITAL'S STORY



Harriet Hathaway, Curator at The Infirmary

There will be three new hands-on displays at the University of Worcester-run Infirmary Museum to enhance the visitor experience as well as the University's teaching provision. This project is being supported using public funding by the National Lottery through Arts Council England of nearly £60,000.

Situated within the University's City Campus, The Infirmary Museum keeps the memory of the Worcester Royal Infirmary – which once operated from the same building alive with a series of exhibits about what life was like. These range from medical equipment from different periods to medical uniforms and

anatomy models. Visitors who worked or were treated at the hospital are also invited to commit their memories to a display board.

The funding will create three digital interactive stations; an Amputation Station, Microscope Station and Keyhole Surgery Station.

Harriet Hathaway, Curator of The Infirmary Museum, said: *"Our museum tells the story of Worcestershire's hospital formerly on the site, and we are keen to attract even more visitors to share that story further. We believe that the new interactive installations will add extra interest for visitors, particularly our younger visitors, and bring some of the medical procedures and medical discoveries to life. By attracting even more people we can preserve that history for future generations, showing how medical care has changed and evolved over time and the hospital's place in that journey."*

One section of the Museum is dedicated to the story of a surgeon of the Infirmary who trialled different amputation techniques. The Amputation Station will help children to understand the process in more detail. The Microscope Station will allow visitors to take a closer look at a variety of slides under a microscope using a digital touch screen animation.

The Keyhole Surgery Station will test the visitors' surgical skills by providing them with an opportunity to 'perform' a key-hole surgery. Visitors will use real medical instruments to manipulate organs in a model body, whilst looking at a television monitor to see the results of their work.

It is hoped that an increasingly interactive side to the Museum will encourage further collaborative work with departments within the University, including the new Three Counties Medical School, providing experiences for students, while also serving the wider public, including schools.



NEW METHODS OF IDENTIFYING AT-RISK PATIENTS

Researchers at the University of Worcester have discovered a new way of helping to identify patients at risk of a second heart attack, by sampling their blood.

The test can also help to predict the type of heart attack a patient might have, and the area of the heart affected.

Heart attacks can be classified into two main types- STEMI (ST Segment Elevation Myocardial Infarction) and NSTEMI (Non-ST segment elevation myocardial infarction).

The researchers looked at certain biomarkers in the blood samples of patients who'd been admitted to hospital after an NSTEMI heart attack. They found that when the blood samples of the patients had a higher concentration of a particular biomarker, they were at a higher risk of having a second heart attack in the following 12 months.

The study began in 2018 and was carried out in collaboration with the Cardiology Department at the Worcestershire Acute Hospitals NHS Trust. Following peer review, it has now been accepted by the International Journal of Cardiology.

Dr Steven Coles, a senior lecturer in Biochemistry from the University of Worcester, was the supervisor for the study. He said:

"The study used blood samples from people who were presenting at hospital with an Acute Coronary Syndrome event. We studied these samples and followed up with them after six months and then again after 12 months. We looked at the concentration of particular biomarkers in their blood and categorised them into low, medium or high for that biomarker. Half of the group who had higher levels of it were readmitted to hospital with a secondary heart attack in the year following their initial one, but for the patients who were in the 'low' group for the biomarker, not a single one was readmitted. For the patients, this highlights the risk to them, and you can provide improved follow-up care. We Can look at how we treat these patients and that's what we need to work with clinicians on. This research doesn't replace the need for things like ECGs but it does give an insight which can improve ongoing care for patients."

The study also found that the biomarker was useful in determining which kind of heart attack the patient was experiencing. The British Heart Foundation has highlighted in the past the harm that can be caused by being diagnosed as having the wrong kind of heart attack.

Dr Coles said *"Our biomarker allows for better distinction between heart attack types, even the area of the heart which has been affected. We can predict in 70 percent of heart attacks what kind of heart attack the patient is having, and this is accurate in all groups, for men and women and across the age ranges."*

The study looked at 80 Acute Coronary Syndrome patients recruited over a number of years and involved a control population as well. It has led to the creation of a large clinical dataset which can be used for further study into the care of patients who have had ACS.



Dr Steve Coles

RESEARCH TO EXPLORE CLIMATE-INDUCED MIGRATION

Two academics at the University of Worcester are part of a global research project looking at climate-induced migration and building resilience for communities.

The ground-breaking £2.3million three-year research project, Climate Adaptation and Resilience Strategies (CLARS), aims to address the challenges of climate-induced migration and enhance the resilience of both migrants and host communities in the Lake Victoria Basin - Kenya, Uganda and Tanzania - and Great Lakes Region - USA and Canada.

It is predicted that more than 200 million people will be forced to move due to the impacts of climate change in the next 25 years. Increasing evidence suggests such migration is already happening with the Internal Displacement Monitoring Centre recording more than 32.6 million displacements in 2022 alone, 98% of which were the result of weather hazards like flooding and wildfires.

The CLARS research project will bring together a team of researchers from the UK, US, Canada, and Germany. Among them are Dr Cedric Nkiko and Professor Alan Dixon from the University of Worcester. Along with Dr Laurie Parsons, from the University of London, and Dr Andreolla Serraglio, from Potsdam Institute for Climate Impact Research in Germany, they will focus their part of the research on the Lake Victoria Basin.

“By understanding how communities in the Global South, such as the Maasai, have been dealing with climate change for a considerable length of time, we aim to learn from their extensive experience,” said Dr Nkiko. “Overall, this will enrich our comprehension of climate adaptation and boost the resilience of migrants and host communities globally.

“For example, in the US, droughts in the Southwest, hurricanes in the Gulf region and sea level rises on the East and West Coast are pushing migrants to the Great Lakes Region in search of abundant natural resources. This research hopes to help city planners and host communities prepare and manage for such migrating activities in both lakes regions.



Dr Cedric Nkiko



Prof. Alan Dixon



“We hope that the outputs of the project will extend beyond both lakes’ regions, benefiting communities worldwide, leading to comprehensive databases related to climate migration and contribute to providing actionable recommendations for policymakers.”

Until now there has been little research that looks at the full impacts of climate-induced migration, including on both the migrants themselves but also the receiving communities. And rarely have those in the global North sought to draw on the climate-induced experiences of those in the global South.

CROSSING THE LINE:

PROVIDING PERSONAL CARE IN THE CONTEXT OF FAMILIES AFFECTED BY DEMENTIA

The Association for Dementia Studies was granted 18 months funding of £ 254,141.00 by the National Institute of Health Research (NIHR), to conduct the Crossing the Line research study (2022 to 2024). The study was developed to gain a comprehensive understanding of the personal care giving experiences of family carers who support someone with dementia and hear their often-hidden voices.

Family carers that support people with dementia had told us that the issue of personal care is very important to them, though initial research has shown that little is known about it in the context of dementia and family care.



Personal care includes helping with going to the toilet, washing, bathing, dressing, mouth-care, shaving, haircare and foot and nail-care. The research explores family carers personal strategies for overcoming challenges when supporting someone with personal care, enabling the development of accessible and educational resources on personal care for use by family carers for someone with dementia.

A UK-wide survey of family carers about the challenges they face providing personal care was designed and distributed with 292 valid returns. The research team also conducted 28 interviews with family carers to explore these challenges and experiences in greater depth. A thematic analysis was undertaken along with an Interpretative Phenomenological Analysis (IPA) of four diverse transcripts, to delve even deeper into the experiences of family carers.

The research has included an incredibly valuable Expert by Experience group, who have contributed to the design of the study through to the delivery. This group has consisted of people with lived experience, including a person living with dementia, family carers and people with dual professional and lived experiences.

Three co-production events were held at the University of Worcester, whereby professionals and those with lived experience worked collaboratively to develop informative personal care resources, derived from the findings of the research. The team is now working on a series of leaflets around personal care, a film and information web pages for family carers to access. These resources have also been reviewed by professionals from England, Ireland, Scotland and Wales, as well as by the studies LGBTQ+ and Equality, Diversity and Inclusion advisors.

If you would like to access a copy of the personal care resources once they have been finalised or are interested to find out more about the study, please email Faith Frost (Research Associate) f.frost@worc.ac.uk.



This project is funded by the National Institute for Health and Care Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number NIHR202970)

RECENT PUBLICATIONS

A selection of research outputs published since December 2023

DIGITAL INNOVATION

BOOK SECTION: *Watts, Helen, Taroun, Abdulmaten and Jones, Richard (2024)* **A CASE STUDY OF BIG DATA ANALYTICS CAPABILITY AND THE IMPACT OF COGNITIVE BIAS IN A GLOBAL MANUFACTURING ORGANISATION.** In: Artificial Intelligence of Things (AIoT) for Productivity and Organizational Transition. Advances in Computational Intelligence and Robotics (ACIR) . IGI, Hershey, Pennsylvania, pp. 1-25.

With the rise of big data analytics in recent years, organisations now have more data than ever before to make decisions. Whilst AI solutions are developing to aid big data decision making, employees continue to analyse big data introducing bias and variability into the process. This chapter details a case study examining the efficacy of the big data analytic capability (BDAC) model, and how it can be augmented to account for cognitive bias to improve the model's organisational value. Qualitative semi-structured interviews were conducted within a global

data-driven manufacturing organisation. Thematic analysis elucidated that cognitive bias impacts decision making when analysing big data. This case study yields recommendations for a modified big data analytics capability model to recognise an additional sub-dimension under the 'intangibles' dimension of 'objective decision-making'. Implications for manufacturing organisations and the role of AI in both removing and adding bias are discussed.

