



Durham
University

Wolfson Research Institute
for Health and Wellbeing

Inspiring the extraordinary

Annual Report 2022



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Message from the Executive Director Professor Amanda Ellison

Welcome to the Durham University Wolfson Research Institute for Health and Wellbeing (WRIHW) Annual Report covering our activities in 2022. This year, we were delighted to welcome Dr Thorsten Føegen, Dr Jonathan Wistow and Professor Brian Castellani to our ranks as Co-Directors. We thank Dr Zach Lee, our previous ECR Co-Director who left us to take up a Chair in Leicester University for all that he did, but he ensured that transition to Jonathan, our new ECR lead, was smooth and seamless. As a classicist, Thorsten brings a wealth of experience of health across the humanities and across time to the Institute and has made an immediate impact in the way our Academies include such considerations in their research. As an expert in social complexity, Brian is very at home with our interdisciplinary approach, providing a wealth of experience in co-production and research methodologies to our fellowship. Together with Barbara Bechter and the impact she has been making in leading new teams relating to work precarity and wellbeing, we now have a formidable leadership team at the Institute. We couldn't do anything without the fierce support of Suzi Boyd our Institute Manager who has done an immense job pulling together this Annual Report along with all the other activities and tasks she does for WRIHW.

Following the launch of our Challenge Academy matrix in 2021, we have been delighted with how the structure has fostered internal and external understanding of our interdisciplinary approach. We have developed new research groups geared towards addressing individual, societal and global health challenges that result in more than the sum of their parts. As you will see from the following pages, these groups, such as InSPIRE, have begun to apply for multi-million pound grants to further their work and are garnering global reputation in doing so.

We continue to support the research arm of the Health@Durham Strategy and are gratified as to how well our health-related research "beyond the clinic" is perceived externally. Once again, our Pain Academy (led by Dr Paul Chazot) is award winning, garnering the accolade for Most Innovative and Creative Communications at the 2022-2023 FUSE awards. Congratulations also to Professor Helen Ball (leader of our Youth Academy) who received the Journal for Human Lactation (JHL) Patricia Martens Annual Award for Excellence in Breastfeeding Research and Professor Jane Macnaughton on being made a Fellow of the Royal College of Physicians of Ireland (RCPI) for her services to the Medical Humanities. Our fellows are being recognised for the impact of their work all over the world, and we couldn't be prouder.



This will be my last Executive Director's message for our Annual Report as I come to the end of my term in July 2023. My guiding principles over my tenure have been to build an institute that serves interdisciplinary research in health and wellbeing as well as the academy of Durham University on the world stage, and to ensure we can use what we know to improve the lives of humans all over the world. Indeed, we can't provide for real and lasting change until we understand all of the influences on human health (the subject of my recent Ted Talk, Reflections of a Recovering Reductionist, and even my stand-up routine for IMH's Breakthrough! Research Cabaret). None of this could happen without our fellowship and I am grateful to everyone who came on this journey with me. It has been a true inspiration working with you all and I can't wait to see what you do next. We have many events taking place before I leave, with a Celebrating Health Festival happening in June and July and many new research programmes bubbling into existence.

The future is indeed bright.

Amanda



Meet the Team

Our mission is to encourage and support high calibre interdisciplinary research to understand and address human health challenges. We do this through our Challenge Academies. Each has been carefully built to address local and global unmet need in health-related issues. Closely aligned with the Sustainable Development Goals, these Academies have the interdisciplinary approach unique to Durham University built in. In this way, each Academy can address major problems in health and wellbeing, but also be responsive to new challenges as they arise.

We help our Challenge Academies grow, fostering networking, identifying and assisting with funding opportunities, expanding their internationalisation and ensuring impact through clinical, industry or policy collaboration. This approach is central to our core ethos where our Academies address the beginning (identifying the correct question), the middle (understanding who the problem affects and how) and the end (how we can use this knowledge to create purpose built solutions that don't just help some of the people some of the time but all of the people, all of the time).



Dr Barbara Bechter Co-Director

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Barbara is Associate Professor in Human Resource Management at Durham University Business School (DUBS). She is a social scientist,

she developed and led multidisciplinary projects and managed international project teams. With her international and interdisciplinary research, she contributes to policy debates around new forms of employment and their regulation. She is especially interested in the link between employment and health. Her research extends beyond the workplace by investigating interventions and support provided by social partner organisations at organisational, national and transnational level to improve the health and safety of workers.



Professor Amanda Ellison Executive Director

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Professor Amanda Ellison is a neuroscientist and physiologist who never got past the why phase. This approach has served her well as

Executive Director of the WRIHW as she not only gets to help our fellowship understand the various influences on our health and wellbeing and how they manifest themselves, but she also gets to support them make real change across our region and our world. Her research seeks to bridge the gap between basic research related to how the brain works and effective rehabilitation paradigms when behaviour is affected by brain damage. In her spare time, she writes popular science books.



Dr Thorsten Fögen Co-Director

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Thorsten Fögen has degrees in Classics (Ancient Greek & Latin) and General Linguistics. His research bridges the gap between

traditional philology and modern cultural history and is characterised by a pronounced interdisciplinary approach. He takes a special interest in ancient scientific discourse and the history of medicine, in particular the Medical Humanities. But he has also worked on many other areas, e.g. ancient epistolography, the role of emotions, animals in the ancient world, and the history of linguistic ideas. In 2022, he organised several conferences and seminar series, e.g. "Portrayals of 'Intellectuals' in the Ancient World" and "Body, Mind and Medicine: Forms of Mental Illness and their Consequences in the Ancient World and Today". He is Editor-in-Chief of the book series "Themes and Forms in Graeco-Roman Literature" (Mohr Siebeck Publishers, Tübingen).

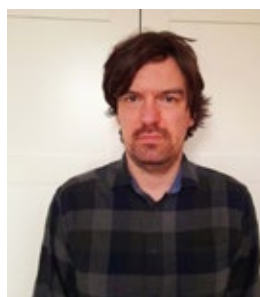
Meet the Team cont.



Professor Brian Castellani Co-Director

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Brian is Director of the Research Methods Centre and Co-Director of the Wolfson Research Institute for Health and Wellbeing at Durham University, UK. He is also Adjunct Professor of Psychiatry (Northeastern Ohio Medical University, USA), Editor of the Routledge Complexity in Social Science series, CO-I for the Centre for the Evaluation of Complexity Across the Nexus, and a Fellow of the UK National Academy of Social Sciences. Brian also runs InSPIRE, a UK policy and research consortium for mitigating the impact places have on air quality, dementia and brain health across the life course. Brian is trained as a public health sociologist, clinical psychologist, and methodologist and takes a transdisciplinary approach to his work. His methodological focus is primarily on computational modelling and mixed-methods. He and his colleagues have spent the past ten years developing a new case-based, data mining approach to modelling complex social systems and social complexity, called COMPLEX-IT, which they have used to help researchers, policy evaluators, and public sector organisations address a variety of complex public health issues.



Dr Jonathan Wistow ECR Director

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Jonathan is ECR Director at the Wolfson Research Institute for Health and Wellbeing at Durham University, UK and an Associate

Professor in the Department of Sociology. He has a background in political science and local government studies and has now moved into the fields of health inequalities, complexity, climate change adaptation, and air pollution and brain health.

Most recently he has written a Policy Press book on 'Social Policy, Political Economy and the Social Contract' and co-authored (with Dr Luke Telford, University of York) a Palgrave Pivot book on 'Levelling Up the UK Economy'. Across these areas he is interested in the role of policy relative to the wider socio-economic contexts and systems it seeks to influence. In his spare time he tries to play electric guitar and work on his model railway.



