

# **Eighth Annual ECR Conference**

**27th June 2025**  
**Teaching and Learning Centre**



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# Programme

## Registration and Refreshments

9:00-9:30

## Welcome and Introduction: Professor Charlotte Clarke, Executive Director, WRIHW

9:30-9:40

## Session #1: Talks Amir Atapour-Abarghouei (Chair)

9:40-10:40

9:40	<p>"The university is not designed for students from my background": An Examination of the Lived Experience of North-East Local Students' Sense of Belonging in an Elite Higher Education Institution</p> <p><b>Ella Hamilton</b></p>
9:55	<p>AI Model for Aortic Dissection Detection and Classification Based on CTA Images</p> <p><b>Maha Alsayyari</b></p>
10:10	<p>Assessing Cross-Cultural Differences Between International Chinese Students (ICS) and UK Home Students (UHS) to Identify Coping Resources for Anxiety: Developing Guidance to Improve Student Mental Health Services in Higher Education</p> <p><b>Wenjing Zheng</b></p>
10:25	<p>How elite UK universities reproduce racial inequality: An insider study exploring black students' sense of belonging at HE.</p> <p><b>Sharon Behrane</b></p>

## Refreshment Break

10:40 – 11.00

## Session #2: Flash Talks Sophie Lovell-Kennedy (Chair)

11:00– 11:25

11:00	<p>Research priorities for Autistic eating experiences identified by Autistic adults in the United Kingdom</p> <p><b>Charlie Greenall</b></p>
11:05	<p>Supporting both Parents &amp; Host Families in their Approach to Food Provision to Ensure Male Academy Footballers are Meeting their Energy Demands</p> <p><b>Holly Brown</b></p>
11.10	<p>The Quiet Genius vs The Social Innovator: How extraversion moderates creativity in solitary and social environments</p> <p><b>Janesh Uppala</b></p>
11.15	<p>Understanding The Paradox of Neuroticism's Preference and Struggle When Alone: The Role of Emotion Regulation Strategies in Solitude</p> <p><b>Kazel Lim Jieyi</b></p>
11.20	<p>Risk Perception of COVID-19 Infection in the UK: Based on the 2021 Large-Scale Household Survey Analysis</p> <p><b>Sungkyung Kang</b></p>

### Session #3: Poster Session

11:25– 12:15

P1	The Impact of Social Media Use on Thoughts and Emotion Regulation in Solitude and Social Settings <b>Xiangyu Deng</b>
P2	What to do When the Earth Shakes? Evaluating Generalised Risk Minimisation Guidance <b>Sheena Ramkumar</b>
P3	Investigating the association of pain catastrophizing and repetitive thought with depression and dysmenorrhea <b>Ella Feldmar</b>
P4	A Woman's Place: Exploring Local Stratifications of Maternal Healthcare within England <b>Leah Beglan</b>
P5	Alzheimer's and ALS prodromal biomarkers focused comparison between retired highly concussed & non-concussed UK male rugby players <b>Norah Alanazi</b>
P6	A Lasting Imprint: How Childhood Maltreatment Affects Social Touch Processing in Adults <b>Olivia Seargeant</b>
P7	Analysis of Commercial Solutions and User Needs in Digital Weight Management Interventions <b>Mengyisong Zhao</b>
P8	Exploring What Affords a Compassion Enabling Environment <b>Harriet Broadfoot</b>

### Lunch Break

12:15– 13:00

### Afternoon Session Introduction: Andrea Lambell

13:00 – 13.05

### Session #4: Unbound Opportunities Presentations

Julie Brown (Chair)

13:05 – 13:35

13.05	Building bridges with the respiratory community – Patient focused research priorities <b>Matthew Armstrong</b>
13.20	Talking About Dementia: An 'Unbound Opportunities' project <b>Johanna Thren and Andrea Lambell</b>

<b>Session #5: Talks</b> <b>Leanne Trick (Chair)</b>	
<b>13:35 – 14:35</b>	
13:35	Seeing is Believing: Effectiveness and Public Acceptability of Alcohol Warning Labels <b>Aditi Mishra</b>
13:50	Reliable Cardiovascular Question Answering with Validated Knowledge Graphs and Multi-Model Embeddings <b>Mohammed Alshammari</b>
14:05	Institutions and Public Health: Why Freedom Matters <b>Eben Macdonald</b>
14:20	Understanding the Experiences of Physical Activity for People in Prison Over the Age of 50 <b>Millie Warren</b>

<b>Refreshment Break</b>	
<b>14:35 – 15:00</b>	

<b>Session #6: Talks</b> <b>Johanna Thren (Chair)</b>	
<b>15:00 – 16:00</b>	
15:00	How the Play and Musical "Spring Awakening" Transcend to a Religion for Depressed Teenagers <b>Mirran Morrison</b>
15:15	Barriers to Accessing Holistic Medicine: Findings From Northeast England <b>Chung-Yen Cheng</b>
15:30	Engaging Chronically Fatigued People in Ethnographic work: challenges and opportunities <b>Nicholas Edwards</b>
15:45	Reimagining Health Research in the Medical Humanities: Art as method and interpretation <b>Olivia Peake</b>

<b>Closing Remarks, Awards and Thank You</b> <b>Andrea Lambell and the ECR Committee</b>	
<b>16:00 – 16:20</b>	

# Early Career Researchers

At the Wolfson Research Institute for Health and Wellbeing (WRIHW) we include a focus on the importance of nurturing its early career researcher (ECR) community. Our ECR community mirrors the interdisciplinary commitment of the WRIHW, with PhD students in anthropology illuminating a brighter side to ayahuasca tourism in South America, peers in bioscience ironing out some truths about dementia, and a wide variety in-between. Improving health and wellbeing is not restricted to a particular academic discipline, and neither are we.

The main goals of the ECR committee are:

- To increase the sense of community between ECRs within the WRIHW
- To increase the visibility of ECRs within the WRIHW, and to wider audiences
- To offer ECRs within the WRIHW opportunities to develop their research, CV and understanding of what a career in research can look like

If you are interested in joining our ECR committee or an ECR Member please contact Andrea Lambell or Amir Atapour-Abagouei.

## ECR Committee Members

Andrea Lambell	ECR Committee Lead, WRIHW Co-Director
Leanne Trick	Psychology
Charmele Ayadurai	Business School
Mohi Ziyachi	Sociology
Thuy-vy Nguyen	Psychology
Georgina Robinson	Theology and Religion
Dafni Lima	Law
Nic Kendall	Biosciences
Johanna Thren	Anthropology
Sophie Lovell-Kennedy	Anthropology
Aditi Mishra	Psychology
Julie Brown	Institute for Medical Humanities



# The Early Career Researcher Conference

This conference aims to showcase the wide range of Health and Wellbeing research at Durham University and promote interdisciplinary work amongst Early Career Researchers.