BOOK: *Rezaei, Sajad and Ansary, A. (2024)* **ARTIFICIAL INTELLIGENCE OF THINGS (AIOT) FOR PRODUCTIVITY AND ORGANIZATIONAL TRANSITION.** Advances in Computational Intelligence and Robotics (ACIR). IGI, Hershey, Pennsylvania.

In the dynamic intersection of cutting-edge technology and evolving business strategies, the fusion of Artificial Intelligence (AI) and the Internet of Things (IoT) has given rise to a revolutionary paradigm known as Artificial Intelligence of Things (AIoT). This emerging technological powerhouse offers boundless possibilities while presenting formidable challenges, and organizations worldwide are wrestling with its integration into their core operations.

Artificial Intelligence of Things (AIoT) for Productivity and Organizational Transition delves into this transformative synergy between AI and IoT. This book explores the multifaceted dimensions of AIoT across varied domains, ranging from education to marketing, hospitality to logistics, and beyond. It sheds light on how this cutting-edge technology is reshaping the very essence of organizations, and provides strategic tools to enhance value chain processes.

Readers will encounter a meticulous examination of the pivotal role played by AIoT in addressing technical challenges within organizations, all while raising crucial concerns and risks that resonate throughout societies. AIoT's impact is monumental,

empowering organizations to elevate productivity by extending its reach into the products and services they offer. The book uncovers strategic decisions regarding AIoT deployment, offering insights into how business leaders can harness this technological juggernaut to enhance communication, information flow, and stakeholder relationships for sustained productivity and strategic success.

This book introduces the fundamental concepts underpinning AIoT integration and the evolving landscape of AIoT research and development, then delves deep into the theoretical foundations of AIoT, examining it through the lenses of economics, behavioral science, technology, psychology, and organizational theory. Within its pages, readers will discover insights into the tools, methods, design factors, user interfaces, and techniques driving AIoT innovation.

This comprehensive work is destined to be an indispensable resource for researchers, business leaders, educators, e-commerce managers, business analysts, and students across a spectrum of disciplines. Entrepreneurs and technology developers will also find it an invaluable guide as they navigate the ever-evolving landscape of AIoT.

BOOK SECTION: Wareham Morris, Katy (2024) **DEEFAKE SOCKPUPPETS: THE TOXIC**

'REALITIES' OF A WEAPONIZED INTERNET. In: Gothic Nostalgia: The Uses of Toxic Memory in 21st Century Popular Culture. Palgrave Gothic (PAGO). Palgrave Macmillan, London, pp. 61-79.

Deepfakes combine the latest in machine learning and Artificial Intelligence to create hyper-realistic audio-visual forgeries. Using state of the art technologies to engineer computer-generated, synthetic movement synchronised with fake audio tracks, deepfakes represent the next generation of digital media manipulation and disinformation: online propaganda cognitively more arresting than other text or image-based fake news, and which improve in quality with each new fake.

Industry experts and academics in the computer sciences have acknowledged the use of deepfakes to produce pornographic videos, fraud and fake news. This chapter investigates the pervasive, deceptive potential of deepfake 'sockpuppets', that is the creation of fake identities that generate and perpetuate toxic propaganda online. These 'sockpuppets' operate undetected as internet users do not have the forensic technology nor media literacy to identify the forgery. Even global news agencies and their editors do not have the expertise of global intelligence agencies who might be able to

detect algorithmic glitches or weaknesses. This has meant that these non-existent, untraceable personae have manifested as international journalists generating publishable content, with the intention of distorting public perception and discourse. Perhaps more worrying, is that even on the discovery of the deepfake this 'news' is not retracted nor removed from websites.

This chapter investigates who is behind the 'sockpuppet' and their intentions. It argues that they are deployed as the cutting edge in toxic media propaganda to undermine cultural and political relationships and campaigns. This form of deepfake is purposefully provocative, working to compromise world leaders and remind nations of geopolitical conflicts. Through the use of xenophobic, racist and misogynist ideologies 'sockpuppets' incite social tensions whilst also undermining the internet as a source of reliable factual information. This has the startling potential to weaponize the internet, moving to a position where nothing is 'true' and maybe that doesn't matter.

JOURNAL ARTICLE: Chastney, J., Gill, H. K., Nyatanga, Brian, Patel, R., Harrison, G. and Henshall, C.

(2024) **"TO TELL YOU THE TRUTH I'M TIRED": A QUALITATIVE EXPLORATION OF THE EXPERIENCES OF ETHNICALLY DIVERSE NHS STAFF.** BMJ Open, 14 (1).

Objectives The aim of this paper was to explore the experiences and support needs of ethnically diverse healthcare staff and how they were affected by the COVID-19 pandemic.

Design A qualitative study using focus groups conducted remotely on Microsoft Teams.

Setting The study took place across 10 National Health Service Trusts in England; 5 were Acute Hospitals Trusts and 5 were Community and Mental Health Trusts.

Participants 55 participants across 16 focus groups took part in the study. Participants were all healthcare staff members from ethnically diverse backgrounds.

Results Seven themes were generated which highlighted issues of negative experiences of discrimination at work, particularly during the COVID-19 pandemic, including participants often finding line managers unsupportive, appearing to lack care and compassion, and not understanding ethnic diversity issues. Participants identified many reasons

for finding it difficult to speak up when faced with such experiences, such as feeling unsafe to do so, or feeling too exhausted to keep speaking up. Other staff had more positive experiences and described supportive interventions, and despite workplace difficulties, many participants discussed remaining motivated to work in the National Health Service.

Conclusions Negative day-to-day experiences of ethnically diverse healthcare staff, and the difficulty of speaking up about these align with other, international literature on this topic. Progress in the area of staff equality is vital if healthcare organisations are to continue to provide high-quality patient care and retain skilled, compassionate staff who value their place of work. Recent literature suggests that many initiatives to reduce inequalities have not been successful, and there is a call for fundamental, cultural-level change. Future research is needed to understand how best to implement these organisational-level changes and to evaluate their effectiveness.

JOURNAL ARTICLE: *Smith, E., Carter, Melody, Walklet, E. and Hazell, Paul* (2024) **EXPLORING THE METHODOLOGICAL BENEFITS AND CHALLENGES OF UTILISING A PHOTOVOICE METHODOLOGY WITH INDIVIDUALS IN RECOVERY FROM PROBLEM SUBSTANCE USE.** Qualitative Health Research.

Photovoice is a type of visual research method which supports participants to reflect upon their experiences by capturing digital images. It is a methodology that is routinely used with groups that could be considered vulnerable, as a way of allowing participants to tell their stories for themselves. This article details the process of conducting a Photovoice study with individuals in recovery from problem substance use and reflects on the methodological benefits and challenges of utilising a visual research

methodology with this population. Researchers wishing to conduct a Photovoice study with individuals in recovery should be mindful of striking a delicate balance between respecting an individual's autonomy and ensuring their wellbeing. Although ethically complex, Photovoice is an ideal method for research with this population as it allows participants to convey meaning and introduce narratives for themselves in an engaging way.

SOCIAL EXCLUSION, CULTURE AND IDENTITY

JOURNAL ARTICLE: *Burgess, Beth , Vinson, Don , Molnar, Gyoza and Richardson, Emma* (2024) **THE REALITIES OF UTILISING PARTICIPATORY RESEARCH AND CREATIVE METHODS TO EXPLORE THE EXPERIENCES OF NON-HETEROSEXUAL COACHES.** Sports Coaching Review, 13(2), 191–203.

Participatory research is “with”, “for” and “by” participants, rather than “on” or “to” them, thereby moving away from a traditional subject-researcher relationship towards a cooperative approach. Participatory research seeks empowering and equitable ways to conduct research with participants, which is pertinent with marginalised groups that have historically been side-lined by traditional methods. This article explores the value of participatory research with non-heterosexual coaches, and the importance of centralising

participants’ lived experience and knowledge in research. Given the limited use of creative methods within coaching research, attention will be focused on the realities of deploying such methods. We argue that coaches in research should have the opportunity to authentically express their experiences, and insights through methods of their choosing. In doing so, diverse, intersectional knowledge may be shared, and opportunities created to support the exploration of sensitive, complex topics that exist within coaching practice.

BOOK SECTION: *Lane, Michael* (2024) **NAVIGATING DEVOLUTION AT THE UPR: THE CASE OF THE UNITED KINGDOM.** In: Human Rights and the UN Universal Periodic Review Mechanism: A Research Companion. Routledge, Abingdon, pp. 277-299.

The United Kingdom is somewhat unique in its constitutional composition, with each of its regions – Wales, Scotland, and Northern Ireland – governed by ‘devolved’ administrations that derive their authority from the UK ‘Westminster’ Parliament. This is referred to as devolution. This chapter examines the challenges that devolution poses for the UK’s engagement with each stage of the Universal Periodic Review. This includes, navigating the ‘broad consultation’ process in advance of reviews; how recommendations might (or might not) be appropriately targeted to devolved administrations; and the role of devolved administrations in

responding to and implementing recommendations. Measures that might be adopted in the UK to better realise this engagement are also analysed. These matters are explored through a review of documentation on the UK’s three UPRs to date; and a reading of the legislation and scholarship on the nature of devolution in the state. This piece is a unique contribution to the UPR scholarship. Though federalisation has received some attention in the literature, devolution as a distinct form of decentralisation has received almost none. This is, therefore, the first scholarly contribution to focus primarily on this issue.