Mrs Suzanne Boyd Institute Manager

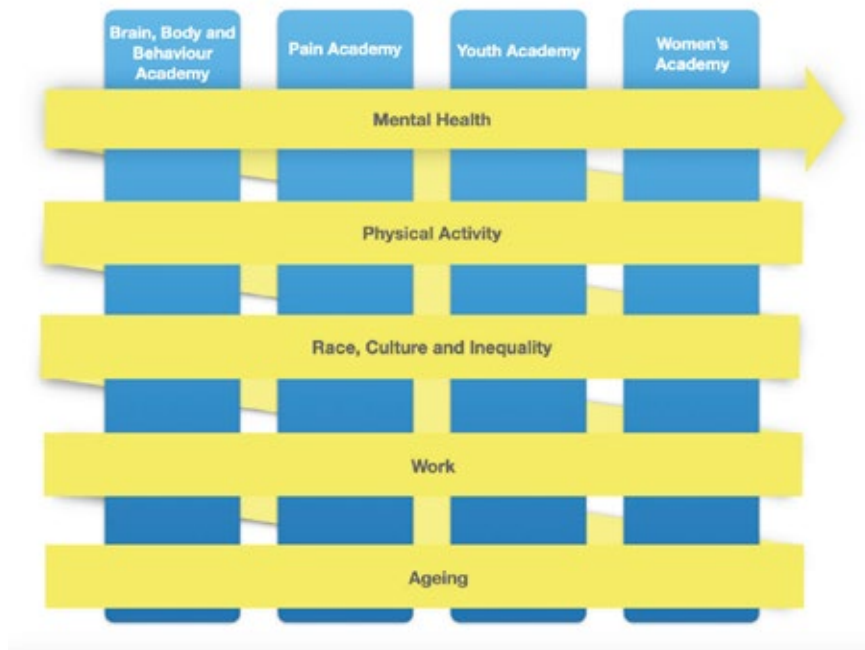
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Suzanne is responsible for the day to day running of the WRIHW, dealing with matters pertaining

to HR, finance, committee support/management, project support and Fellowship support. She is also responsible for the Institute website, fortnightly newsletter and social media accounts.



Challenge Academies



Each Challenge Academy has been carefully built to address local and global unmet need in health-related issues.

Closely aligned with the Sustainable Development Goals, these Academies have the interdisciplinary approach unique to Durham University built in. In this way, each Academy can address major problems in health and wellbeing, but also be responsive to new challenges as they arise.

By addressing issues of race, mental health, physical activity etc. in each of our Academies, we can ensure a holistic approach, increasing our depth of understanding leading to impact for all.

Our Academies are comprised of projects that use an interdisciplinary approach, to investigate issues from multiple angles. Within the Challenge Academy Matrix, we can ensure a further level of enquiry meaning that health and wellbeing is understood from many facets of influence (e.g. the reciprocal influence of mental health in pain).

For more information on our academies and current projects can be found later in this report, as well as on our website.

Our Fellowship and Postgraduate Associate Scheme

The Institute's Fellows come from a diverse range of disciplinary and professional backgrounds across Durham University and organisations with which we collaborate.

Fellowship is open to all academic and research staff of the University who subscribe to the Institute's aims and undertake and publish research using an Institute affiliation. The purpose of Fellowship is to create a research community that subscribes to the Institute's aims and has the opportunity to share in its activities, resources, support and collective reputation.

The Institute also offers Postgraduate students the opportunity to become Postgraduate Associates (PGA) of the Wolfson Research Institute for Health and Wellbeing.

The Institute's Postgraduate Associates scheme is open to all Postgraduates, from any department within the University, who subscribe to the aims of the Institute and undertake to acknowledge the Institute when presenting or publishing their work.

If you would like to apply to become a Fellow or a Postgraduate Associate please visit durham.ac.uk/research/institutes-andcentres/wolfson/about-us/people



Our ECR Community

As the Wolfson Research Institute for Health and Wellbeing (WRIHW) 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, and also to offer ECRs within the WRIHW opportunities to develop their research, CVs, understanding of what a career in research can look like and what their skills can bring to the world beyond.



Action Learning Sets

The WRIHW organise Action Learning Sets that focus on developing external engagement experience, networking, and peer support among a small cohort of early career researchers (ECRs) working in the broad area of health and wellbeing. We recruit across all faculties and departments and will be taking applications for the next Action Learning Set in 2023.

An Early Career Researcher wrote;

“For me the ALS highlighted the importance of self-reflection, and how taking the time to reflect on our experiences and skills in a deliberate and candid way can unlock so much potential. I feel like I’ve learned a valuable skill that I plan to continue using in my research career going forward.”

Through being involved, participants form a facilitated supportive peer group in which they have had the opportunity to connect with others from different academic disciplines to share ideas and develop plans for engaging with relevant stakeholder groups or individuals.

The Action Learning Sets include more experienced academic colleagues and relevant professional support staff, who offer mentorship and practical guidance on developing connections and initiating and engaging in research related conversation with external partners. Involvement in the action learning set has offered participants the opportunity to act as advocates for the Health@Durham strategy and raise the profile of Durham’s broad base of health-related research to external audiences.

Doctoral Training Programme

The Wolfson Research Institute for Health and Wellbeing has been delighted to enter year 2 of the WRIHW’s Doctoral Training Programme (DTP), an initiative focused on supporting and developing doctoral students from all four faculties of Durham University working in the broad area of health-related research.

Our DTP consists of a series of events and activities, including but not limited to Interdisciplinary Health and Wellbeing Research Workshops, a Mentoring Scheme, Training Need Analyses, Career Planning and Employability Development, and Research Conferences. We now have two cohorts of DTP students, who work on a wide array of health-related research, from women’s reproductive health and contraceptive use, to trauma, community gardening and wellbeing, and harmful sexual behaviour displayed by children and young people.

Through being involved our series of events and activities, our DTP students have not only received additional support and development opportunities beyond their departments but also connected with other students and researchers from different academic disciplines working in health-related research. The programme will offer mentorship and practical guidance on the possibility of interdisciplinary research on health and their pathways to implementation that is of prime importance to the career ahead.

Our Professors in Practice

Professors in Practice recognises the expertise and experiences of senior business professionals across a wide variety of disciplines and sectors. By enabling such individuals to share their skills directly with researchers and the academic community, they can bring their practical insights, experience and distinction to our Fellows, ECRs, Postgraduate associates and Challenge Academies, enabling them to engage directly with public policy and business practice through their research.

Professor Nicola Wilson **WRIHW Professor in Practice in association with the** **Psychology Department**

Nicola's early career began as a CBT therapist in adult mental health psychological services, with an initial 15 years' experience of service design and strategic leadership of mental health and wellbeing services within the NHS and higher education sectors and programme leadership of undergraduate and postgraduate study pathways in mental health and wider applications of CBT. After leaving the University sector - from 2012 until 2015 - Nicola went on to lead a team of health professionals hosted within the NHS to build engagement, knowledge exchange and research collaboration between the North of England and regions across Europe, brokering European health and life-sciences project partnerships, building consortia, facilitating valuable knowledge exchange opportunities and creating informal, trans-European networks of clinical and research excellence.

Until the end of 2021, Nic was Deputy Chief Executive at the Northern Health Science Alliance (NHSA).