The conference will feature an introduction by Professor Charlotte Clarke, Executive Director of the Wolfson Research Institute for Health and Wellbeing and Associate PVC (Health), as well as special presentations from the Unbound Opportunities workshop grant awardees.

There will be presentations and posters by fellow ECRs. There will be time for questions and conversation, networking and collaboration. Prizes will be given for the best poster and best talk.

Thank you and please enjoy!

***The ECR Committee***



# **Session 1: Talks**

**Chaired by  
Amir Atapour-Abarghouei**





# **“The university is not designed for students from my background”: An Examination of the Lived Experience of North-East Local Students’ Sense of Belonging in an Elite Higher Education Institution**

**Ella Hamilton**

## **Department of Sociology**

Only 10% of students from the North-East of England attend Durham University, which has declined from 10.5% in the 2020/21 academic year (Jack, 2024). Of any United Kingdom (UK) institution, this is the lowest proportion of local students attending the university (ibid). This study aims to fill and aid the pre-existing literature surrounding sense of belonging at university, to highlight the experiences of North-East local students, in particular looking at their academic and social engagement. Drawing on quantitative and qualitative data collected from 55 participants at an elite higher education institution in the North-East of England, this study examines local students’ sense of belonging and aims to contribute perspectives from North-East students in order to understand their sense of belonging in higher education. The research challenges the lack of research of North-East local students, which is especially important at a university such as Durham University, since it is located in an area which has such a strong local identity, which is not particularly reflected in its student population. The findings should have wider implications for creating a greater sense of belonging at universities for North-East local students, and for there to be increased inclusivity and applicability of research within the field of belonging in higher education to North-East local students.

# AI Model for Aortic Dissection Detection and Classification Based on CTA Images

Maha Alsayyari

## Department of Computer Science

Aortic dissection is a severe cardiovascular condition in which the inner layer of the aortic wall tears, allowing blood to split the vessel wall layers and creating a life-threatening false lumen. It occurs at a relatively low frequency, ranging from 0.2% to 0.8%. However, If not accurately diagnosed and treated, it has a high mortality rate of 50% within 48 hours. Delayed or missed diagnoses on computed tomography angiography (CTA) are a major contributor to this high mortality. To address the urgent need for rapid, reliable detection, we have developed a fully automated, two-stage deep-learning pipeline that can operate directly on CTA volumes as soon as they are acquired.

**Stage 1: 3D Aorta Segmentation.** A three-dimensional convolutional neural network was trained on 50 CTA volumes, manually annotated by clinicians. The network partitions the aorta into two anatomically meaningful segments—pre-subclavian and post-subclavian—providing detailed volumetric masks that isolate the vessel from surrounding structures and standardize the region of interest for downstream analysis.

**Stage 2: Slice-Level Dissection Classification.** From each segmented volume, we extract axial 2D slices of the aorta and classify them as “dissected” or “non-dissected.” This second network was trained on 13 804 clinician-labeled slices and evaluated on a held-out set of 54 863 images, ensuring robustness even on challenging slices. By operating at the slice level, the model can pinpoint dissections that might be overlooked in volume-wide analyses.

In a blind test on 137 unseen patient scans, our system achieved a detection F1 score of 0.989 and an average classification F1 score of 0.896—performance comparable to expert readers. By integrating this pipeline directly into the CTA workflow, clinicians could receive immediate, high confidence alerts for both the presence and DeBakey type of aortic dissection, potentially reducing diagnostic delays and improving patient outcomes.

# Assessing Cross-Cultural Differences Between International Chinese Students (ICS) and UK Home Students (UHS) to Identify Coping Resources for Anxiety: Developing Guidance to Improve Student Mental Health Services in Higher Education

**Wenjing Zheng**

## Department of Psychology

Durham University, as one of the oldest and most prestigious collegiate universities in England, divides responsibilities between academic departments and the 17 colleges, which offers a unique support structure through its collegiate system.

This research explores the experiences and views of students and staff at Durham, with a particular focus on international Chinese students and UK home students. It helps people understand how Durham's unique collegiate system provides students with additional support and resources. It also explores what kind of mental health services students need, particularly in terms of cultural sensitivity and accessibility. This research has collected 31 student interviews, 10 staff interviews, and 29 completed student surveys.

### Preliminary Results

1. International students in the UK face key challenges such as cultural adaptation, language barriers, academic pressure, and emotional stress.
2. Chinese students are reluctant to disclose their disabilities to the university, fearing that such records may negatively impact their academic performance and future employment prospects.
3. Chinese students have a high threshold for seeking help, reflecting a lack of awareness and trust in the university's ability to support them.
4. International students encounter more challenges compared to their peers. These include isolation, navigating a foreign language, cultural differences, occasional racial discrimination, financial concerns, and immense pressure from parents.
5. Colleges and universities can raise awareness of support services by sharing information on Xiaohongshu, a key platform for Chinese students abroad.
6. Students often struggle to find mental health counselling contact details online, delaying access to support. Universities and colleges should improve website navigation and offer multiple booking channels, ensuring clear communication across support pages.
7. Overlapping college and departmental support responsibilities cause confusion, with students receiving conflicting or misleading information.

# **How elite UK universities reproduce racial inequality: An insider study exploring black students' sense of belonging at HE.**

**Sharon Berhane**

## **Combined Honours in Social Sciences**

My research, conducted with 10 black students at a primarily white elite institution, used qualitative methods to investigate what factors impact their sense of belonging in these spaces. Existing literature reflects on diversity, safe spaces and racism as the main issues impacting belonging for black students. However, my study discovers that institutional responses to racism and the perception of adequate racial support, have had just as consequential an impact on belonging as specific racist incidents for some participants. Similarly, the setting of Durham University highlights different aggravating factors specific to the Northeast, like the hypervisibility of black people, the difficulties accessing black hair care, beauty and food supplies, and racism from some local residents in the aftermath of the 'race riots' this summer. Therefore, this study offers universities and the HE sector different recommendations created by participants for strategies to support black students in uncertain times. These findings have been thematically analysed and coded enriched by the insider approach to data collection as it is investigated by a black student at the same university.