BOOK: *Mitra, Barbara, Young, Sharon and Mirza, M. (2024) GENDER IN THE DIGITAL SPHERE: REPRESENTATION, ENGAGEMENT, AND EXPRESSION.* Rowman and Littlefield, Maryland, U.S.

The digital sphere, especially social media, is perceived as a new form of public sphere where individuals can share and circulate information and participate in formal and informal democratic processes albeit in the context of echo chambers and confirmation biases. *Gender in the Digital Sphere* explores how we represent, express, and engage with the digital world via the lens of gender. Each chapter

touches on one of the three pillars of engagement, expression, or representation in relation to the digital world, and themes range from social media, body image and identity to feminist activism to gender and digital narratives. The contributors raise important questions about the impact of digital media in everyday life and make connections between theory and everyday accounts of gender and technology.

JOURNAL ARTICLE: *Toon, Wendy (2024) "PROBABLY THE MOST PERFECT SYMBOL OF OUR DEMOCRACY": THE ARMY, SPORTS, AND THE RE-EDUCATION OF GERMAN YOUTH DURING THE EARLY AMERICAN OCCUPATION OF GERMANY, 1945–1946.* *Journal of American Studies*, pp. 1-28.

During World War II, Germany and the United States fought it out on the battlefields, but once the Allies were victorious, American attention quickly turned to the playing fields. Despite recent enmity, in the spirit of amity GIs quickly started recreational games with German youngsters. This seemingly natural development was at odds with both American expectations of the Germans and vice versa.

Reeducation of Germany, and especially its Nazi-indoctrinated youth, was viewed as essential to peace, and the army, through sports, became perhaps unlikely early reeducators. This article outlines sports' inherent Americanness, this impromptu playing, and its relationship to the formal army program of youth activities.

PROFESSIONAL EDUCATION

JOURNAL ARTICLE: *Norman, Kay (2024) ENHANCING COMMUNICATION IN NURSING AND MULTIPROFESSIONAL HEALTHCARE TEAMS.* *Nursing Standard*, 39 (5). pp. 23-36.

Effective communication within nursing and multi-professional healthcare teams is essential to promote patient safety. However, communication is a complex concept comprising various elements and variables that affect how messages are delivered, received and interpreted. In this article, the author explores communication within healthcare teams

and provides some insight into the factors that affect team communication, such as interpersonal relationships. The author also explores organisational culture and cultural sensitivity, and discusses some evidence-based approaches to enhancing communication within healthcare teams.

JOURNAL ARTICLE: *Lipscomb, Martin (2024) CAN PHILOSOPHY BENEFIT NURSES AND/OR NURSING? HEIDEGGER AND STRAUSS, PROBLEMS OF KNOWLEDGE AND CONTEXT.* *Nursing Philosophy*, 25 (1). pp. 1-8.

When researchers and scholars claim their work is based on a philosophical idea or a philosopher's corpus of ideas (and theory/theorist can be substituted for philosophy/philosopher), and when "basing" signifies something significant rather than subsidiary or inconsequential, what level of understanding and expertise can readers reasonably

expect authors to possess? In this paper some of the uses to which philosophical ideas and named philosophers (Martin Heidegger and Leo Strauss) are put in exegesis is critiqued. Considering problematic instances of idea-name use may enable the question: "Can philosophy benefit nurses and/or nursing?" to be better understood if not answered.

JOURNAL ARTICLE: *Francis, John , Kyte, Jamie and Bateman, Michael* (2024) **THE ROLE OF THE ANALYST: COMPARATIVE ANALYSIS OF APPLIED PERFORMANCE ANALYST JOB ADVERTISEMENTS IN THE UK AND IRELAND (2021-2022).** *International Journal of Performance Analysis in Sport*, 1–30.

This study examined the key roles, responsibilities, and skills sought when advertising for the recruitment of Applied Performance Analysts (APAs) in UK and Irish professional sports settings. Deductive and inductive content analysis of the job descriptions and personal specifications of 130 job advertisements from 2021 to 2022 across the entire APA spectrum was undertaken. This encompassed 21 different specific role titles. Despite unified advertisement formats, noticeable variations emerged regarding length and content focus, regardless of First-team or Academy positions. The findings revealed a greater focus on Sports Performance Analysis (SPA), sports, and technical expertise coupled with professional behaviours in APA advertisements, with less priority

shown to relationship-building skills. First-team positions particularly requested more skill-specific analysis expertise. Academy APAs were expected to focus on collecting data, facilitating feedback, in addition to creating and approving infrastructure for various age groups. Comparatively, First-team roles involved more complex data analysis tasks, including interrogating data, trend identification, and stakeholder reporting. The analysis not only highlights role discrepancies but also serves as a potential framework for employers when creating job advertisements, assists applicants in identifying the key skills to highlight, and informs curriculum and training programmes to cover the entire APA spectrum.

JOURNAL ARTICLE: *Spicksley, K. and Kington, Alison* (2024) **UNITING TEACHERS THROUGH CRITICAL LANGUAGE AWARENESS: A ROLE FOR THE EARLY CAREER FRAMEWORK?** *British Journal of Educational Studies*, 72(1), pp. 23–41.

In this paper, we make initial advances towards building an argument for the inclusion of Critical Literacy Awareness within the new Early Career Framework in England. Using illustrative examples from recent research projects, we argue that post-2010 education policy has discursively divided practitioners, structuring relationships between different groups of teachers in schools as hierarchical and competitive, rather than collegial and supportive. We argue that such hierarchies may be a contributing

factor to the teacher retention crisis, given that research indicates teachers working in schools with a collegial culture are more likely to remain committed and motivated. We propose that engagement with CLA may enable early career teachers to critique and resist dominant discourses which differentiate and hierarchically divide them from their colleagues, and therefore, the utility of CLA should be explored within future iterations of the Early Career Framework.

JOURNAL ARTICLE: *Vinson, Don , Bradshaw, A. and Cale, A.* (2024) **VALUE CREATION IN A COACH DEVELOPER SOCIAL LEARNING SPACE: STORIES OF OPENNESS AND MAKING A DIFFERENCE.** *International Sport Coaching Journal*, AOP. pp. 1-15.

Previous studies concerning Coach Developer learning have demonstrated notable deficiencies in the provision offered to practitioners, commonly reporting what they experienced was prescriptive instruction of how to deliver coach education courses – a practice starkly in contrast to the espoused theoretical underpinnings of the courses themselves. This Participatory Appreciative Action and Reflection investigation (PAAR; Ghaye et al., 2008) aimed to better understand the value created for, and through, 10 participants recruited to a 9-month Coach Developer professional development programme that was designed not to prescribe, but to guide, their learning. Data were collected through individual and group interviews, field notes and professional

discussions. Additionally, this study aimed to investigate the extent to which the identification of short and long value flows could provide insight into Coach Developer learning. Two main themes were constructed, namely; (a) Openness to finding new ways of developing others, and (b) Making a difference. Embracing the concepts of value creation, as well as short and long value flows, illuminated the importance of the consideration of Coach Developers' predispositions, non-prescribed guidance by programme facilitators, and the power of value creation stories. These findings illustrate how value creation concepts can potentially help to understand Coach Developer learning.

JOURNAL ARTICLE: Frearson, Antoinette and Duncan, Mandy (2024) **AN INTERPRETIVE PHENOMENOLOGICAL ANALYSIS OF TEACHERS' LIVED EXPERIENCES OF WORKING WITH TRAUMATISED CHILDREN IN THE CLASSROOM.** Journal of Child and Adolescent Trauma. pp. 1-16.

This study illuminates teachers' lived experiences of working with traumatised children in school environments. Children who experience trauma display a range of behaviours in the classroom which impact on attainment and outcomes. Dealing with childhood trauma in the classroom is challenging and brings risks to teachers' mental health including secondary traumatic stress and burnout. Interpretative phenomenological analysis (IPA) was

employed to understand the lived experiences of teachers working with traumatised children in the classroom. Findings from in-depth semi-structured interviews with six teachers indicate that teachers increasingly support traumatised children in the classroom but there is a need for targeted trauma-informed training and effective support from senior management to support teachers' mental health and wellbeing.

HEALTH AND WELLBEING

JOURNAL ARTICLE: Tajuria, G., Dobel-Ober, D., Bradley, Eleanor, Charnley, C., Lambley-Burke, R., Mallen, C., Honeyford, K. and Kingstone, T. (2024) **EVALUATING THE IMPACT OF THE SUPPORTING THE ADVANCEMENT OF RESEARCH SKILLS (STARS) PROGRAMME ON RESEARCH KNOWLEDGE, ENGAGEMENT AND CAPACITY-BUILDING IN A HEALTH AND SOCIAL CARE ORGANISATION IN ENGLAND.** BMC Medical Education, 24 (126). pp. 1-12.

Objectives To evaluate the impact a novel education programme - to improve research engagement, awareness, understanding and confidence - had on a diverse health and social care workforce. Barriers and facilitators to engagement were explored together with research capacity-building opportunities and ways to embed a research culture. The programme is entitled 'Supporting The Advancement of Research Skills' (STARS programme); the paper reports findings from a health and social care setting in England, UK.