Alan Foster MBE **WRIHW Professor in Practice in association with the** **Department of Mathematical Sciences**

Integrated Care System Executive Lead, North East and North Cumbria Integrated Care System

Alan is an accountant by profession and has worked in local health authorities and NHS trusts since 1986, becoming Chief Executive of North Tees and Hartlepool NHS Foundation Trust for 10 years from 2007. He has held various health related Chairs including that of the critical care network across Durham and Teesside. He has much experience in the development in patient services and the integration of hospital and community services. More recently, Alan has been involved in the implementation of new IT systems and electronic patient records which has led to his passion for the Integrated Care system which went live in March 2019. We look forward to organizing events with Alan in the near future to allow many of you to interact with Alan and his wealth of experience.



Blythe Crawford CBE **WRIHW Professor in Practice in association with the** **Department of Psychology**

Station Commander, RAF Leeming and Commandant, Air & Space Warfare Centre

Blythe Crawford Comdt Crawford has long and distinguished career in the RAF but has also commanded in all ranks across Joint and Coalition forces in an number of campaigns and arenas. As an experienced Officer with a demonstrated history of working in the Defense & Space industry he has strong professional skills in Crisis Management, Intelligence Analysis, Military Aviation, Intelligence, and Airworthiness. Comdt Crawford is an innovator of health and safety provision for his personnel and their families on bases under his remit and is working with WRIHW to establish and evidence the value of these interventions



Our Honorary Professors

Honorary titles within the Wolfson Research Institute for Health and Wellbeing are conferred upon persons of appropriate distinction, other than members of staff, who have an on-going association with the University in the area of research. They are leaders in their field, and below is a list of our current Honorary Professors.

Professor Andrew Owens

Professor Andrew Owens is a consultant cardiac surgeon and Director of Innovation at South Tees Hospitals NHS Foundation Trust, where he has also held the position of Director of R&D and Clinical Director for Cardiothoracic Surgery. He sits on the Executive of the Clinical Research Network North East and North Cumbria and is an elected trustee of the Society for Cardiothoracic Surgery in Great Britain and Ireland.

His clinical interests include surgery of the aorta, aortic valve and minimal access cardiothoracic surgery, including transcatheter aortic valve implantation (TAVI); he is also a TAVI proctor (USA and Europe) for Edwards Lifesciences. He is currently an investigator in an NIHR funded trial of minimally invasive cardiac surgery. He is a Fellow of the Royal Colleges of Surgeons of England and in Ireland, has held fellowships from the National Heart Foundation of Australia and Society of Cardiothoracic Surgeons of Great Britain and Ireland, was winner of the McCormack Medal in cardiothoracic surgery and awarded a Hunterian Professorship by the Royal College of Surgeons of England.



Professor Paula Whitty

Professor (Dr) Paula Whitty is the Director of the North East Quality Observatory Service (NEQOS) as well as the Implementation Lead for the North East and North Cumbria's Applied Research Collaborative (ARC NENC) and Joint Director of Research, Innovation and Clinical Effectiveness at Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust.

Previous posts include the national Lead for the 'Better Metrics' project and the Clinical Effectiveness Lead at the Healthcare Commission. Originally trained as a consultant in Public Health, Paula continues to be an accredited Public Health Physician and has a Doctorate in patient-reported outcome measurement.

Paula's current research interests are in 'implementation research' and she has previously collaborated with Professor David Hunter in Durham University's Centre for Public Policy and Health on the evaluation of the 'North East Transformation System'. Paula is an Honorary Professor of Practice at Newcastle University.



Professor Sam Eldabe

Professor Eldabe is an NHS consultant based at South Tees NHS Foundation Trust with 18 years' experience. He is a consultant in anaesthesia and pain medicine at the James Cook University Hospital and clinical professor of anaesthesia and pain medicine at Exeter University.

His interests include the role of medical devices in improving patient care. A background in anaesthesia has given Sam a broad exposure to all classes of medical technologies from simple Class I devices to the more complex Class IIB. Work as a chronic pain treatment specialist has afforded Sam experience in research with various class III active implantable devices. He has published more than 60 articles on the subjects of pain relief and cost-effectiveness of various pain procedures.



Professor Emily Oliver

Professor Emily Oliver is a Chartered Psychologist and Associate Fellow of the British Psychological Society, a Senior Fellow of the Higher Education Academy, and a Fellow of Fuse, the Centre for Translational Research in Public Health. Her research takes the form of two inter-related strands. First, motivation, in particular how this is sustained and strengthened during crises. This includes understanding how and why people cope differently, with a focus on mental health outcomes.

The second strand focuses on translating these ideas to design equitable interventions and policies to support health and wellbeing. Here, the role of physical activity is centred, alongside consideration of how activity-based interventions can engage individuals or groups who may be excluded from standard approaches or services.



Our Honorary Fellows

Honorary titles within the Wolfson Research Institute for Health and Wellbeing are conferred upon persons of appropriate distinction, other than members of staff, who have an on-going association with the University in the area of research. They are leaders in their field, and below is a list of our current Honorary Fellows.

Dr Karen Hind



Discipline: Bone and body composition - Mechanical loading and endocrine influences on bone strength - DXA imaging methods Athlete Health - Concussion and sub-concussion - Bone and body comp - RED-S - Female Athlete Triad - Retired athlete health

Over 15 years experience in bone, body composition and medical imaging research. Leading and managing academic, clinical and industry research to successful completion, scientific writing, extensive peer reviewed publication record, developing teams, networks and partnerships, managing budgets, and leadership of committees and research groups.

Dr Doug King



Experience: Registered Comprehensive Nurse with 25 yrs experience in medical, surgical, orthopaedics, mental health, Emergency and now Clinical Nurse Specialist in Emergency Medicine. Retired serviceman from the Royal New Zealand Navy (1977-1987) and Royal New Zealand Nursing Corps (1995-2000). Awarded NZOSM, NZGSM(IO) and NZDSM(R) Medals. Recipient of Te Amorangi National Māori Academy Excellence Award, PhD New Investigator Award – AUT University and PhD Faculty of Health and Environmental Sciences Award for translation of thesis to publication.

Research Overview: Focus on researching injuries in sports by investigating injury mechanisms at the amateur level of participation to identify possible injury reduction strategies, sports-related concussion assessment and management through to rehabilitation focusing on transferability of the research to non-sporting environments focusing on intimate partner violence and non-accidental injury.

Dr Frances Cole



Frances Cole is a recently retired GP passionate about quality primary care and community management of persistent pain since in 1996. She gained a postgraduate diploma in CBT therapy in 1993-4 via Newcastle CBT centre & University of Durham and focused on delivering biopsychosocial approaches to persistent pain management.

In 1996 she and colleagues set up the first primary care based pain management programmes in Bradford, UK taking only referrals from GPs! Patient outcomes were crucial to see whether CBT based pain management programme approaches made a difference. The outcomes found people with pain had significantly less anxiety, depression, improved physical health and, most of all, their confidence to cope with their lives despite the pain had doubled.

Since then Frances has worked in pain rehabilitation services across Yorkshire and with collaboration with patients and clinicians both in primary and specialist care in the UK, created numerous pain management resources. She has co-created numerous books and other resources; for example *Overcoming Chronic Pain – CBT self-help book*, recommended by Reading Well Agency 2013 and 2017 and *An introduction to Living Well with Pain*, 2017. She commissioned Bob Lewin, Professor of Cardiac Rehabilitation, York University, to create *The Pain Management Plan* and collaborated with Pain Management programme services around the UK on its evaluation in NHS services use.

We don't often think about how what we do and how we behave is contingent on what is going on in our brain and how that is affected by what is happening in our body.