**Keywords:**

Sense of belonging, elite universities, primarily white institutions, black students, insider research

## **Session 2: Flash Talks**

**Chaired by  
Sophie Lovell-Kennedy**



# Research priorities for Autistic eating experiences identified by Autistic adults in the United Kingdom

**Charlie Greenall**

## Department of Psychology

**Objective:** Current understanding of eating behaviour is primarily focused on neurotypical populations, which does not appropriately reflect Autistic experiences. To date, research into Autistic eating experiences has highlighted negative influences on eating, such as sensory aversions and poor interoception, but a holistic picture of eating in autism is absent. This research aimed to provide a wider understanding of autism-specific eating experiences whilst amplifying Autistic voices by highlighting their priorities for eating research.

**Methodology:** In Stage 1, 13 Autistic adults (aged 18-57) completed three online focus groups, discussing eating experiences and research priorities. Transcript data were analysed using reflexive thematic analysis. In Stage 2, 174 Autistic adults (aged 18-74) completed a survey consisting of open-ended questions about their eating behaviour. Responses were analysed through content analysis using a coding framework developed from themes revealed in Stage 1. Participants also completed a priority-setting survey, ranking research priorities co-developed with Stage 1 participants.

**Results:** Five themes were developed in Stage 1, centered around predictability, sensory differences, emotions, cognition, and conforming to neuronormativity. Results from the content analysis in Stage 2 confirmed the themes from Stage 1 were representative of a wider Autistic population, and revealed two additional subthemes: Embodied sensory experiences, and Specific ED cognitions. Research priority-setting in Stage 2 revealed priorities to (i) better understand sensory processing and interoception in eating and (ii) address barriers and facilitators to accessing treatment for eating difficulties.

**Conclusion:** Autistic adults' eating experiences are underpinned by a complex interplay of positive, negative, and neutral influences. This work provides a preliminary foundation for a theoretical model of eating in autism. It also highlights key priorities of the Autistic community for research into interoception and barriers to treatment for eating difficulties. These priorities should be used to inform the focus for future research in this area.

# **Supporting both Parents & Host Families in their Approach to Food Provision to Ensure Male Academy Footballers are Meeting their Energy Demands**

**Holly Brown**

## **Department of Sport and Exercise Sciences**

A common theme in recent literature identifies that adolescent academy footballers are under-fuelled on days with greater energy demands. This research aims to support both parental and host family food provision to ensure elite academy footballers are meeting their energy demands, whilst giving additional thought to how elite football clubs advertise and select host families to support young footballers. Qualitative methods have been utilised to examine the dietary habits and social practices of players and their caregivers. Specifically, 32 semi-structured interviews were conducted during the 24/25 season, either at the training grounds of four academies within the English Football League or English Premier League, or online via Microsoft Teams. Discussions will be interpreted to determine if social practices and dietary habits could limit optimal dietary intake for player health and performance.

Following the analysis of each interview, an intervention will be introduced with the aim to effectively support caregivers in their approach to food provision by targeting the areas identified as limiting optimal intake. Initial observations suggest that players often eat in various spaces with limited control throughout the week, with interviews highlighting the chaotic nature of a young footballer's life. Additionally, food moralisation has been apparent in several interviews, and discussions suggest this is reinforced by club staff and caregivers, with some players describing disordered eating behaviours. This raises questions about the next steps, as it seems counterproductive to implement an intervention(s) in each academy that is likely to be ineffective due to the disjointed schedules described.

# The Quiet Genius vs The Social Innovator: How extraversion moderates creativity in solitary and social environments

Janesh Uppala

## Department of Psychology

This study examined the influence of environmental conditions (Solitude vs Social) and individual extraversion levels on creative performance, operationalized through divergent (Alternative Uses Task, AUT) and convergent (Remote Association Task, RAT) creativity tasks. Creativity research has traditionally been divided, emphasizing either the enhancing effects of social interaction or solitude. Similarly, extraversion has often been associated with creativity as a facilitating personality trait, particularly within social contexts. However, there is limited empirical research examining how these factors interactively influence creative output. A total of 38 participants, randomly assigned to either a solitude or social condition, underwent a controlled 6-hour experimental session. Prior to the session, extraversion levels were assessed online using the HEXACO Personality Inventory. Both divergent and convergent creativity were measured before and after the experimental manipulation to assess any changes attributable to the conditions.

Results indicated no significant differences in creativity performance between solitude and social conditions. Moreover, extraversion did not significantly moderate the effect of the environmental condition on either divergent or convergent creativity. Interestingly, baseline creativity scores emerged as the only significant predictors of final creative output for both creativity measures. This emphasizes the potential trait-like stability of creative abilities, suggesting that short-term environmental manipulations or personality factors like extraversion may have less influence than previously assumed. These findings challenge dominant narratives in creativity research that stress the significant influence of environmental stimuli and personality traits on creativity. Instead, the results lend support to a model where creativity is resilient and largely innate, minimally influenced by immediate external conditions. Methodological limitations, including the relatively brief experimental duration, modest sample size, and practical constraints on condition manipulation, may have contributed to the non-significant findings. Future research should explore longer-term, rigorously controlled environmental manipulations and integrate neuroscientific methodologies such as EEG or fMRI to investigate the deeper cognitive and physiological mechanisms underpinning creative processes. This approach could offer greater clarity regarding how internal traits and external environmental contexts jointly shape creative potential.



# Understanding The Paradox of Neuroticism's Preference and Struggle When Alone: The Role of Emotion Regulation Strategies in Solitude

Kazel Lim Jieyi

## Department of Psychology

Solitude promotes wellbeing, yet induces psychological distress as well. This heterogeneous emotional experience is salient within Neuroticism literature. Individual high in Neuroticism appears to be drawn towards solitude for emotional regulation purposes, yet they report struggling with feelings of loneliness as well. To reconcile these findings, this study aims to understand the emotional experiences in solitude within this population by looking at Neuroticism's emotion dynamics when alone. It also aims to identify the emotional regulation strategies supported by solitude, and whether the employment of adaptive or maladaptive emotion regulation strategies alters their solitude experience. Subjects (N = 9 -14) participated in a 6-hour long study where following a psychosocial stress induction phase, they stayed in either Solitude or Social Interaction for 4 hours. When alone, subjects kept themselves occupied with puzzles or books while in social interaction, they played with either board games or engaged in a casual conversation with a research assistant.