Methods A four-level outcome framework guided the approach to evaluation and was further informed by key principles of research capacity development and relevant theory. Quantitative data were collected from learners before and after engagement; these were analysed descriptively. Semi-structured online interviews were conducted with learners and analysed thematically. A purposive sample was achieved to include a diversity in age, gender, health and social care profession, and level of attendance (regular attendees, moderate attendees and non-attendees).

Results The evaluation spanned 18 half-day workshops and 11 seminars delivered by expert educators. 165 (2% of total staff at Midlands Partnership University NHS Foundation Trust (MPFT)) staffs booked one or more education sessions; 128 (77%) including Allied Health

Professionals (AHPs), psychologists, nursing and midwifery, and social workers attended one or more session. Key themes of engagement with teaching sessions, relevance and impact of training and promoting a research active environment were identified with relevant sub-themes. Positive impacts of training were described in terms of research confidence, intentions, career planning and application of research skills as a direct result of training. Lack of dedicated time for research engagement, work pressures and time commitments required for the programme were key barriers. Facilitators that facilitated engagement are also described.

Conclusions Findings demonstrate the impact that a free, virtual and high-quality research education programme had at individual and organisational levels. The programme is the product of a successful collaboration between health and social care and academic organisations; this provides a useful framework for others to adapt and adopt. Key barriers to attendance and engagement spoke to system-wide challenges that an education programme could not address in the short-term. Potential solutions are discussed in relation to protecting staff time, achieving management buy-in, recognising research champions, and having a clear communication strategy.

JOURNAL ARTICLE: Lyndon, S., Solvason, Carla (2024) **'IT'S A STRUGGLE' – THE ROLE OF THE SCHOOL HEALTH AND WELL-BEING LEAD IN SUPPORTING FAMILIES IN POVERTY.** Journal of Poverty and Social Justice (JPSJ). pp. 1-20.

This paper explores one primary school's response to addressing poverty experienced by children and families, within a post-covid context. It draws on a small-scale qualitative case study exploring the role of the Health and Well-Being Lead [HWBL] in a primary school in the Southeast of England. This study is born out of previous research funded by TACTYC which examined the contribution of Maintained Nursery Schools [MNSs] in low-income areas of England to Early Years Education and Care (Authors' own, 2020a; 2020b). The most prominent finding from the previous research was how these nurseries not only supported the holistic education of the child but were also attuned to the wider needs of the family. Part of the findings included the need for a designated member of staff, funded by the local authority, who could be sent out to offer support to families as a preventative measure when they saw that "the wheels [were] getting wobbly" (Authors' own, 2020a: 56); acting as a bridge between the home and the setting. The present research arose from an encounter with Katie (pseudonym) at a

university conference, who was fulfilling a role in a primary school which was very similar to the one identified in the research with the Maintained Nursery Schools. Although Katie worked in a school, she was not a teacher, her background was in family support. This paper presents a case study focusing on Katie's role as a Health and Well-being Lead [HWBL], within a primary school in an area of relatively low-income in a predominantly affluent market town. The research was unfunded and arose from a joint interest between the school where Katie worked and the researchers to explore the contribution that the role of the HWBL makes to the children and families at the school. It privileges the voices of the families and staff, including the 'struggles' families face, their resilience and innovation in addressing these, and how they are supported by the HWBL within the school context. Although the context has changed from early years (where the need for this role was originally recognised) to a Primary school; the role, with a focus upon care for the whole family unit, remains the same.

JOURNAL ARTICLE: McCullough, J., Gillen, P., Miller, P., Sinclair, M., Black, R., Miller, P. and Farrell, Derek (2024) **EXPLORATORY PEDAGOGICAL RESEARCH OF A BESPOKE EYE MOVEMENT DESENSITISATION AND REPROCESSING THERAPY TRAINING FOR MIDWIVES.** Mental Health Science (e59). pp. 1-14.

Eye movement desensitisation and reprocessing (EMDR) therapy is a transdiagnostic, comprehensive, integrative, evidence-based treatment intervention for post-traumatic stress disorder (PTSD), complex PTSD, and perinatal PTSD. PTSD can arise from an experience of pregnancy or birth related trauma. Despite this, there is limited availability and access to EMDR therapy within the United Kingdom National Health Service. EMDR is a psychotherapeutic intervention which is usually delivered by highly specialist mental health professionals. However, with such a robust protocol, it is appropriate to consider if other health professionals should be trained to deliver EMDR. Humanitarian trauma capacity-building projects in a global context have shown that task shifting can assist with addressing unmet mental health therapy needs. Midwives are highly skilled graduates working in the perinatal period who understand that women's emotional health is as important as their physical health. Therefore, it was proposed that EMDR knowledge and skills could be efficiently task shifted to midwives. The aim and

objectives were to train midwives to deliver modified EMDR scripted protocols and techniques and explore qualitative and quantitative outcomes of a bespoke EMDR for midwives (EMDR-m) educational programme. The online training was delivered to the midwives over 4 days with clinical practicums incorporated throughout. Pre and post-tests demonstrated an increase in their EMDR knowledge, skills and confidence. EMDR Group Supervision provided by three experienced EMDR Accredited Practitioners was mandatory for 6 weeks post-training and ongoing one-to-one supervision was made available. Midwives scored the course 9.6/10 (range 8–10) and described it as 'amazing' and 'invaluable'. Challenges for the future include ring-fenced time and an appropriate space to deliver the therapy. Those midwives who completed the training have progressed to deliver early EMDR-m interventions in a perinatal mental health research study in their own Health and Social Care Trust (reported elsewhere).

JOURNAL ARTICLE: Song, J., Jonsson, L., Lu, Y., Bergen, S., Karlsson, R., Smedler, E., Gordon-Smith, Katherine, Jones, I., Jones, Lisa, Craddock, N., Sullivan, P., Lichtenstein, P., Di Florio, A. and Landén, M. (2024) **KEY SUBPHENOTYPES OF BIPOLAR DISORDER ARE DIFFERENTIALLY ASSOCIATED WITH POLYGENIC LIABILITIES FOR BIPOLAR DISORDER, SCHIZOPHRENIA, AND MAJOR DEPRESSIVE DISORDER.** *Molecular Psychiatry*. pp. 1-10

Bipolar disorder (BD) features heterogeneous clinical presentation and course of illness. It remains unclear how subphenotypes associate with genetic loadings of BD and related psychiatric disorders. We investigated associations between the subphenotypes and polygenic risk scores (PRS) for BD, schizophrenia, and major depressive disorder (MDD) in two BD cohorts from Sweden (N = 5180) and the UK (N = 2577). Participants were assessed through interviews and medical records for inter-episode remission, psychotic features during mood episodes, global assessment of functioning (GAF, function and symptom burden dimensions), and comorbid anxiety disorders. Meta-analyses based on both cohorts showed that inter-episode remission and GAF-function were positively correlated with BD-PRS but negatively correlated with schizophrenia-PRS (SCZ-PRS) and MDD-PRS. Moreover, BD-PRS was negatively, and MDD-PRS positively, associated

with the risk of comorbid anxiety disorders. Finally, SCZ-PRS was positively associated with psychotic symptoms during mood episodes. Assuming a higher PRS of certain psychiatric disorders in cases with a positive family history, we further tested the associations between subphenotypes in index BD people and occurrence of BD, schizophrenia, or MDD in their relatives using Swedish national registries. BD patients with a relative diagnosed with BD had: (1) higher GAF and lower risk of comorbid anxiety than those with a relative diagnosed with schizophrenia or MDD, (2) lower risk of psychotic symptoms than those with a relative diagnosed with schizophrenia. Our findings shed light on the genetic underpinnings of the heterogeneity in clinical manifestations and course of illness in BD, which ultimately provide insights for developing personalized approaches to the diagnosis and treatment.

JOURNAL ARTICLE: Morris, L., Innes, A., Williamson, Tracey, Wyatt, M., Smith, E. and McEvoy, P. (2024) **EXPERIENCES OF A COMMUNICATION-SKILLS COURSE FOR CARE PARTNERS OF PEOPLE LIVING WITH DEMENTIA, EMPOWERED CONVERSATIONS: A QUALITATIVE FRAMEWORK ANALYSIS.** *British Journal of Clinical Psychology*, 63, pp. 227–243.

Objectives Our aims were to examine whether an experiential course for care partners of people living with dementia, Empowered Conversations (EC), was acceptable to participants and to explore participants' perceptions of the impact of the course upon their communicative interactions. EC is based on an integrative model derived from psychological and linguistic theory and empirical evidence. EC is based on mentalisation theory, perceptual control theory and linguistic theory (The Communicative Impact Model).

Methods Qualitative data were collected via 28 semi-structured interviews. Framework analysis was used to analyse data.

Results Three superordinate themes, 'improved communication', 'improved well-being' and 'support through others' were identified. Twenty-seven out of

the 28 participants described feeling that they were able to better connect with the person living with dementia that they were supporting through attending EC.

Conclusions The findings indicated that EC was acceptable and beneficial to care partners. Care partners developed a range of strategies and understandings that enabled them to communicate better with the person they were supporting, enhanced well-being and relationships, as well as developing social networks. This is the first qualitative study to examine a psychosocial intervention for care partners of people living with dementia using a non-CBT framework and indicates that perceived control could influence how care partners respond to stress and difficulties.

JOURNAL ARTICLE: *Petch, Geoffrey, et al. (2024)* **GLOBAL SPORE SAMPLING PROJECT: A GLOBAL, STANDARDIZED DATASET OF AIRBORNE FUNGAL DNA**. Scientific Data, 11 (561). pp. 1-17.