In fact, it is a tri-ciprocal relationship all wrapped up in the environment in which we find ourselves. We cannot understand health and wellbeing without including all three in our enquiries and understanding their effect on each other. See examples below how damage to the brain affects our behaviour (stroke) how what we do with our bodies affects our brain and behaviour (concussion) and how the environment our bodies are in can affect our brain and behaviour (delirium).



Infrared Light Therapy for Dementia

According to a recent report from the WHO, neurological disorders affect up to a billion people worldwide, and growing with Alzheimer's disease (AD) and Parkinson's Disease being number one and two. Currently, there is a paucity in effective treatments for all the major neurological disorders, with little prospect of this changing in the near future. Based on our innovative pre-clinical work over the last 20 years in Durham University, a series of recent clinical studies have begun to validate the use of Photobiomodulation therapy (PBMT) NIR1070nm as a rapid, effective and safe treatment for Alzheimer's disease, in the USA funded by our collaborators at Quietmind Charity Foundation.

PBMT1070 was selected based on its penetrability into the brain through the skull, its transmission by water (70% of brain), and its multi-modal physiological, biochemical and behavioural effects, which addresses the key requirements for an effective treatment for neurological disease, the 3 "N"s, Neuroprotection, Neuroplasticity and Neurorepair. A double placebo-controlled study was conducted at a Texas Medical school, Temple, USA with 70 participants. The treatment protocol comprised two 6 minutes sessions daily for 8 weeks at home with either the active PBMT1070 or placebo device, self-administered by patient or family caregiver. A remarkable improvement of 4.8 MMSE units was achieved, with equal efficacy in both men and women participants in the trial. Importantly no side effects were reported. Our parallel study in Europe reported an improvement in memory and mobility in a healthy ageing human study (n=30) using the same protocol.

Lumiere Bright Ideas October 2021 was a vehicle for presenting this programme of work led by Dr Paul Chazot. Funding has been secured to perform a clinical trial with PBMT 1070nm in Alzheimers in the UK (clinical partners are Newcastle and Exeter NHS Trusts). A series of case studies are in progress for individuals with Progressive Supranuclear Palsy (PSP), Concussion Trauma encephalopathy (CTE) and covid-induced parosmia and myasthenia gravis.

Project Cross Cuts

Mental Health Academy, Ageing Academy and Race, Culture and Inequality Academy

Brain Injury: Wellbeing and Rehabilitation

Brain injury is a leading cause of disability, with incidence of brain injury continuing to increase in the UK annually. This has drastic consequences for individuals and wider society. Over the past year interdisciplinary researchers at Durham, led by Dr Alison Lane (Psychology) have continued to conduct mixed-methods research into the wellbeing of brain injury survivors. In one paper currently under consideration, the research team explored the personal experiences of brain injury survivors during the Covid-19 pandemic, with specific questions relating to loneliness, resilience, and wellbeing. The findings show that many people experience loneliness and reduced wellbeing after a brain injury, but surprisingly survivors did not report that lockdown made this worse. One argument put forward is that people who already experience restricted living due to impairments of neurological injury were buffered to the consequences of lockdown. This 'level playing field' with the general population had a positive impact on patient mindset, with them feeling less behind or at odds with perceived social expectations. This has consequences for rehabilitation efforts in a post-pandemic world; interventions should focus on reframing survivors' beliefs regarding expectations and minimise the pressure they experience to keep up with peers.

Project Cross Cuts

Mental Health Academy and Physical Activity Academy

Understanding Concussive Injuries and novel therapeutics

Repeated concussive injuries, including concussion and sub-concussion, are increasingly recognised as being a significant public health concern, particularly in the context of sport although the research has ramifications in other fields. The immediate effects of a concussion can include headache, nausea, and visual disturbances, and longer term there are links to cognitive decline and neurodegeneration. Durham University researchers from across the departments of Sport and Exercise Sciences, Biosciences, Mathematics and Psychology, led by Dr Alison Lane, have been conducting studies into concussive injury, including investigating biomarkers, changes in cognition, and neuroprotective supplements.

We have shown a significantly higher prevalence of adverse mental health and sleep disruption in Elite Rugby and in former athletes who reported a higher number of concussions. Anger and irritability were more prevalent in former athletes with a history of five or more concussions. Strategies are needed to address mental health and sleep disturbance in elite rugby code athletes, who are also less likely to seek help should they need it.

Further research is needed to elucidate causation, and the neurobiological connection between concussion, sub-concussions and longer-term psychological health and wellbeing. Various prodromal biomarkers for CTE and AD have been identified (publications in preparation). In one study that was completed in 2022 (publication in preparation), changes in cognitive performance associated with sports participation were detected, and the study provided evidence for the accuracy of novel tool for recording cognitive health. Pilot work from the research team has also demonstrated small changes in eye-movements and cognition over the course of part of a sporting season that were more notable in people playing contact as opposed to non-contact sport.



Future studies are planned to continue to explore the effect of repeated concussive injuries and monitoring of recovery, and it is hoped that the findings will inform the management of concussion. Another phase 1 study completed in 2022 revealed the acceptability of a new patented natural supplement that may help protect brain and physical health in athletes at risk of concussion, with further projects planned from this work, focused on efficacy (with CONKA, UK, Improve Your Brain Health).

Recently, we have developed a novel model using the *Drosophila* fly, which offers a rapid, inexpensive drug screening approach for prospective post-concussion syndrome (PCS) treatments, and shows promise in investigating the oxidative stress mechanisms underlying PCS. Additional analyses, including neurodegeneration biomarker quantification and behavioural monitoring, are currently being explored to validate this model. Using this model, the natural CONKA supplement has been shown to extend lifespan, reduce oxidative stress, improve mobility in ageing and protect against repetitive concussion (Paper in preparation). Many of the Academy are active members of the newly formed international Repercussion Group with strong associations with the Concussion Alliance. A new Phase 2 Single-Label Efficacy Clinical Trial for PCS will be recruiting in the near future based on a patented drug re-use strategy developed in the Academy.

Project Cross Cuts

Mental Health Academy, Youth Academy and Physical Activity Academy



Brain, Body and Behaviour Academy cont.

En-Lighten: Improving Healthcare with Light

Durham University Enlighten Research Team explores the impact of the physical environment on health and well-being with a particular focus on the harsh nature of the critical care environment. Our interest is in how our senses are impacted by the conditions of the environment and how changes can be made to improve this.

In this Innovate UK-funded project our role has been to evaluate a prototype circadian lighting system designed by Circada Ltd. Qualitative feedback was found to be generally positive regarding the concept of dynamic circadian lighting for critical care. Participants repeatedly highlighted the disorientating nature of these critical care units which often lack natural light and where there is little change in night and day light levels. It was thought that a light that altered over a 24- hour period may help bring a sense of time and help patients to sleep. Delirium is a common and serious condition suffered by many critical care patients and a contributing factor is thought to be disruption of circadian rhythms that occurs in this clinical environment, detached from more natural stimuli.

Clinical staff were generally very positive about the prospect of a dynamic lighting system, especially if this were low cost and easy to install, and were keen to put it into practice. The concept of dynamic Circadian lighting for critical care was widely seen as an improvement on current more static lighting. A system that is easy to install in a hospital setting with low cost and minimum disruption would be a positive addition to the market.



Technical lighting profile data gathering proved very successful and, as a result of this project, Durham University Enlighten Team have developed a valuable tool for future research in this field.