Results did not support any of the study's hypotheses but showed distinctive trends that are nevertheless discussed in light of the very limited sample available for analysis. Notably, prior deactivation and restorative effects of solitude appear to be replicated within the sample. Moreover, insights are potentially gained on previous reports of Neuroticism's predilection for solitude - individuals high in Neuroticism did not reap more benefits than others in solitude, however their mood was noticeably worse when in social interaction. Solitude also appears to support the use of adaptive emotion regulation strategies and at high levels of adaptive emotion regulation strategies use, the association of Neuroticism with negative emotions is observed to be markedly weakened. Non-significant findings of the study highlights the need to consider the unique characteristics of Neuroticism's emotionality. Altogether, these findings while to be taken cautiously, aligns with established functions of solitude as a space for self-regulation. It also provides potential insights to the role of emotion regulation strategies at altering solitude emotional experiences.

# **Risk Perception of COVID-19 Infection in the UK: Based on the 2021 Large-Scale Household Survey Analysis**

**Sungkyung Kang**

## **Department of Mathematical Sciences**

The spread of COVID-19 infection has had a crucial impact in the UK, at both a societal and individual level. To understand its impact, the virus risk perception of the population should be investigated. This has been reported variously depending on countries, their cultures, and socioeconomic factors. This perception in the UK has highlighted the importance of social solidarity – particularly when social interaction was restricted for public health reasons. The thesis explores how risk perception of the likelihood of COVID19 infection in the UK adult population is affected by socioeconomic factors, behaviours related to social solidarity and health status. The data analysed here were collected during the transition situation when England, Scotland, Wales, and Northern Ireland began easing their lockdown policies, in accordance with slightly different timelines. The data used in this thesis is the UK large-scale household survey data gathered in late March 2021 by the University of Essex, and an ordinal logistic regression analysis based on the survey design has applied.

From the data analysis, variables related to employment status, helping others living in different households, having COVID-19 vaccinations and general health status turned out to be statistically significant in relation to perceptions of the likelihood of COVID-19 infection. The findings are explained by drawing on the concepts of social solidarity, as suggested by Durkheim, and also that of comparative optimism.

## **Session 3: Poster Session**

**Please dont forget to vote!**

**This year you will choose  
the winner of best poster.**



# **The Impact of Social Media Use on Thoughts and Emotion Regulation in Solitude and Social Settings**

**Xiangyu Deng**

**Department of Psychology**

How does the use of social media shape our inner thoughts when we are alone versus when we are with others?

This study explores how momentary patterns of social media engagement affect the nature of self-reflection and thought content in solitude compared to social contexts, using Ecological Momentary Assessment (EMA) among young adults aged 16 to 24.

# What to do When the Earth Shakes? Evaluating Generalised Risk Minimisation Guidance

**Sheena Ramkumar**

## Department of Geography & Philosophy

What are the best, most effective protective action measures (PAMs) for people to take in a given context in order to minimise their earthquake risks? I address this question on the basis of research conducted in Nepal and Aotearoa/New Zealand. Currently, experts and earthquake safety organisations offering risk minimisation communication do so in a generalised, one-size-fits-all approach, which can prove counterproductive. Since there is little or no published information available evaluating and analysing current expert recommended PAMs and risk minimisation guidance, my poster offers a useful starting point for future interdisciplinary and intersectional (geography, philosophy, and disaster studies) research.

PAMs are used within disaster studies for disaster risk reduction (DRR) to signal appropriate action that should be taken during hazards like earthquakes. Duck, cover and hold (DCH) is an example of an earthquake PAM that is widely recommended, universally accepted, and adopted as the best guidance to follow in the case of an earthquake. As I argue, generalisation for universal applicability (the assumption that rules can be applied universally across different contexts) can be problematic; therefore, the practical dimensions of this DRR heuristic require deep critical scrutiny on a context-by-context basis.

Research, communication, and use are three key integrated knowledge components with significant interrelations and differing levels of interaction in the extensive processes of DRR. While the humanities can enhance the engagement with science and society to offer knowledge for use in practical contexts, this knowledge is not free from the socio-political and power constructs in which it is generated and disseminated. Societies consist of individuals with diverse backgrounds and unique living contexts, therefore the idea of a generalised, universal applicability of knowledge to any disaster context where people are involved requires critical evaluation. Generalisation for universal applicability, especially with regard to PAMs, is antithetical to the awareness of disasters as social constructs. If PAMs are meant to be used and make an impact by reaching their goals of minimising disaster risks for people, then this knowledge must be contextualised and co-produced with local persons and for local contexts, rather than the abstract, impersonal universal.

# Investigating the association of pain catastrophizing and repetitive thought with depression and dysmenorrhea

Ella Feldmar

## Department of Psychology

**Background:** Dysmenorrhea, also known as period pain, is a recurrent and often disabling condition that has been consistently linked to depression. However, the underlying cognitive mechanisms which explain this association are not well understood. This is a notable gap in the literature considering how important cognition is in shaping how individuals experience and respond to pain and distress.

**Method:** The current cross-sectional study investigated whether two cognitive processes, repetitive thought (dwelling on personal concerns; RT) and pain catastrophizing (a negative response pain; PC) explain the relationship between dysmenorrhea and depression. A total of 131 female university students who menstruate completed an online survey, consisting of questions related to menstrual history, recent pain severity, and standardised self-report questionnaires measuring PC, RT, dysmenorrhea and depression.

**Results:** Results indicated a significant medium-sized positive correlation between dysmenorrhea and depression. PC was a full mediator of the relationship between depression and dysmenorrhea suggesting that increased depressive symptoms significantly predicted greater severity of dysmenorrhea entirely via elevated PC. However, in the subset of participants who met clinical threshold for dysmenorrhea (n=88), RT did not mediate the reverse association between dysmenorrhea and depression.

**Conclusion:** These findings not only confirm the link between depression and dysmenorrhea, but also offer a novel perspective by demonstrating that PC may explain the relationship between depression and dysmenorrhea. The findings have implications for the treatment of dysmenorrhea, suggesting that targeting psychological symptoms and dysfunctional coping methods (PC) may be useful for managing pain and reducing the overall burden of dysmenorrhea. Finally, future research should address current methodological limitations by incorporating longitudinal designs with more diverse samples, to help advance both clinical practice and strengthen theoretical models of dysmenorrhea and depression.

# A Woman's Place: Exploring Local Stratifications of Maternal Healthcare within England

Leah Beglan

## Department of Psychology

This work is based around my undergraduate dissertation which aimed to explore how social and geographical place may impact equitable choice in maternal healthcare and support provision. Through the generation of primary data from a survey, interviews and participant observation based in neighbouring towns in South-East England, I examined perinatal experience and how it may be impacted over small geographical distances. Throughout, I discovered a strong stratification of equitable care, where middle-class residents exploit increased choice and agency to access high quality healthcare and support.