Novel methods for sampling and characterizing biodiversity hold great promise for re-evaluating patterns of life across the planet. The sampling of airborne spores with a cyclone sampler, and the sequencing of their DNA, have been suggested as an efficient and well-calibrated tool for surveying fungal diversity across various environments. Here we present data originating from the Global Spore Sampling Project, comprising 2,768 samples collected during two years at 47 outdoor locations across the world. Each sample represents fungal DNA extracted from 24 m³ of air. We applied a

conservative bioinformatics pipeline that filtered out sequences that did not show strong evidence of representing a fungal species. The pipeline yielded 27,954 species-level operational taxonomic units (OTUs). Each OTU is accompanied by a probabilistic taxonomic classification, validated through comparison with expert evaluations. To examine the potential of the data for ecological analyses, we partitioned the variation in species distributions into spatial and seasonal components, showing a strong effect of the annual mean temperature on community composition.

JOURNAL ARTICLE: *Kim, D., Li, Y., Ahn, H., Woods-Tör, Alison, Cevik, V., Furzer, O., Ma, W., Tör, M. and Jones, J. Carsten (2024)* **ATR2CALA2 FROM ARABIDOPSIS-INFECTING DOWNY MILDEW REQUIRES 4 TIR-NLR IMMUNE RECEPTORS FOR FULL RECOGNITION**. New Phytologist. 243, pp. 330-344.

Arabidopsis Col-0 RPP2A and RPP2B confer recognition of *Arabidopsis* downy mildew (*Hyaloperonospora arabidopsidis* [Hpa]) isolate Cala2, but the identity of the recognized ATR2Cala2 effector was unknown.

To reveal ATR2Cala2, an F2 population was generated from a cross between Hpa-Cala2 and Hpa-Noks1. We identified ATR2Cala2 as a non-canonical RxLR-type effector that carries a signal peptide, a dEER motif, and WY domains but no RxLR motif. Recognition of ATR2Cala2 and its effector function were verified by biolistic bombardment, ectopic expression and Hpa infection.

ATR2Cala2 is recognized in accession Col-0 but not in

Ler-0 in which RPP2A and RPP2B are absent. In ATR2Emoy2 and ATR2Noks1 alleles, a frameshift results in an early stop codon. RPP2A and RPP2B are essential for the recognition of ATR2Cala2. Stable and transient expression of ATR2Cala2 under 35S promoter in *Arabidopsis* and *Nicotiana benthamiana* enhances disease susceptibility.

Two additional Col-0 TIR-NLR (TNL) genes (RPP2C and RPP2D) adjacent to RPP2A and RPP2B are quantitatively required for full resistance to Hpa-Cala2. We compared RPP2 haplotypes in multiple *Arabidopsis* accessions and showed that all four genes are present in all ATR2Cala2-recognizing accessions.

JOURNAL ARTICLE: *Baysal, O., Studholme, D., Jimenez-Quiros, C. and Tör, M. Carsten (2024)* **GENOME SEQUENCE OF THE PLANT-GROWTH-PROMOTING BACTERIUM BACILLUS VELEZENSIS EU07**. Access Microbiology, 6 (5). pp. 1-26.

Many Gram-positive spore-forming rhizobacteria of the genus *Bacillus* show potential as biocontrol biopesticides that promise improved sustainability and ecological safety in agriculture. Here we present a draft-quality genome sequence for *Bacillus velezensis* EU07, which shows growth-promotion in tomato plants and biocontrol against *Fusarium* head

blight. We found that the genome of EU07 is almost identical to that of the commercially used strain QST713 but identified 46 single-nucleotide differences that distinguish these strains from each other. The availability of this genome sequence will facilitate future efforts to unravel the genetic and molecular basis for its beneficial properties.

JOURNAL ARTICLE: *Cherry, Amy, Wheeler, Mike, Mathisova, Karolina and Di Miceli, Mathieu (2024)* **IN SILICO ANALYSES OF THE INVOLVEMENT OF GPR55, CB1R AND TRPV1: RESPONSE TO THC, CONTRIBUTION TO TEMPORAL LOBE EPILEPSY, STRUCTURAL MODELING AND UPDATED EVOLUTION** *Frontiers in Neuroinformatics*, 18. pp. 1-20.

Introduction The endocannabinoid (eCB) system is named after the discovery that endogenous cannabinoids bind to the same receptors as the phytochemical compounds found in Cannabis. While endogenous cannabinoids include anandamide (AEA) and 2-arachidonoylglycerol (2-AG), exogenous phytocannabinoids include Δ -9 tetrahydrocannabinol (THC) and cannabidiol (CBD). These compounds finely tune neurotransmission following synapse activation, via retrograde signaling that activates cannabinoid receptor 1 (CB1R) and/or transient receptor potential cation channel subfamily V member 1 (TRPV1). Recently, the eCB system has been linked to several neurological diseases, such as neuro-ocular abnormalities, pain insensitivity, migraine, epilepsy, addiction and neurodevelopmental disorders. In the current study, we aim to: (i) highlight a potential link between the eCB system and neurological disorders, (ii) assess if THC exposure alters the expression of eCB-related genes, and (iii) identify evolutionary-conserved residues in CB1R or TRPV1 in light of their function.

Methods To address this, we used several bioinformatic approaches, such as transcriptomic (Gene Expression Omnibus), protein-protein (STRING), phylogenic (BLASTP, MEGA) and structural (Phyre2, AutoDock, Vina, PyMol) analyzes.

Results Using RNA sequencing datasets, we did not observe any dysregulation of eCB-related transcripts in major depressive disorders, bipolar disorder or schizophrenia in the anterior cingulate cortex, nucleus accumbens or dorsolateral striatum. Following in vivo THC exposure in adolescent mice, GPR55 was significantly upregulated in neurons from the ventral tegmental area, while other transcripts

involved in the eCB system were not affected by THC exposure. Our results also suggest that THC likely induces neuroinflammation following in vitro application on mice microglia. Significant downregulation of TRPV1 occurred in the hippocampi of mice in which a model of temporal lobe epilepsy was induced, confirming previous observations. In addition, several transcriptomic dysregulations were observed in neurons of both epileptic mice and humans, which included transcripts involved in neuronal death. When scanning known interactions for transcripts involved in the eCB system ($n = 12$), we observed branching between the eCB system and neurophysiology, including proteins involved in the dopaminergic system. Our protein phylogenic analyzes revealed that CB1R forms a clade with CB2R, which is distinct from related paralogues such as sphingosine-1-phosphate, receptors, lysophosphatidic acid receptors and melanocortin receptors. As expected, several conserved residues were identified, which are crucial for CB1R receptor function. The anandamide-binding pocket seems to have appeared later in evolution. Similar results were observed for TRPV1, with conserved residues involved in receptor activation.

Conclusion The current study found that GPR55 is upregulated in neurons following THC exposure, while TRPV1 is downregulated in temporal lobe epilepsy. Caution is advised when interpreting the present results, as we have employed secondary analyzes. Common ancestors for CB1R and TRPV1 diverged from jawless vertebrates during the late Ordovician, 450 million years ago. Conserved residues are identified, which mediate crucial receptor functions.

PUBLIC & COMMUNITY ENGAGEMENT

AMY LEVY AND THE 'JEWISH LITERARY COMPLEX'

18 January 2024, Online

Dr Luke Devine, Senior Lecturer in Sociology and Politics, gave a talk to the Jewish Historical Society of England entitled "Amy Levy and the 'Jewish Literary Complex'". This talk coincided with the release of Luke's new edited collection: *Amy Levy: Collected Writings*.

ART HOUSE OPEN LECTURES: MARCUS COATES

23 January 2024, The Art House

Marcus Coates attempts to understand how we relate to each other and the implications of this for the world around us. His work is often motivated by the need for change, with a social and ecological impact in mind. He works with others to create processes founded on empathy and trust, collaborating with members of the public, organisations and institutions, as well as experts from a wide range of disciplines including; anthropologists, ornithologists, wildlife sound recordists, choreographers, politicians, psychiatrists, palliative care consultants, musicians, and primatologists amongst others.

FANTASY: REALMS OF IMAGINATION

30 January - 25 February 2024, the Hive

From January 30th to February 25th, The Hive will be hosting an exhibition on tour from the British Library entitled 'FANTASY: REALMS of IMAGINATION'.

To celebrate and enhance The Hive show, students and alumni from the School of Arts have responded to an open call to produce work to be exhibited alongside the exhibition.

Work was produced around the themes: Illustrated maps, World building, Concept art, D&D, Weird & Uncanny, Magic & Dark Arts, Fairy & Folk tales, Myth and Legend, Myths and Monsters, and Character design.



CREATIVE READING SERIES: CATHERINE SWIRE

31 January 2024, The Hive

Catherine Swire's collection of poems, *Soil*, is published by the Artel Press in 2021 and illustrated by Russian artist, Marina Kolchanova, explores the way that trauma is translated by landscape. *Soil* provides maps of walks around trauma-sites that explore local myths and history as well as the stupor of loss. Now in its third edition, the poems were featured on Radio 4's *Ramblings* and at *Ledbury Poetry Festival*. Her work prompted a 2023 exhibition in Worcester Cathedral of drawings in response, by landscape artist Bridget Macdonald. Last year Catherine led poetry workshops from Kent to the Highlands. She is a qualified teacher and teaches young adults. Her prize-winning book of prose and poetry *Ash, Flame, Feather* will be published by Black Spring Press in February/March 2024.