In a second study, we followed the journey of a long stay critical care patient (18 months), Carol, recording her observations and memories of her experiences in different bed spaces of both ICU and HDU departments at James Cook University Hospital, Middlesbrough. Patient's account gave insight into the patient's eye view from various critical care bed spaces and how different positions across a unit can impact patient experience. Different bed positions and side rooms yielded different degrees of positive and negative responses, causing varying levels of comfort/discomfort and contentment/distress.

Patient's eye view perspective strongly influenced Carols' experience in Critical care, and she displayed a positive attitude to personalised lighting, aesthetics, and levels of environmental and communication control, which were introduced to her during the study. Most notably, in her 18 months in intensive care, Carol did not experience a single bout of delirium, despite her being a primary candidate. The James Cook University Hospital Enlighten Intensive care garden designed by Durham WRIHW Artist in Residence, Dr Laura Johnston, opened in Summer 2022. Funding was obtained to evaluate the impact of the garden on ICU patients, staff and visitors

Project Cross Cuts

Mental Health Academy and Ageing Academy





InSPIRE: Innovating UK clean air policies to prevent cognitive disorders across the lifespan, particularly for vulnerable urban populations

Air pollution is the largest environmental risk to public health in the UK with over 9 out of 10 people living in areas which exceed World Health Organisation (WHO) Global Air Quality Guidelines. The most vulnerable to poor air quality include children, the elderly, and those with pre-existing medical conditions. The greatest health burden of air pollution is experienced in the most socio-economically deprived parts of densely populated urban areas with those most susceptible typically experiencing the highest exposure levels, thereby widening existing health and social inequities.

Epidemiological studies have shown that long-term exposure to air pollution (over years or lifetimes) reduces life expectancy, mainly due to cardiovascular and respiratory diseases and lung cancer. More recent evidence suggests an association with adverse cognitive and brain health outcomes, including early-life cognitive and neurodevelopmental impairment and later-life increased risk of cognitive decline and dementia.

The UK Clean Air, Net Zero and Levelling-Up Strategy ambitions provide a unique public health policy context for central and local government to deliver place-based interventions that have co-benefits for air quality, climate change and brain health. At the city level, urban design is a key intervention measure, as it influences where air pollution is produced, how it disperses, how people are exposed and what can be done to mitigate or protect against its impact. Urban design also has a key role in delivering nature-based solutions to address air pollution, climate change and meet net zero targets. These design strategies need, however, to be matched by scientific evidence and appropriate guidelines, including the development of bespoke policy strategies to optimise their impact and mitigate any unintended consequences.

InSPIRE, led by Professor Brian Castellani, Sociology Department, was developed in 2020 from a £41k UKPRP

consortium development grant. Since then, we have received two ESRC IAA grants in 2021-2022 (RI200189 = £6.5k, RI200191 = £15k) and are presently developing a 2022 project proposal as part of the new £4.1mil Healthy Places, Healthy Planet research programme, NIHR School of Public Health Research. Our remit is based on the very real and immediate need for a knowledge hub/network that brings together research, practice, and policy guidance to co-produce solutions, tools, translational materials, and to develop innovative research into the historical links between air quality and brain health in the UK.

Here are some of the projects we are engaged in presently:

An academic publication setting the policy agenda in this area.

A policy brief to share with central government and public and third-sector organisations.

Research on the role urban planning in the UK has on air quality and brain health across the life course, including dementia post diagnosis.

A one hour 'healthy air and happy brains' lesson plan for schools.

Several stakeholder workshops.

Project Cross Cuts

Race, Culture and Inequality Academy, Mental Health Academy and Ageing Academy

Centre for Global Infectious Disease

Microbial pathogens are major threats to global human health and food security. For example, Neglected Tropical Diseases (NTDs: 20 diseases, 19 of which are caused by bacteria, viruses, fungi, protozoa and helminths) affect a staggering 2.7 billion people. This problem is exacerbated by the rise of drug resistance and a lack of investment in antimicrobial discovery, issues recently highlighted by the World Health Organisation in a report predicting the dawn of a post-antibiotic era. Drawing on expertise at Durham and partner organisations across the biological, chemical and physical sciences CGID, led by Professor Paul Denny, seek to synergize research foci to develop collaborative efforts for the identification and inhibition of novel antimicrobial targets, ultimately leading towards the development of new therapies and preventative strategies.

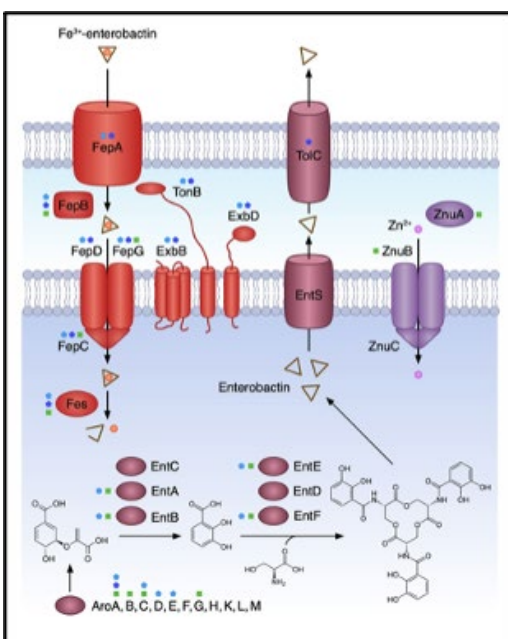
Throughout the COVID pandemic CGID has continued to work in a trans-national fashion to combat some of the globe's most pressing health problems, SARS-CoV-2 and many more historically persistent pathogens.

Multi-layered bacterial genome defences: linking molecular mechanisms to bacteria-MGE conflicts in single cells, populations, and communities

The ambitious goal is to tease apart how complete, multi-layered, bacterial immune systems operate at the level of individual molecules, cells, populations and microbial communities requires complementary expertise and experimental capacity in bioinformatics, molecular microbiology, biochemistry, mathematical modelling, microscopy, and experimental evolution techniques. The research program provides a new tier in the understanding of bacterial genome evolution and goes well beyond the frontiers of bioscience knowledge. The multidisciplinary approaches that are pioneered will transform understanding of the role of bacterial immune systems in microbial genome evolution.

Project Cross Cuts

Race, Culture and Inequality Academy



Insights into the Antibacterial Mechanism of Action of Chelating Agents by Selective Deprivation of Iron, Manganese, and Zinc

Bacterial growth and proliferation can be restricted by limiting the availability of metal ions in their environment. Humans sequester iron, manganese, and zinc to help prevent infection by pathogens, a system termed nutritional immunity. Commercially used chelants have high binding affinities with a variety of metal ions, which may lead to antibacterial properties that mimic these innate immune processes. However, the modes of action of many of these chelating agents in bacterial growth inhibition and their selectivity in metal deprivation in cellulose remain ill defined. Here, Paterson et al and Sharples address this shortcoming revealing an important antibacterial potential. <https://journals.asm.org/doi/10.1128/AEM.01641-21>

Project Cross Cuts

Race, Culture and Inequality Academy

The annual workshop of the Centre for the History of Medicine and Disease (CHMD) on 'New Research in the History of Medicine and Science' was held in person in Durham, and online, on 24 June 2022, bringing together staff, postgraduates and postdocs from the Departments of Philosophy, Modern Languages and Cultures, and History.