However, working-class residents are hampered by structural violence and reduced capital, ultimately constraining their access to choice in quality care. This inequity is important to uncover as through neoliberalisation of public healthcare and xenophobic minimisation of culturally varied alternative care the trajectory of stratification is accelerating. Further work I am engaging in looks at similar areas throughout England where neighbouring towns exhibit massive variances in deprivation and equitable access to quality healthcare. Tragically, these divergences often jeopardise the health of the most vulnerable within populations such as recent immigrants, asylum seekers and those on the poverty line.

I also look at other ways in which poor quality maternal healthcare is culturally justified, thereby reducing opportunity for public critique and improvement. These justifications appear all through the life-course: examples include schooling, occupations and prenatal classes. All of these may be seen as tools for propagating the biomedical norm and minimising women's choice concerning suitable care. Therefore, in order to ensure equitable provision of care, alongside public healthcare reform, I argue there must be a reform in cultural perception of maternal care, choice and rights.

# **Alzheimer's and ALS prodromal biomarkers focused comparison between retired highly concussed & non-concussed UK male rugby players**

**Norah Alanazi**

## **Department of Mathematical Sciences**

The health and well-being of retired rugby union and league players, particularly concerning the long-term effects of concussions, are of increasing concern. Concussion is recognised as a major risk factor for neurodegenerative diseases such as Alzheimer's disease and Amyotrophic Lateral Sclerosis (ALS), especially in athletes involved in contact sports. This study aimed to examine differences in key biomarkers between retired UK-based rugby players with a history of substantial concussions and a non-contact sports control group, with a specific focus on biomarkers associated with Alzheimer's disease, ALS, and Chronic Traumatic Encephalopathy (CTE).

A random sample of male retired athletes was selected from both contact (rugby) and non-contact sport backgrounds. Serum biomarkers (t-tau, RBP-4, SAA, Nf-L, and retinol), plasma cytokines, and serum-derived exosomal markers (A $\beta$ 42, p-tau181, p-tau217, and p-tau231) were assessed using validated commercial ELISA assays. Biomarker levels were compared between the two groups.

The results revealed significantly elevated levels of t-tau ( $p < 0.01$ ) and p-tau181 ( $p < 0.05$ ) in the group with a history of substantial concussions. While differences in p-tau217, p-tau231, SAA, Nf-L, retinol, and A $\beta$ 42 were not statistically significant, trends toward higher levels of A $\beta$ 42, p-tau217, and p-tau231 were observed in the concussed group. Notably, serum-derived exosome sizes were significantly larger ( $p < 0.01$ ), and RBP-4 levels were significantly lower ( $p < 0.05$ ) in the concussion group compared to controls.

These findings suggest that retired athletes with a history of repeated concussions exhibit altered serum and exosomal biomarker profiles, including increased t-tau, p-tau181, and exosome size, along with reduced RBP-4. These biomarkers warrant further investigation as potential early indicators of future neurodegenerative risk, including ALS, in individuals with a history of concussion.



# A Lasting Imprint: How Childhood Maltreatment Affects Social Touch Processing in Adults

Olivia Seargeant

## Department of Psychology

Childhood maltreatment (CM) has been linked to neuroanatomical changes and psychosocial disability in adulthood. Prior research has focused on the relationship between CM and the development of post-traumatic stress disorder (PTSD) and mood disorders (Copeland et al., 2018), while largely overlooking its effect on social perception, a key aspect of social functioning. Specifically, social touch perception has been linked to various psychiatric conditions, but no studies have investigated the effect of CM. This study examines how histories of CM and self-harm (SH) influence the neural encoding of visually presented social touch of others, focusing on whether those with such histories differ in their neural responses to positive and negative social touch.

A touch video database of social and nonsocial interactions was used as the stimuli set (Lee Masson et al., 2018). 139 participants (N = 43 in the CM+SH+ group, N = 50 in the CM+SH- group, and N = 46 in the control group) rated the affective qualities of each video clip while undergoing functional magnetic resonance imaging (fMRI). Behavioral ratings were analyzed for group differences in perception, and whole brain and region-of-interest (ROI) analyses were conducted to assess neural activation patterns in response to the videos.

Behavioral results revealed significant group differences in the perception of positive social touch videos, with the control group rating these videos as more pleasant and likable than participants with a history of CM and SH. Interestingly, fMRI analysis showed that individuals with a history of CM, but not SH, had significantly higher activation of the parahippocampal gyrus than did the control group or the participants with a history of CM and SH.

This increased activation may reflect compensatory neuroplasticity following early adversity in the group without SH behaviors. This neuroplasticity was absent in the group that engages in SH. These findings provide novel insight into how CM is associated with altered neural encoding of social touch and underscore the importance of investigating social touch processing in trauma-exposed populations. This research may contribute to a deeper understanding of how CM affects psychosocial functioning and the development of more tailored treatments for CM survivors.

# **Analysis of Commercial Solutions and User Needs in Digital Weight Management Interventions**

**Mengyisong Zhao**

**Department of Computer Science**

Obesity is a serious global health issue, with the prevalence of adult obesity more than doubling between 1990 and 2022, according to the World Health Organization (WHO). While traditional weight management interventions (WMIs) offer in-person support that help individuals achieve and maintain a healthy weight, they often demand significant resources and have limited accessibility.

Digital WMIs (DWMIs), delivered via websites or smartphone apps, offer scalable, cost-effective solutions for providing dietary advice and physical activity promotion alternatives, have the potential to overcome WMIs barriers, making weight management support more widely available. However, user needs for digital services and

# Exploring What Affords a Compassion Enabling Environment

**Harriet Broadfoot**

## Department of Education

This study explores what opportunities early childhood education (ECE) environments afford for experiencing compassion and the barriers/challenges to this, and seeks to illuminate what constitutes a compassion enabling environment. ECE plays a vital role in supporting children's learning and development, helping to foster strong foundations for flourishing in children's lifelong learning, well-being and living.

In our increasingly complex world and with the challenges it brings there is a need for an alternative narrative in early education that focuses on the broader educational goals of individual and collective well-being and living well together. In such a context compassion - as a core competency for sustainability that is foundational for thriving, connectedness and well-being - presents as a means of supporting children both in the present, and future whilst empowering them as global citizens to attend to the well-being of human and nonhuman others.