FANTASY WORLDS

Between January and March 2024, the Hive hosted a series of events centred around the theme of 'Fantasy'. As part of this, academics from the University of Worcester delivered talks around this theme.

WHAT'S SO WEIRD AND WONDERFUL ABOUT 1980S NOSTALGIA, FANTASY AND SCI-FI: A CRITICAL INSIGHT ON *STRANGER THINGS*

5 February 2024

Katy Wareham Morris delved into modern cult classic *Stranger Things* and explored what makes it so captivating to audiences.



THE MAGIC OF SCIENCE AND LOVE

14 February 2024



What is the mysterious thing called love, and how can we find it? In this talk Dr Kate Ashbrook and Prof Darren Oldridge explored various attempts to understand (and create) love, past and present.

Darren considered the enticing and disreputable practice of "love magic" in the Tudor and Stuart age. Kate explored modern scientific research into the mysteries of human attraction.

CURRENT RESEARCH INTO THE FANTASY GENRE

19 February 2024

Staff and students from the University of Worcester's School of Humanities explored how elements of fantasy - forms, styles, characters, genres and mythologies - inform their interdisciplinary and multidisciplinary research projects. From the villains of early modern plays compared to reality 'star' villains, to constructing embarrassment and challenging ethics. Speakers included: Lucy Smith (Student, MRes Media and Culture), Jane Cassidy (Student, MRes Sociology), Katy Small (Student, MRes Sociology), Niamh Dolly Fitzpatrick (Student, MPhil/PhD English Literature), John Davies-Mourby (Student, MRes Sociology), and Wendy Hill (Student, MRes History).

LIMITLESS IMAGINATION - HOW DOES OUR BRAIN PRODUCE IMAGINATION? WITH DR MATHIEU DI MICELI

5 March 2024

Imagination is the faculty of forming new ideas or concepts outside of our immediate reality. This is believed to be the reason why humans have become the dominating species on the planet. It is also the basis of fiction, whether printed or on-screen. This interactive session explored imagination and how neuroscience aims to decipher its neurological and psychological principles. The session also analysed how imagination can become a disease, such as in hypochondria, schizophrenia, or psychosis.

WITCHCRAFT AND CHILDREN'S BOOKS

27 March 2024

For centuries witchcraft has inspired fascination and fear - and also many kinds of entertainment. In this talk Profs Darren Oldridge and Jean Webb examined the history of witchcraft and its incorporation into modern fiction for children and young adults. As they revealed, the witch of children's literature has kept some of the qualities of her historical ancestors, but also undergone some magical transformations.

ROUND TABLE DISCUSSION: THE SPECTRAL CHILD AND THE LAW

2 February 2024, Hybrid event (Trinity College Dublin and online)



As part of the 'Haunting Issues: Children, Spectrality and Culture' AHRC Research Network, and in collaboration with colleagues in the School of Law at Trinity College Dublin, 'The Spectral Child and the Law' drew together a cohort of creative writers, cultural commentators, clinicians and legal scholars for a roundtable discussion on where the child might be understood to be 'missing' in Irish law, both historically and in the contemporary moment. Chaired by Dr Lucy Arnold, this conversation reflected on how literature might articulate the silences, questions and tensions which exist in Irish law around the figure of the child

and of the foetus, in relation to the provision of reproductive healthcare, miscarriage, child loss and infertility, among other issues, particularly in the wake of the 'Repeal the 8th' movement, and the constitutional change which followed it. The event asked how creative work might respond to these absences and the questions they generate in a way which is impactful and meaningful to an audience beyond the legal and medical profession, and the potential of literature to play a vital role in helping societies navigate issues that have historically been highly polarising.

ART HOUSE OPEN LECTURES: MATTHEW CORNFORD

6 February 2024, The Art House

Matthew Cornford is an artist and teaches at the University of Brighton. Cornford is currently working with John Beck (University of Westminster) on a project to find and document the sites of every former British Art School.

The Art School Project was prompted by the discovery that the college both Beck and Cornford attended in the early 1980s, Great Yarmouth College of Art and Design, was disused and up for sale. Evolving over 15 years outcomes from this work include an ongoing series of solo exhibitions: The Art Schools of North West England, Bluecoat, Liverpool (2018); The Art Schools of the West Midlands, The New Art Gallery Walsall (2023) and most recently The Art Schools of the East Midlands, Bonington Gallery Nottingham (2023). A related public ART project commissioned by Meadow Arts is visible on the sides of the Hereford College of Art student accommodation building, No.1 Station Approach, Hereford.



WOMEN'S STUDIES GROUP 1558 – 1837 SEMINAR SERIES

7 March 2024, Online

Doctoral student and Associate Lecturer; Niamh Dolly Fitzpatrick, presented online at a public seminar for the Women's Studies Group 1558-1837, on the 7th March. Her talk was entitled "Isabella Andreini & Margherita Costa: Dramatists. Creatures. Women." and focussed on how theatre was used as a medium for the advancement of proto-feminism in the Italian Renaissance.

INTERNATIONAL WOMEN'S DAY: INSPIRING INCLUSIVITY AND SEIZING OPPORTUNITIES

8 March 2024, City Campus

In March, colleagues from Worcester Business School organised a public event to mark International Women's Day. This year's theme, 'inspiring inclusivity and seizing opportunities', captured a wide array of stories, and explored the role that opportunism has played in shaping the journeys of the speakers so far. Attendees heard from insightful business leaders, such as

'Women Who, Worcestershire', as well as inspirational students, graduates and collaborators.



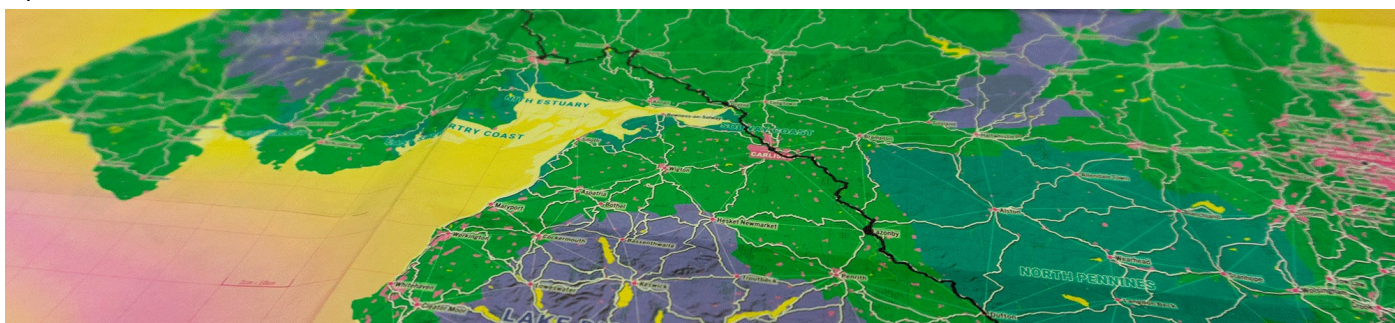
'NATIONAL RAILWALKS' LAUNCH EVENT

9 March 2024, Online

The 'Railwalks' launch workshop aimed to capitalise on interest generated from the Railwalks website and social media in the core idea of linking up all UK stations via walking routes. Talks and workshops were run throughout the day with the aim of helping to:

1. Plot new walks between stations where there were presently none over the UK rail system.
2. Discuss what the group should do into the future and where it might focus their energies.
3. Show individuals how to use simple walking navigation apps using GPX tracks.

This new overarching national group aims to help collate these routes and develop new walks to 'fill the gaps'. Attendees ranged from Ramblers organisations, train operators, rail employees and transport specialists and writers.



ANNUAL PUBLIC LECTURE: CONSTITUTIONS, RIGHTS AND JUSTICE RESEARCH GROUP

20 March 2024, Jenny Lind Building



Sir John Henry Boulton Saunders

This year's annual public lecture for the Constitutions, Rights and Justice Research Group was delivered by former senior judge Sir John Henry Boulton Saunders, with a presentation entitled, '*Should we be locking so many people up for so long in prison?*'.

Sir John was appointed to the High Court Bench in 2007. He presided over a number of high-profile trials, including trials arising from the Parliamentary Expenses scandal (2011) and News Phone Hacking scandal (2013/2014) and was also the presiding Coroner and Chair of the Public Inquiry into the Manchester Arena terror attack. Until 2020, Sir John was the Vice Chairman of the Parole Board of England and Wales.

TACKLING THE TRUTH: WHY WOMEN FACE MORE KNEE INJURIES IN SPORT?

8 April 2024, Elizabeth Garrett Anderson Building

The Three Counties Medical School and student Medicine Society (MedSoc) inaugural public engagement event took place in April, with a series of interdisciplinary talks exploring why women footballers are six times more likely sustain Anterior Cruciate Ligament (ACL) injuries.



ART HOUSE OPEN LECTURES: LAURA WHITE

16 April 2024, The Art House

Laura White has a materially engaged practice, that cuts across a studio practice (primarily sculpture), writing and fieldwork. Laura focuses on process and how objects/things come into being, with an emphasis on the handling of materials, from stable material such as ceramics and concrete to the changeable matter of clay, bread dough, silicone rubber and rusting metal. Exploring and responding to material behaviours and her personal relationships to them, alongside their historical and social contexts.