Speakers were

- Yari Perez-Marin on 'Iván de Sorapán's Spanish Medicine (Madrid, 1616) and the popular circulation of medical knowledge';
- Ursula Mulcahy on 'Science in the Georgian North East';
- Matthew Eddy on 'Race, Health and Climate Data in 19th Century British West Africa';
- Nick Summerton on 'The health of the Emperor Augustus. A case study on the challenges of retrospective diagnosis';
- Holger Maehle on 'The Sexual Psychology of Albert Moll: A Lost Alternative to Freud's Psychoanalytic Approach?';
- Andy Byford on 'Juvenile Criminology in Late Imperial Russia and the Early Soviet Union';
- John Shepherd on 'Unravelling Juvenile Delinquency: Psychiatry, Statistics and Prediction in the Glueck Papers, 1940-1950';
- Hansun Hsiung on 'Sleights of Hand, Strokes of Brush: Debating the Mind on Film in Tokyo, 1910-11';
- Coreen McGuire on 'Disabled Innovation to Disabled Expertise through the Domestication of Respiratory Technology 1963-1989'.

The CHMD's research collaboration with the KU Leuven resulted in publication of a joint paper by Jolien Gijbels, Cheryl Lancaster, Andreas-Holger Maehle and Reinout Vander Hulst, 'Aligning Faith with Medicine: Medical Ethics, Reproduction and Catholic Morality in Francophone and Anglophone Normative Literature, c. 1840-1960', *Journal of Religious History* 46/3 (2022): 439-459 (doi: 10.1111/1467-9809.12871).

Project Cross Cuts
Mental Health Academy



Established in April 2001, the Centre for the History of Medicine and Disease (CHMD) is a University-approved Research Centre that provides a focus for cutting-edge, interdisciplinary research and postgraduate education in the histories of medicine, health, disease, medical ethics and science.

Body, Mind and Medicine Conference

In 2022, the Body, Mind and Medicine conference was held online. The two day event – jointly organised by Dr Thorsten Fögen, Co-Director of the Wolfson Research Institute for Health and Wellbeing, and the University of Edinburgh – offered an interdisciplinary platform for academics as well as the general public.

By giving examples, ranging from antiquity to the present day, of how mental ailments have been experienced, theorised and treated, this event explored ancient and novel approaches to forms of mental disease, thus simultaneously creating connections between the disciplines of Classics and Medical Humanities. The focus was threefold:

- (1) exploring the language pertaining to mental ailments from antiquity (ancient Greek and Latin) to today;
- (2) investigating the consequences of mental disease, thus examining how mental illness may lead to a fracture between the individual and the community, which entails navigating issues of isolation, stigmatisation and (in-)communicability connected with the experience of disease;
- (3) exploring the plurality of remedies provided for mental illness both in antiquity and nowadays: this including both strictly medical and pharmacological therapies, along with alternative remedies, such as philosophy and the therapeutical use of speech.

We had more than 110 registrations from 27 countries.

Project Cross Cuts
Mental Health Academy, Ageing Academy, Work Academy, Women's Academy and Youth Academy

Brain, Body and Behaviour Academy cont.

Paternalism, Health, and Public Policy

Most of us would be outraged if doctors made decisions about our medical care without consulting us. Yet few object to public health policies that shape behaviour and restrict choice. Indeed, in certain public health contexts it seems more appropriate to focus on promoting citizens' well-being, rather than on respecting choices. Similarly, few dispute parents' right to override their children's wishes and make healthcare decisions for them, or for carers to do so on behalf of disabled persons in their charge.

What explains our different reactions to these two sorts of case? This tension may arise because in some contexts it is not obvious what respecting autonomous decisions would require. For example, when dealing with diverse groups with conflicting preferences, or when implementing public health policies for populations whose autonomous capacities might be called into question, such as children and individuals with some cognitive impairments. But should we be so willing to allow outside interference when it comes to populations and vulnerable individuals? Is paternalistic treatment even possible here, if we cannot identify the autonomous will of these individuals or groups?

Over four inter-disciplinary workshops, funded by the Wellcome Trust, we investigated the tension between the state's duty to protect the health of its citizens, and the worry that such policies take important decisions out of the hands of those affected by them, undermining their autonomy and agency. The final workshop was hosted by CELLS in Durham in September 2022, and considered the limits of parental rights, the ethics of state interference in the family, and – most importantly – the extent to which children's own decisions and preferences should contribute to medical decision-making and public health policy. (Project PI: Dr Jessica Begon, SGIA and CELLS member.)

Project Cross Cuts

Mental Health Academy, Ageing Academy, Physical Activity Academy, Women's Academy and Youth Academy



Durham Centre for Ethics and Law in the Life Sciences was established in 2011 and supports excellence in academic research, innovative teaching and public dialogue on the ethical, social and regulatory issues raised by the life sciences. This area is defined broadly to include issues relating to health, the environment and biotechnology. We seek to promote the exchange of ideas and the production of high-quality scholarship within and beyond the University. Our expertise spans a wide range of academic disciplines, including (but not restricted to) anthropology, biology, law, philosophy, sociology and theology.

Law at the Frontiers of Biomedicine

Professor Shaun Pattinson, Durham CELLS (Centre for Ethics and Law in the Life Sciences), came to the end of a two-year project examining the way that the current law is challenged by biomedical developments at the end of September 2022. It was funded by a Leverhulme Major Research Fellowship. The outcome is a book entitled *Law at the Frontiers of Biomedicine*. This book presents an innovative legal theory and applies it to future developments in biomedicine. The book's legal theory reconceptualises the role of legal officials in terms of moral principle and contextual constraints ('contextual legal idealism'). It is applied by asking how a political leader or appeal court judge could address technological developments in biomedicine for which the current law of England and Wales would seem to be ill-equipped to respond.

Project Cross Cuts

Mental Health Academy, Women's Academy, Youth Academy and Ageing Academy



From Discipline to Quality of Care: How Neurologists can Learn from Decisions of Disciplinary Tribunals

From 2021 to 2022, Dr Barend van Leeuwen (Durham CELLS) worked on a research project with a health lawyer (Menno Mostert (Utrecht University)) and two medical doctors (Inge Gimbel (Utrecht University) and Roeland van Leeuwen (Gelre Ziekenhuizen, Apeldoorn)) in the Netherlands.

This interdisciplinary project investigated how neurologists can learn from the decisions of medical disciplinary tribunals in the Netherlands, and how these lessons can be implemented in practice. All disciplinary cases brought against neurologists in the Netherlands in the period of 2010 to 2020 were analysed. The main aim was to identify the learning elements of these cases. The results of the study were published earlier this year in *European Neurology*. After the completion of the research project, the Netherlands Society for Neurology decided to create a Working Group on Disciplinary Law to continue the research on the relationship between disciplinary law and quality of healthcare on a structural and long-term basis.

Project Cross Cuts

Race, Culture and Inequality Academy and Work Academy



Brain, Body and Behaviour Academy cont.



The Durham Centre for Imaging (DCI) brings together leading scientists engaged in neuroimaging research. Led by Prof Amanda Ellison (Strategic Director), Dr Liam Norman (Co-Director of Operations) and Dr Anna Matejko (Co-Director of Research), DCI aims to encourage new interdisciplinary research programmes involving academic staff, both within and between departments at Durham University, and with academic and clinical colleagues at other institutions.

In 2022, the Durham Centre for Imaging grew, with many new colleagues joining the Department of Psychology who study the human mind using brain imaging techniques. This year we also saw the development of many innovative projects focusing on human vision and navigation.

Learning to see in depth with new sensory signals

A European Research Council funded project led by Professor Marko Nardini is examining people's abilities to learn to see in depth using new signals, such as those from audition. Using cutting-edge fMRI decoding techniques, the team will determine where and how different cues to depth are combined in the brain. Previous research shows depth cues are combined in the early sensory cortex, relatively automatically (even when people are not attending to them). This study will examine to what extent depth perception via newly learned cues can acquire these properties telling us more about how human perception can be enhanced or augmented.