A multi-sited ethnographic methodology was adopted with an interpretivist orientation. This involved a prolonged period of participant observation in two ECE settings, a nursery and a Reception year within a school in England, as well as semi-structured interviews and focus groups with the participating children and staff. Reflexive Thematic Analysis and Ethnographic Analysis using creative analytic practices were used to analyse the materials generated during fieldwork. Spaces, relations and time formed three lenses for the descriptive interpretations which focused on perceiving, experiencing, realising compassion, as well as opportunity areas in ECE environments.

The results illustrate the interrelation between the environment, and children's and adults' experiences of compassion alongside what enables realising it and opportunities afforded. With implications for practice and how we might consider the 'enabling environment', in particular the results highlight the influence of the 'nature' and architecture of settings, the importance of imagination, connection and sense of community as well as the role of time, gatherings, engagement in a 'living' environment, and story, as well as challenges to compassion that can present in ECE environments. Overall, this study contributes a deeper and wider understanding of compassion in ECE, and what co-curates compassion enabling environments in ways that afford opportunity to experience, explore and extend it.

# **Session 4: Unbound Opportunities Presentations**

**Chaired by  
Julie Brown**



# Building bridges with the respiratory community - Patient focused research priorities

**Matthew Armstrong**

**Department of Sport and Exercise Sciences**

Chronic Breathlessness is a significant health challenge for individuals with chronic respiratory diseases. It often leads to disability, as people gradually reduce their daily activities to self-manage symptoms. This avoidance of physical activity can trigger a downward spiral of worsening breathlessness and physical deconditioning, ultimately impacting independence and quality of life. Promoting accessible opportunities to enhance independence through physical activity is a key objective of the NHS long term plan for people with respiratory conditions. Funding from the WRIHW Unbound opportunities has supported the development of a small-scale focus group involving NHS staff, community organisations, and individuals living with respiratory diseases across the North East.

**Aim:** To identify key barriers and facilitators to improving physical activity and independence among people living with respiratory conditions.

**Method:** The focus group will be hosted by Healthworks, a local health charity in Newcastle upon Tyne known for its pioneering work in community rehabilitation and lifestyle support, particularly in areas with low socioeconomic status and significant health inequalities. The focus group will explore the following themes:

- 1) Key barriers and facilitators to physical activity and independence
- 2) Experiences of living with a respiratory condition in the local area
- 3) Current community-based opportunities
- 4) Future aspirations for community support to enhance independence through physical activity.

**Desired Outcomes:** The focus group is expected to yield short, medium, and long term benefits:

- **Short term:** Establish a collaborative network of individuals living with and supporting those with respiratory disease, to inform the development of region-specific research priorities. This will empower individuals to lead and shape person-centred research within their communities.
- **Medium term:** Co-produce research ideas and grant applications.
- **Long term:** Lay the groundwork for inclusive research that prioritises the needs of people from diverse communities across the North East. This aligns with the vision of Durham and Wolfson: “to support people to thrive in the places they live, rather than in the hospital”.

# Talking About Dementia: An 'Unbound Opportunities' project

**Johanna Thren and Andrea Lambell**  
**Department of Anthropology**

When a person is faced with a diagnosis of dementia, the experiences of everyone involved are profoundly influenced by the timing and content of conversations between families affected by dementia and their health and social care professionals. Families have a better chance of getting the support they need when sensitive conversations occur at the right time and in the right way. On the other hand, if conversations are avoided or handled badly, a difficult situation can be made even worse for families and professionals alike.

This aspect of dementia care has been identified as the number one priority for more research.

Through attending the Wolfson ECR Network Unbound Opportunities workshops in February and March, we explored our research passions and life experiences, which led us to identify attendees who have experience in caring for people with degenerative disorders and/or supporting bereaved individuals. This connection led to the formation of a funding co-applicant team. Our successful Unbound Opportunities grant bid is funding a series of workshops to explore the topic.

Our primary goal was to integrate relevant insights from our academic, professional, and personal experiences to make connections across the university and beyond, identifying potential future research project topics and possible funding opportunities. We learned several important lessons during the workshop planning period, including: The time it takes for internal and external reviews when putting funding applications together

The formal barriers and opportunities that exist in this context  
The questions that need to be answered when setting up interdisciplinary cooperation.  
This presentation outlines the workshop planning process, identifies the perspectives of collaborators, assesses capacity, defines key objectives, and considers personal comfort zones. It also details the workshop activities that have taken place and those that will be conducted.

# Session 5: Talks

Chaired by  
Leanne Trick



# Seeing is Believing: Effectiveness and Public Acceptability of Alcohol Warning Labels

**Aditi Mishra**

## Department of Psychology

Research has established that alcohol consumption adversely affects both public and environmental health. Despite this, few studies examine interventions aimed at reducing alcohol consumption. Image-and-text warning labels on tobacco products have been found effective and publicly acceptable in the UK. This study aims to evaluate their potential effectiveness and acceptability when applied to alcoholic drinks. Two types of cigarette-style warning labels - a health warning label highlighting the risk of bowel cancer posed by drinking and an environmental label emphasises the carbon footprint of alcohol production were utilised

Participants were randomised to one of three groups and viewed wine bottles carrying: (a) Environmental damage warning label; (b) Health warning label; or (c) an alcohol label akin to those carried by alcohol currently without any additional information (control condition). They were then asked to perform a pouring task with volume poured serving as the primary outcome. Following the completion of this task, participants filled out a questionnaire evaluating the secondary outcomes. These outcomes include the acceptability and appeal of the label, preference of the different label types and negative emotional arousal.

Results will be analysed to determine which label more effectively reduced pouring behaviour and intention to consume, and which is more publicly acceptable. Additionally, we will explore factors influencing public support for mandatory front-of-package alcohol warning labels. We will also discuss the implication of our findings for research, policy and practice.



# Reliable Cardiovascular Question Answering with Validated Knowledge Graphs and Multi-Model Embeddings

**Mohammed Alshammari**

## Department of Computer Sciences

### Background:

Artificial intelligence (AI) is increasingly used in healthcare to deliver fast and accessible medical information. However, many existing systems struggle with reliability, especially when producing incorrect or fabricated answers. This raises concerns in clinical contexts, where accuracy and trust are essential.

### Objective:

This study aims to develop and evaluate an AI-powered system that answers questions about cardiovascular diseases. The goal is to provide trustworthy, accurate, and easy-to-understand responses supported by verified medical sources, relevant references, and disease-related images.