PLANT HEALTH MATTERS

12 May 2024, The Hive

Academics and research students delivered a day of activities, informative talks, displays and hands-on demonstrations all focused on plant health. This included a plant health diagnosis clinic and the chance to pick up a free plant. The event has been organised by the University's Molecular Plant and Microbial Biosciences Research Unit (MPMB-RU) in collaboration with experts from the School of Science and the Environment. It is designed to coincide with the United Nations' Food and Agriculture Organization's designated International Day of Plant Health (May 12). "The event aims to shed light on the often-overlooked significance of plants in sustaining life and maintaining the health of our ecosystems," said event lead Professor Mahmut Tör. Visitors explored tiny microorganisms through microscopes to understand how they cause plant diseases, as well as learning about the pollination process and the crucial role pollinators, such as bees and other insects, play in plant reproduction and maintaining a healthy ecosystem.



OUT LOUD

The Hive hosted a series of events around the theme 'Out Loud'. This series included explorations into the worlds of music, sound, communication, spoken word, oral history, voices and expression.

DAVID BOWIE AND IDENTITIES

18 April 2024

David Bowie is known for his ever-evolving personas, challenging boundaries, intersecting identity, and otherness. In personas such as Ziggy Stardust or songs such as Boys Keep Swinging, Bowie paved the way for those with ambiguous identities to feel accepted. Dr Barbara Mitra explored identity in Bowie's songs.

EUROVISION EUPHORIA

7 May 2024

During this celebratory explanation of all thing Eurovision, Lou Aimes-Hill and Tom Mandall took a deep dive into the history, queerness and the songs behind the world's largest live music event.

CENSORSHIP AND THE DEVIL: THE CASE OF *BRIMSTONE AND TREACLE*

8 May 2024

In 1976 the BBC cancelled a TV drama about the Devil by celebrated playwright Dennis Potter. Over forty years later, Potter's play remains deeply shocking - and also a remarkable work of art. During this screening of the original TV play, Professor Darren Oldridge provided an introduction and led a discussion to explore some of the many issues it raises.

IS THIS MUSIC TO MY EARS? EXPLORING THE LINKS BETWEEN MUSIC AND THE BRAIN

16 May 2024

Presented by Dr Mathieu Di Miceli, this interactive session explored the physical properties of music and how the brain processes sound, which can influence emotional behaviour. In addition, the links between music and neuroscience were deciphered to ascertain whether sound therapy could be used to treat stress, anxiety, pain, or memory impairments.

COWBOY CARTER AND THE 'FUNNY LITTLE CONCEPT' OF GENRE

20 May 2024

Cowboy Carter, the highly anticipated second instalment in Beyonce's 'triiilogy', secured the top spot on the Billboard Country Charts making her the first Black woman to ever have a number one country album. Lou Aimes-Hill and Issy Gawne took those in attendance through the album and its encapsulated histories; sonic interpolations, women in country, and the 'funny little concept' of genre.

DISCUSSION GROUP: TALKING TABOOS

Academics from the Department of English, Media & Culture at the University of Worcester discussed taboo, risky and potentially controversial topics in a series of discussion groups.

5 June 2024

'*Fat Activism*' with Robyn Platt

12 June 2024

'*Sex, Consent and Cultures of Silence*' with Holly Barnes-Bennetts

19 June 2024

'*Cancel Culture*' with Katy Wareham Morris



Image credit: @ladybuchness

PINT OF SCIENCE

13-15 May 2024, Arch Rivals & Francini Café de Colombia

"Pint of Science is a grassroots non-profit organisation that has grown astronomically over the few years since two people decided to share their research in the pub. Although our mission has expanded, our core values remain the same: to provide a space for researchers and members of the public alike to come together, be curious, and chat about research in a relaxed environment outside of mysterious laboratories or daunting dark lecture theatres. We believe that everyone has a place at the table to discuss the research going on both on our doorsteps and far beyond. Our missions and visions are based around the people that matter most: our audience, volunteers, speakers, and our wider research community."



In May, the Pint of Science festival returned to Worcester for 2024. Run at The Arch Rivals and Francini Café de Colombia, the events provided the public with the opportunity to hear academics and doctoral students talk on a wide variety of topics, covering everything from tackling sexism and misogyny, to supporting people living with dementia, to the UK constitution.

The events; organised by staff and students within the Doctoral School, proved to be a great success with engaging questions from the audience and subsequent positive feedback, with many attendees enquiring about future events.



TALKS

'Co-production: Doing health research differently'
Lois Donnelly, Dr Catharine Rose, Jess Howdle, Prof. Eleanor Bradley

'Doing things with dementia: Exploring support to keep people connected'
Thomas Morton

'A lesson on the UK constitution (but it's entirely 'US Office' memes)'
Dr Michael Lane

'Muddling-Through: How the UK responds to periods of political turmoil'
Dr Chris Monaghan

'Listen Up! What every child needs'
Dr Claire McLoone-Richards

'Close Encounters: How disengagement and alienation can affect pupils' experiences at school'
Dr Ben Looker

'What would you do? The Role of Bystander Intervention in Tackling Sexism & Misogyny'
Dr Gillian Harrop


'Consent Cultures & Positive Sexual Consent'
Holly Barnes-Bennetts

"'Will this get me cancelled?': The dilemmas of researching hot button topics"
Dr Bere Mahoney & Beck Lowe

'Covers, Collectivity and COVID-19'
Lou Aimes-Hill

'Improving females' health and performance by mitigating heat strain'
Dr Jessica Mee

"'I AM the Captain of my Fate": The Impact of the Düsseldorf 2023 Invictus Games"
Dr Emma Richardson

 Francini Cafe de Colombia
14 Angel Place, Worcester, WR1 3QN, United Kingdom

13 May



Doing Health Research Differently >

14 May




Who makes the rules? Brief Lessons on the UK const... >


15 May



Tuning into Children: Their rights to be respected... >


 The Arch Rivals
4 Netherton Court, Worcester, WR1 3AU, United Kingdom

13 May



It's On All of Us: The importance of healthy behav... >

14 May



Facing the Music: Exploring Controversy and Collec... >

15 May



Innovations for Wellbeing: Putting Women and Disab... >



L-R: Dr Emma Richardson, Jess Howdle, Beck Lowe, Dr Charlotte Taylor, Esther Dobson, Dr Catharine Rose, Robyn Platt, Dr Gillian Harrop, Dr Jessica Mee, Dr Michael Lane, Holly Barnes-Bennetts, Thomas Morton, Lois Donnelly, Dr Claire McLoone-Richards

The Doctoral School would like to thank the speakers for their participation, and the teams at Arch Rivals and Francini Café de Colombia for their help facilitating these events.

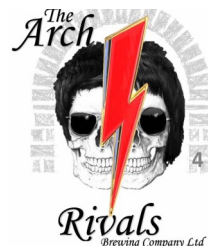


"Insightful, inclusive and fascinating"

"Thoroughly enjoyable"

"Great event, fabulously organised! Speakers were fascinating (and brave!) - really showed the value of showcasing emerging research. Thank you to everyone involved for a fantastic evening!"

"Extremely well presented and what a brilliant atmosphere created!"



Worcester City Co-ordinators: Esther Dobson & Dr Charlotte Taylor

Event Managers: Robyn Platt & Beck Lowe

Event Volunteers: Dr Claire McLoone-Richards & Nichola Armstrong



DEMENTIA ACTION WEEK

In May, the University teamed up with the Hive and Age UK Hereford & Worcestershire to mark Dementia Action Week with a variety of events, activities and an exhibition intended to educate, raise awareness and decrease stigma around dementia.

EXHIBITION: SEE THE PERSON, NOT THE DEMENTIA

13-19 May 2024

This exhibition created with Age UK Hereford & Worcestershire clients highlighted the impact of dementia on individuals and offered a poignant glimpse into its profound effects on families and the broader community. Through art, many aspects of dementia were unveiled, demonstrating the resilience, creativity and stories of those affected, their loved ones and the community at large.

DOING THINGS WITH DEMENTIA: EXPLORING SUPPORT TO KEEP PEOPLE CONNECTED

13 May 2024



Dementia research in the news is nearly always about finding a cure, but just as important is how we can support the nearly 1 million people (and growing) who are living with dementia right now. While a diagnosis of dementia is life changing, people can still live full and active lives with the condition - but support in the community needs to be better. Thomas Morton, Research Associate with the University of Worcester's Association for Dementia Studies, talked about their work to improve this situation, including initiatives like

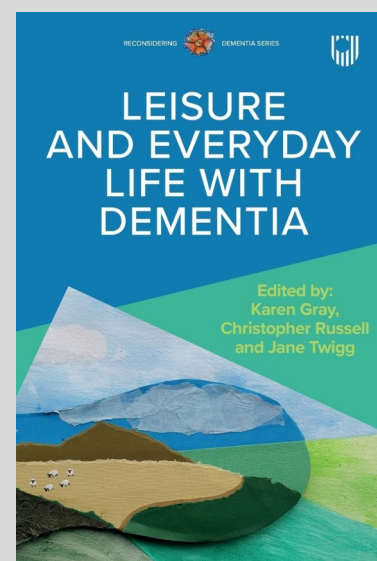
Meeting Centres that aim to connect people to their communities and each

other. He talked about what Meeting Centres are, who can go and what people do there, as well as the wider research that the Association for Dementia Studies does.