Project Cross Cuts

Youth Academy, Ageing Academy and Physical Activity Academy

How does the brain represent complex visual scenes using simple summary statistics?

When we open our eyes, we feel like our perceptual experience of the world is rich and detailed. But is this detail mostly an illusion? Previous research suggests that our experience mostly consists of sparse summary statistics of information, but we know very little about how the brain encodes this information. A new study led by Dr Liam Norman uses fMRI to identify the brain areas that discretely encode the diversity in visual features like colour and orientation.

Project Cross Cuts

Youth Academy, Ageing Academy and Physical Activity Academy

How we move around our environment

Contrary to what has previously been thought, Professor Anthony McGregor and colleagues have recently found evidence that activity in the brain is determined by the type of learning being required to solve a problem rather than the type of information being learned (dynamic or static movement plans for example). A new project will help to understand what two different parts of our memory for movement systems (the hippocampus and the putamen) do when we have to find our way around or when we remember our way around. This work is important for what we know about learning but also how these abilities degrade over age.

Project Cross Cuts

Youth Academy, Ageing Academy and Physical Activity Academy



Namaste Care- understanding the magic

Wolfson Research Institute for Health and Wellbeing doctoral student, Nicola Kendall, is exploring ways to evaluate a sensory intervention used to support people living with advanced dementia called Namaste Care. With ever increasing numbers of people being diagnosed with dementia, and no highly effective treatments of cure available, focus for people living with dementia needs to be focussed on the best possible care to meet their needs at all stages of the disease.

Before starting her PhD, Nic led a Namaste Care community project at St Cuthbert's Hospice in Durham, where trained volunteers visited people in their own homes to deliver Namaste Care. Wonderful outcomes were reported by volunteers and carers, with real 'magic moments' shared. However, the person living with advanced dementia is unable to tell us how they feel about the intervention, as they have most often lost the ability to express their feelings verbally by this stage of dementia. Nic wants to try to give those people a voice, by capturing biological, physiological and behavioural information direct from the Namaste Care recipient.

Nic is the Namaste Care International Champion for hospices, and frequently provides training and supervision for organisations hoping to implement Namaste Care. She also facilitates the Northern Regional Namaste Care Community of Practice. Having written two books about Namaste Care (2020 and 2021) she now hopes to provide evidence of the benefit of this gentle, loving intervention that will convince the medical profession of its merits and hopefully lead to its inclusion in NICE guidelines.

The first part of Nic's research is complete and will be used to design the second stage of data collection. The consultation with family carers, professionals, people living with dementia and volunteers provided useful observational information which has been transferred into an observational tool which can be tested out to measure the outcome of a session. The consultation also gave valuable guidance about the practicalities and ethical issues surrounding collecting physical samples from people living with advanced dementia.

Nic's study is supported by an inter-disciplinary team of supervisors: Dr Paul Chazot, Biosciences, Professor Sarah Atkinson, Human Geography and Dr Leanne Trick, Psychology as well as Nic's Wolfson mentor, Dr Kim Jamie, Sociology.

Project Cross Cuts

Mental Health Academy and Ageing Academy

Brain, Body and Behaviour Academy cont.

Based within the Department of Sociology at Durham University, the Centre for Research into Violence and Abuse (CRiVA) is dedicated to improving knowledge about interpersonal violence and abuse, and professional and societal responses to it.

CRiVA was launched in June 2013, and our Director is Professor Nicole Westmarland, with Dr Hannah Bows as Deputy Director. We currently have approximately 300 members, consisting of around 80 staff and students from within the university and around 220 members from across the UK and internationally.

CRiVA have started planning for their 10th Anniversary in 2023!



Domestic Violence Perpetrator Programmes and Neurodiversity

In September 2022 CRiVA co-hosted an event with UK NGO Respect and Monash Gender and Family Violence Prevention Centre in Australia to deliver findings from Dr Nicole Renehan's research project 'Domestic Violence Perpetrator Programmes and Neurodiversity'. The project explored how programmes can be more responsive to the needs of neurodivergent men and increase safety for victim-survivors. The full report is available to download here: <https://tinyurl.com/4tvtzc9a>

This project is the first international study to explore the experiences and perspectives of domestic abuse practitioners who work with autistic and/or ADHD men. Further, findings revealed that there are only two studies internationally that have researched the experiences, views, and/or outcomes of neurodivergent autistic and/or ADHD men who attended a domestic violence perpetrator/men's behaviour change programme (DVPP/MBCP).

Project Cross Cuts
Mental Health Academy



More Life ([more-life.co.uk](https://www.more-life.co.uk))

Professor Dorothy Monekosso, Wolfson Fellow, is Chief Technology Officer at More Life, whose aim is to make the lives of individuals healthier, through healthy lifestyle behavioural interventions such as weight management, giving up smoking, NHS Health Checks, healthy eating or improved physical activity. We work with individuals on their own, with their families, within groups from the local community, school or workplace.

Professor Monekosso and Durham University, with funding from Innovate UK KTP, aims to develop a novel data-driven system for personalised behaviour change for More Life weight loss programmes.

Project Cross Cuts
Mental Health Academy and Physical Activity Academy

MORE Life

Peer Support for Long Covid

Since the first wave of COVID-19 in March 2020 the number of people living with post-COVID syndrome has risen rapidly at global pace, however, questions still remain as to whether there is a hidden cohort of sufferers not accessing mainstream clinics. This group are likely to be constituted by already marginalised people at the sharp end of existing health inequalities and not accessing formal clinics. The challenge of supporting such patients includes the question of how best to organise and facilitate different forms of support.

As such Jordan Mullard, WRIHW Fellow, and team, aim to examine whether peer support is a potential option for hidden or hardly reached populations of long COVID sufferers with a specific focus on the UK, though not exclusively.



Through our analysis, we highlight three key peer support perspectives in healthcare reflecting particular theoretical perspectives, goals, and understandings of what is 'good health', we call these: biomedical (disease control/management), relational (intersubjective mutual support) and socio-political (advocacy, campaigning & social context).

Additionally, we identify three broad models for delivering peer support: service-led, community-based and social media. Models from other long-term conditions suggest that peer support for long COVID can and should go beyond biomedical goals and harness the power of relational support and collective advocacy. This may be particularly important when seeking to reduce health inequalities and improve access for a potentially hidden cohort of sufferers.

Project Cross Cuts

Mental Health Academy, Physical Activity Academy, Work Academy and Ageing Academy



Research by the Anthropology of Health Group has provided the inspiration for a podcast drama looking at the history of smoking and tobacco addiction.

'Tobias and Syd', spans several centuries following a time travelling woman called Syd who is lured into an addictive relationship with the shape-shifting Tobias.

During its journey through the ages, the play looks at the relationship tobacco has with slavery and colonialism and also explores the notion of romance, from the seduction of smoking to the beginnings of an LGBTQ+ relationship. The drama partly draws on the research work of WRIHW Fellow Professor Andrew Russell

Project Cross Cuts

Mental Health Academy, Race, Culture and Inequality Academy, Ageing Academy and Youth Academy

The Pain Academy

Long-term pain from whatever reasons affects over 14 million people throughout the UK. Reliance on medication, including opioids, is the mainstay of management and is proving harmful to health for many.