### Methods:

We gathered cardiovascular disease information from reputable healthcare institutions, including the Mayo Clinic and the Cleveland Clinic. This content was structured into a knowledge base and integrated with language models capable of interpreting both clinical and conversational queries. To improve accuracy, the system rephrases unclear or error-prone questions before retrieving relevant information. Each response includes the source name, reference list, and medical images to enhance transparency and user confidence.

### Results:

The system was tested using 100 questions divided into five categories: straightforward, long, general spelling mistakes, misspelt disease names, and out-of-scope queries. It performed well in the first three categories, achieving over 98% accuracy. Performance declined for queries with misspelt disease names (accuracy: 54.56%) due to limitations in spelling correction. For out-of-scope questions, the system appropriately avoided providing misleading or inaccurate answers.

### Conclusions:

The system reliably handles a wide range of medical queries and avoids generating misleading responses when reliable data is unavailable. By grounding each answer in trusted sources and presenting references and medical visuals, the system promotes transparency and user trust. Future work will focus on improving the handling of misspelt disease names, enhancing the interpretation of multi-part queries, and expanding coverage to additional medical domains.

# Institutions and Public Health: Why Freedom Matters

**Eben Macdonald**

## Business School

Do autocracies achieve better public health outcomes?

Those who reply 'yes' maintain that the absence of liberal institutions means they can easily enact coercive policies to handle infectious diseases, unobstructed by democracy, the rule of law, the legislative process, constitutional restraints or private property rights. For this conference, I present a two-fold counterargument.

Firstly, drawing on previous research, I argue that autocratic institutions wield a double-edged sword, as short-term success in the public health sphere comes with the cost of longer-term vulnerability to poverty-related diseases, via the economic underdevelopment they usually produce.

Secondly, I reflect on my own qualitative research which suggests that autocracies often aren't particularly interested in dealing with public health issues to begin with: governments which lack a democratic mandate seek to legitimize themselves by hijacking populist resentment against a common enemy. In many cases, these have been politically disenfranchised outgroups who suffer the brunt of public health emergencies by virtue of their socioeconomic status; in others, a scientific expert class associated with Western technocracy.

Put simply, I propose an impossible trinity, whereby predatory government institutions are unlikely to coexist with the infrastructural quality necessary for protecting public health or the correct administrative attitudes towards emergencies.

# Understanding the Experiences of Physical Activity for People in Prison Over the Age of 50

**Millie Warren**

## Department of Sport and Exercise Sciences

Physical activity is a highly effective way to improve the health and wellbeing of people, especially those over the age of 50. For example, it can promote longevity and independence, slowing cognitive decline, and preventing falls. As people get older, they become less active, this is exacerbated in the prison environment. There is little known about older adults in prison and as the prison population ages, older adults (age 50 yrs +) in prison are becoming increasingly inactive and frail.

The purpose of my research is to understand perceptions and experiences of physical activity among older adults while in prison. This involves gathering insights from the perspective of prisoners and prison staff about the role of physical activity in prisons. By using a flexible combination of focus group interviews, individual interviews, and periods of observation, I will work with participants to ascertain information and insights on how to support the health and wellbeing of older prisoners using physical activity. These findings will be shared and discussed in a workshop involving people with lived-experience, stakeholders and third-sector workers to co-design usable recommendations to support the health and wellbeing of older people in prison through physical activity.

# Session 6: Talks

Chaired by  
Johanna Thren



# **How the Play and Musical “Spring Awakening” Transcend to a Religion for Depressed Teenagers**

**Mirran Morrison**

## **Department of Theology and Religion**

I propose that the musical Spring Awakening can transcend the realms of entertainment to collaborate with Hans Mol's religious theory of the sacralisation of identity to intervene in teenage depression and suicidality. This is done through an appreciation of depression as an attack on positional normalcy and an identity crisis, and a presentation of Spring Awakening as a religion and alternative spiritual treatment.

I focus particularly on the character of Moritz and how the contribution of academic pressures and a need for validation in attachment-insecure teenagers can lead to an increased risk of suicide. The alternative to this is representation and espoused understanding, displayed in the way we internalise aspects of our surroundings and 'attach' to them, placing them on a pedestal; this is how I link the musical Spring Awakening back to Hans Mol's religious theory of the sacralisation of identity.

# Barriers to Accessing Holistic Medicine: Findings From Northeast England

Chung-Yen Cheng

## Department of Geography

This presentation identifies barriers to accessing holistic medicine in Northeast England and suggests ways to remove the barriers. My research findings are drawn from my fieldwork in Northeast England, where I did 50 interviews with users and practitioners of holistic medicine, and conducted participant observation in holistic medicine classes and therapy sessions. I have engaged with a variety of holistic medicine, including massage, acupuncture, Tai Chi, and yoga.

Current literature has identified multiple barriers to accessing holistic medicine, including racism (Zuckerwise, 2024), ableism (Basas, 2014), classism (Berentson-Shaw, 2020), and ageism (Walsh, 2015). However, such literature has two shortcomings. First, it tends to portray the barriers they identified as universal, rather than using a place-based approach. Second, it does not discuss why people need to be included in wellness spaces in the first place. In response to the first shortcoming, I focus on Northeast England because the holistic medicine scene here is underresearched. My research could then contribute to the health policies in this region. Responding to the second shortcoming, before identifying the barriers to accessing holistic medicine, I will first discuss what holistic medicine offers that other wellbeing activities cannot. Drawing on my fieldwork data, I found three aspects: First, holistic medicine is nonjudgemental. Second, it offers an escape from reality. Third, it provides healing on multiple fronts at once – physically, mentally, and spiritually.

Then, I will identify the barriers to accessing holistic medicine in Northeast England. This includes time, location, religious belief, classism, cost, shame, lack of information, teacher's/therapist's style, and gendered nature of wellness spaces. Some barriers correspond to the findings in current literature, while some do not, which reflects the value of place-based research.

Finally, I will suggest ways to reduce barriers. I draw my suggestions from my participants' accounts of what introduced them to holistic medicine. I argue that making these existing points of entry more accessible is more feasible than coming up with new ways to reduce the barriers. The existing points of entry include GP advice, friends and family recommendations, coming across advertisements, and looking up information online out of interest.

# Engaging Chronically Fatigued People in Ethnographic work: challenges and opportunities

Nicholas Edwards

## Department of Anthropology

Chronic Fatigue Syndrome (CFS) is the term used to categorise cases of unexplained, debilitating chronic fatigue that is not alleviated by rest, with concomitant post-exertional malaise and cognitive dysfunction. Estimating its full impact in the UK is difficult due to the lack of recent epidemiological data, though it is thought to affect between 250,000 and 390,000 individuals. Estimates of disability among sufferers range from 25% to 75%. CFS usually results in a major reduction in social and occupational activity, and poor emotional and mental health. The pathophysiology of CFS is poorly understood by biomedicine, and there are currently no known biomarkers, so it is a diagnosis of exclusion. Sufferers of CFS typically face stigma and delegitimization.