AUTHOR TALK AND Q&A: BEHIND THE COVER WITH DR CHRIS RUSSELL, KAREN GRAY AND JANE TWIGG

14 May 2024

Leisure and Everyday Life with Dementia is a book which examines leisure in the everyday lives of people living with dementia and challenges readers to consider the role of leisure activities beyond their potential for therapeutic benefit. Dr Chris Russell, discussed the publication and spoke with some of Age UK Herefordshire & Worcestershire's inspirational dementia members who shared their lived experiences with Dementia and what leisure activities mean to them.



HOW TO MAKE YOUR HOME DEMENTIA FRIENDLY

14 May 2024

Teresa Atkinson from the Association for Dementia Studies looked at how dementia and the physical environment interact. Participants learnt about some of the symptoms of dementia and the impact these can have, before exploring how dementia friendly design can help. The session covered the principles of dementia friendly environments, helping attendees to be more aware of their surroundings, and focusing on changes that can be made within the home and garden.

RESEARCH INFOGRAPHIC DESIGN BRIEF AND EXHIBITION

In February, a live research infographic brief was launched with second year BA(Hons) Graphic Design students. They were asked to produce number of diagrams to illustrate the data collected by a number of University of Worcester researchers from completed research studies. Devised by Esther Dobson (Doctoral School) and Andy Stevenson (School of Arts), the aim of the brief was to communicate academic work in an accessible and way to members of the public.

The students were invited to select from data sets from the following projects:

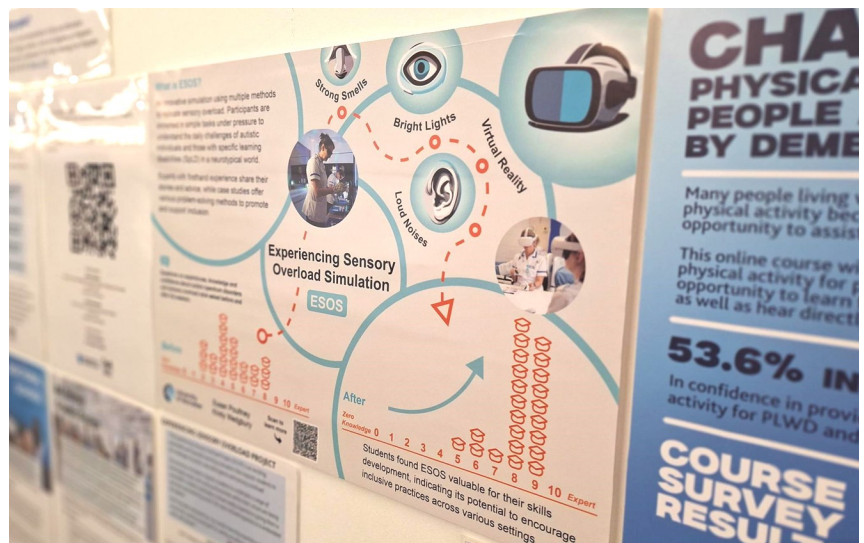
- 'Championing Activity for People Affected by Dementia' Principal Investigator: Dr Chris Russell
- 'Global Symptom Burden and Quality of Life in Chronic Kidney Disease (CKD)' Principal Investigator: Prof. Dez Kyte
- 'Experiencing Sensory Overload Project' Principal Investigators: Sue Poultney and Kirsty Wedgbury
- 'What do Applied Performance Analyst Employers Really Want?' Principal Investigator: Dr John Francis

"... this module and assignment ... has taught me a broad spectrum on how different information and data can be best translated visually and made simple and more efficient; I believe this assignment has also in a way pushed me out of my comfort zone and given me an insight of how as designers we must communicate with non-creative minded individuals and best translate ideas and concepts."

EXHIBITION

30 May–26 June 2024, The Hive

Once finalised, the Principal Investigators selected the infographic posters that best communicated their research, for an exhibition at the Hive. All completed infographic posters are accessible to view [here](#).



UNIVERSITY OF WORCESTER PUBLIC LECTURE SERIES: CONSENT FROM EARLY YEARS TO TEENS

21 May 2024, The Hive

Consent is not just a sexual issue but a social issue. In a post #MeToo world people are more and more aware of the 'issue' of sexual consent. We can see this reflected in the changes to the UK Relationship and Sex Education curriculum in 2021 which was amended to include education on consent. The problem with this is that consent is a broad concept with links to issues of bodily autonomy, respect and empathy which simply cannot be taught during one hour in secondary school.

During this talk, Holly Barnes-Bennetts looked at how we might go about embedding the concept of consent in the minds of the next generation from their early years. She discussed teaching children and young people to understand their own bodily autonomy, develop personal boundaries and to respect that of others, and supporting childhood empathy. A discussion followed the talk focussing on how to support the development of these practices in teenagers, particularly in the area of sexual intimacy.

HAY FESTIVAL

The University once again hosted a series of fascinating talks at this year's Hay Festival, widely regarded as one of the world's top literary festivals.

RISING TIDES AND FALLING HARVESTS

27 May 2024

The University of Worcester series of talks began with a talk exploring the pressing issues surrounding the surge in flooding incidents driven by climate change and their profound effects on communities, agriculture and our landscapes. Professor Ian Maddock, from the School of Science and the Environment, was joined by local fruit and hops grower, Ali Capper, former Environment Agency Area Manager, David Throup, and BBC journalist Nicola Goodwin.

GUARDIANS OF LEGACY: PRESERVING IDENTITY AND HERITAGE AMIDST CONFLICT

28 May 2024

The following day, the University hosted a thought-provoking discussion delving into the critical theme of preserving identity and heritage during times of war and conflict. Pro Vice Chancellor Education, Culture and Society, Professor Lisa Stansbie, and the University's Professor of Shakespeare Studies, Nicoleta Cinpoes, were joined by Dr Sara Nesteruk, a filmmaker and senior lecturer in creative digital design at Manchester Metropolitan University, and Philip Parr, Artistic Director of Parrabbola and Chair of the European Shakespeare Festivals Network.

A MANIFESTO FOR EDUCATION

29 May 2024

The third talk saw the University Vice Chancellor, Professor David Green CBE DL, joined by two former Secretaries of State for Education – Charles Clarke and Justine Greening - and the Times political columnist and Chair of the highly influential Times Education Commission, Rachel Sylvester, for a discussion exploring what a future government's manifesto and action for education should.

ILLUSTRATION WORKSHOPS

30 May 2024

The University's Illustration team ran a number of river-themed workshops aimed at children of all ages. This included crafting figures from leaves, sticks, flowers, seeds, nuts and a touch of string magic; mask making based on the nature, wildlife and folklore associated with the River Wye; designing River Warriors using mixed media; designing characters for a protest poster supporting the protection of the River Wye.

UNIVERSITY OF WORCESTER PUBLIC LECTURE SERIES: EXCLUSION FROM MAINSTREAM PRIMARY SCHOOLS IN THE WEST MIDLANDS

11 June 2024, The Hive

Approached from a perspective that considers 'childism' and feminist care ethics as tools for thinking differently, this talk examined how and why children are excluded from primary schools in England, with a particular focus on the West Midlands. In doing so, recently conducted research involving education professionals and parents of children excluded from primary school was drawn upon in order to explore the key concerns surrounding the practice of exclusion; leading into a broader conversation about what primary school exclusion can tell us about the issues faced by the school system today.



IMAGES OF RESEARCH

17-27 June 2024, The Hive

As part of the annual Images of Research competition, University researchers were invited to submit an image that captured their research, accompanied by a short lay summary suitable for a public audience. A total of 41 submissions were received from both research staff and students, and formed an exhibition displayed in the Hive.

Entries were organised around the University's Areas of Challenge: 'Human Health and Wellbeing', 'Sustainable Futures', 'Professional Education', and 'Culture, Identity and Social Exclusion'. The Images of Research online catalogue can be viewed [online](#).

PUBLIC CHOICE AWARD



WINNER

Niamh Fitzpatrick
'The Path of Virtue'

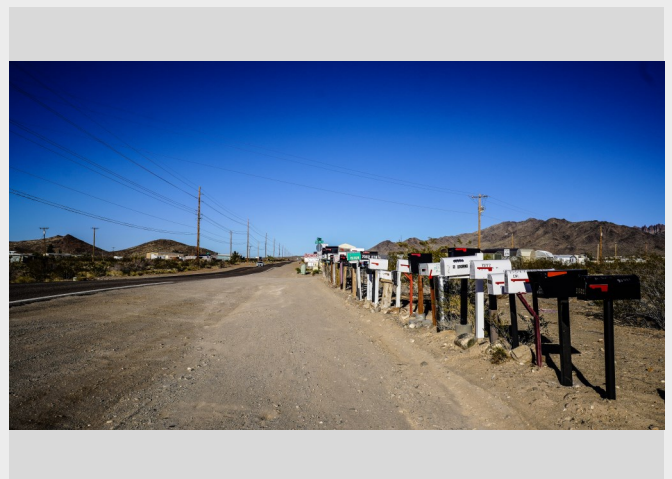
RUNNER UP

Antoinette Frearson
*'Somewhere over the Rainbow :
The Challenges of Post-Pandemic Teaching'*

RUNNER UP

Dr Sophie Knight
'Food for Thought'

JUDGES' CHOICE AWARD



WINNER

Thomas Butsch
'My Letterbox'

RUNNER UP

Prof. Alan Dixon
'Invisible Poverty'

RUNNER UP

Beck Lowe
*'I self-identify as
self-absorbed'*

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