Described as a “recursive debility”, attempts by sufferers of CFS to promote awareness, advocate for research, and engage politically with healthcare services are thwarted by the debilitating nature of CFS itself. Chronically fatigued people also face challenges when participating in research whose methodology presents potential barriers to people with limited energy and stamina, e.g. in-person meetings, leaving the house, synchronous communication, large amounts of text to read, etc. Traditional ethnographic interviews, involving sustained periods of concentration, may be particularly unsuitable for severely chronically fatigued individuals. Reaching potential participants may also be problematic, due to the potential disillusionment of sufferers with conventional healthcare provision.

Chronically ill people, and anyone with limited mobility, should not be forgotten by ethnographers, and developments in research should be seen as an evolution that can benefit everyone in the ever-connected, digitally-mediated, post-COVID world. In particular, I argue that the use of telecommunication technology should not be seen as inferior to conventional, in-person methods. This presentation explores some of the challenges of designing and adapting ethnographic research that engages people with CFS, and suggests some opportunities it can bring.

# Reimagining Health Research in the Medical Humanities: Art as method and interpretation

**Olivia Peake**

## Institute of Medical Humanities

Based on a group project (which received an 86), I will briefly talk about how the module 'Reimagining Health Research' helped to set us up for becoming ECR.

Going into the specifics of the report I want to talk about how art can be both a method and interpretation for exploring the experiences of mental illness in young adult carers (ABR, arts based research). As a masters student I will not get to conduct the research myself, but as this project received such positive feedback, I think it is important to share it and think about how the future of research can be shaped by a more 'critical' and interdisciplinary approach to health.

It explores a bottom up approach that centres participant voices at all stages of the research and focuses on carers due to the research gap and the knock-on effect that caring for their wellbeing will have on their dependents and wider networks of care. Considering how much carers save the NHS this project and encouraging research like it is vital. The exhibition and publication of findings beyond the ivory tower and paywalls of academia, is an exciting direction for research to take - enabling research to become a form of creative expression, care and activism.



# Careers Development

The Wolfson ECR Network is here to support everyone at Durham who is keen to explore how they can develop themselves as health and wellbeing researchers. One way we do this is by signposting our members to the excellent career development resources available at Durham.

The [Durham Centre for Academic Development \(DCAD\)](#) offers a broad range of developmental opportunities, which can be browsed on its Sharepoint site

The [Careers and Enterprise team](#) has a comprehensive programme of support.

The careers service provides planning and progression support for careers within and beyond academia, offering guidance on CV writing, making effective applications, and interview preparation. Regular careers workshops and training sessions are held throughout the year, specifically designed for postgraduate and early-career researchers. Also, 60-minute one-to-one appointments for specific postgraduate careers support are available with PGR Careers Adviser [Mark Corcoran](#).

The Venture Lab offers the EDAPT Agile Thinking Programme, a problem-solving method developed through research into the mental processes used by some of the world's top problem solvers. To learn more about this programme and all the other opportunities on offer through the Enterprise team, contact Postgraduate Enterprise Manager [Paul Stafford](#).

The [Coaching and Mentoring Network](#) offers free one-to-one sessions to Durham University employees.

To make connections with fellow ECRs in our region, there's the [British Academy Early Career Network North-East and Northern Ireland Cluster](#). Although it's primarily intended for individuals engaged in the humanities and social sciences, its inclusive approach is researcher-led and accessible to all researchers, regardless of their funding source or background.

# Prosper

[Prosper](#) is a new online resource to help people across the UK to advance their post-doctoral careers.

Prosper can help you

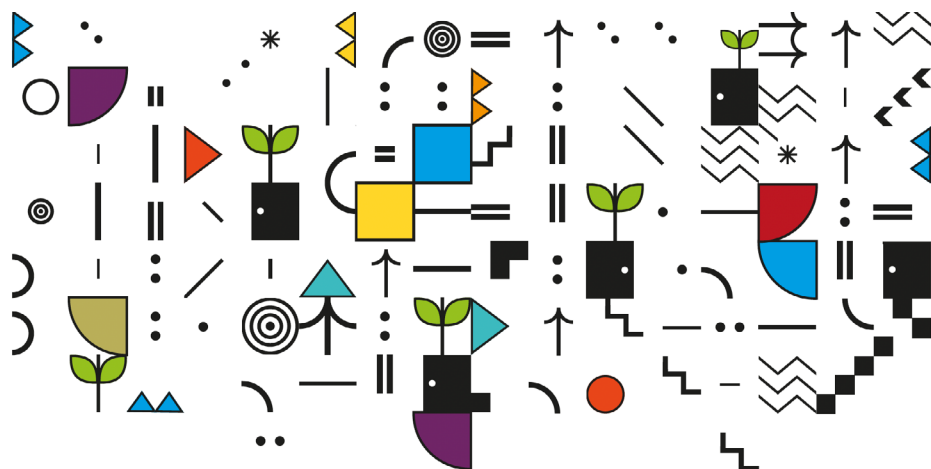
- Figure out what you want from your career
- Create a personalised career action plan
- Learn about opportunities beyond academia
- Develop skills for your whole career, wherever it takes you

While it is designed for individuals who have completed their PhD and are now working as researchers on a fixed-term contract, this free resource is open to all.

You do not need to register to use the resource, but if you do, you gain access to some extra functions. To register, [go to this page](#) and select 'I'm a postdoc' if you fit into the definition. Otherwise, choose the category 'none of the above'.

The Durham Prosper programme will offer Spotlight sessions, open to all postdocs and ECRs, to enable them to achieve their career goals. Also, places are available on the Durham Prosper Cohort 2025-2026 - a bespoke nine-month programme tailored to the needs of a selected group of Postdoctoral Research Associates (or equivalent) currently employed at the university on research-only contracts.

Applications to join the Durham Prosper Cohort 2025-2026 are being accepted until noon on Friday July 25 and more information is available on the Prosper link above.



# Prosper.

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**@WolfsonResearch**  
**[dur.ac.uk/research/institutes-and-centres/wolfson](http://dur.ac.uk/research/institutes-and-centres/wolfson)**  
**[wolfson@durham.ac.uk](mailto:wolfson@durham.ac.uk)**



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