10 footsteps to Live Well with Pain

The overall aim of the Gabapentin and Opioid Tapering Tool (GOTT) 10-footsteps pain self-management project (which won an AHSN Bright Ideas award in 2021) is to equip healthcare staff and other practitioners such as social prescribers who work to support people with persistent pain at a foundational level with fundamental knowledge and skills. We specifically train staff to understand and explain the nature of persistent pain and to introduce and support targeted self-management strategies based on individualised, person-centred care planning. Uniquely, we co-deliver our co-designed online 10-FOOTSTEPS to live well with pain training package with Lived Experience Trainers (LETs). The package was accredited in 2022 by the Personalised Care Institute (PCI). The benefits of the overall project stem from the current situation within which standard medical care for persistent pain risks medicine induced harm to many patients.

The project in Darlington delivered significantly improved GP confidence and achieved a 100% reduction in high dose opioid prescriptions after 2 years (in December 2022), and a 50% reduction in gabapentinoids prescriptions, saving over £140,000 on opioid prescribing alone within the practice. It is now being rolled out all over the UK.

We have launched the new iteration of the www.livewellwithpain.co.uk website, with enhanced interactive elements and social Prescribing zone, based on postcode. We have recently developed a project designed to equip healthcare staff and other practitioners such as social prescribers who work to support people with persistent pain at a foundational level with fundamental knowledge and skills. We plan specifically to train staff to understand and explain the nature of persistent pain and to introduce and support targeted self-management strategies based on individualised, person-centred care planning.

By the end of this project in summer 2023, we expect that our multidisciplinary professional and lived experience team will have provided initial 10 FTSP training, follow-up support to up to 100 practitioners in North East, developed an improved infrastructure to support continuation of the training beyond the term of the project and trained our first locality course facilitators.



Project Cross Cuts

Mental Health Academy, Ageing Academy, Race, Culture and Inequality Academy, Work Academy and Brain, Body and Behaviour Academy



Unmasking Pain

In terms of social prescribing, our Unmasking Pain project is a creative collaboration between artists, people living with on-going pain and pain management specialists to explore the shared challenges of living with pain. It seeks to find a voice for those living with pain through artistic collaboration, the artist and the artform and trial different creative approaches to support those living with pain to gain a sense of identity beyond their all-encompassing pain.

UNMASKING PAIN is an "Arts Council" funded project exploring creative approaches to telling stories of life with persistent pain through the eyes of the pain-liver. It is a co-production between the worlds of arts, health, medicine and therapies. It brings together people with lived experience of chronic pain, carers, GPs, physiotherapists, academic science researchers and artists.

UNMASKING PAIN has unfolded through a series of 'co-labs' – creative and critical spaces where artists, people living with pain and pain management specialists will come together with artistic director Balbir Singh. With access to a range of arts practitioners working with movement and dance, mask-making, puppet creation, clay sculpture and music, participants have discovered creative ways to explore life and live well despite their pain.

At the end of the series of co-labs, the multi-disciplinary artworks created is being curated to form an UNMASKING PAIN exhibition which is currently being rolled out in various innovative settings in the North of England, including shop windows, GP services, parks, Community centres etc. This is being shared widely in public spaces and health settings, as well as through digital and online presence in the North-east and Yorkshire.

This project has been evaluated using mixed methods, involving subjective qualitative questionnaires, as well as a range of objective quantitative methods, including activity, sleep and physiological measures, as well as novel AI machine-learned morphological and thermal imaging techniques, as indicators of physical and mental health, respectively; co-production of scientists and Artists and pain livers, all simultaneously sharing and learning from the experience.



Some examples of Unmasking pain project outcomes: 100% of the participants' need for pain medication has either decreased or stayed the same during the project; 100% of the participants' pain catastrophising scores have decreased during the project; 100% of the participants' confidence scores have increased during the project.

"It has changed my entire perspective on creativity"

"I have found the creativity of making flower arrangements more important than taking painkillers"

"I realise I do not need to rely on pain medication now, I can use other methods to take my mind off the pain"

"The pain is always there but I feel more confident of carrying on without meds"

This project won the Fuse Health award for Innovative and Creative Communications Initiative (2023).

Project Cross Cuts

Mental Health Academy, Work Academy, Physical Activity Academy, Brain, Body and Behaviour Adademy, Ageing Academy and Race, Culture and Inequality Academy

The Youth Academy

The future of our children is influenced by multiple factors both within and outside of our control, but over quite a long timespan of (at least) 18 years and our enquiries in this academy challenge the prevailing view that our experiences as youths end as we reach adulthood.

Led by Professor Helen Ball (Anthropology Department), and Professor Nicole Westmarland (Sociology Department) the Youth Academy understands what happens in our youth has ramifications for the rest of our lives in terms of physical and mental health, education, economic and social status. Therefore, our understanding of youth health and wellbeing is critical to the health of our world now and in the future.



The Durham Infancy & Sleep Centre (formerly the Parent-Infant Sleep Lab) is a research centre of the Department of Anthropology. It is the home for a group of researchers examining various aspects of infant and child sleep and parenting behaviour since 1995. Our work with more than 5,000 parents and babies during the last 20+ years has substantially increased parents' understanding of babies' sleep, how best to care for babies during the night, and how best to keep them safe when asleep.

Pictured left: The DISC team

Durham Infancy and Sleep Centre Projects

Data for the ESSaM (Evaluation of Sleep Safety Materials) project was collected between March – June 2022 via online surveys and focus groups. DISC received an ESRC IAA award to conduct this evaluation of the Safer Sleep for Babies campaign materials that were co-produced with Lullaby Trust, Unicef UK Baby Friendly Initiative and Public Health England.

Another project, the ongoing County Durham SUDI (Sudden Unexpected Death in Infancy) Prevention Project, is funded by NIHR ARC NENC. We have undertaken a review of existing multi-agency SUDI policies across the UK, as well as working with colleagues in Durham Public Health team, Durham Safeguarding Children Partnership and other stakeholders to co-produce training for the multi-agency workforce. So far, we have signed up over 400 staff working with vulnerable families in County Durham and are currently developing an approach to assess the impact of this intervention.

Sleep, Baby and You Training Programme

Alongside the conference, DISC launched a new training programme for health practitioners titled 'Sleep, Baby & You', which was picked up by the BMJ and Guardian as news. The training was designed in collaboration with Possums & Co following a research project which concluded in 2020. Sleep, Baby & You seeks to empower parents by providing information on normal infant sleep through antenatal and postnatal resources and practitioner support.



Effects of maternal mental health on prenatal movement profiles in twins and singletons

Professor Nadja Reissland (Psychology) found that prenatal experiences, including maternal stress, depression and anxiety, form crucial building blocks affecting the maturation of the foetal central nervous system. Previous research has examined foetal movements without considering effects of maternal mental health factors critical for healthy foetal development. Maternal depression increased foetal self-touch significantly. In foetal twins, maternal stress significantly decreased and maternal depression significantly increased other twin touch. Maternal mental health factors affected the head movements of twins significantly more than singletons, with maternal depression decreasing head movement frequency for twins significantly.

These results indicate that maternal mental health might have an impact on types of body perspectives formed in utero, in twin compared with singleton pregnancies. Future research needs to examine whether these prenatal effects affect postnatal differences in body awareness.

Project Cross Cuts

Women's Academy and Mental Health Academy

Project Cross Cuts

Women's Academy, Race, Culture and Inequality Academy



Challenging legal definitions of adolescence

Several areas of law have yet to catch up with physiological, social and psychological understandings of adolescence as a phenomenon that extends beyond the age of 18. In a recent project, Professor Emma Cave (Durham CELLS) has explored ways in which adolescence can be better accommodated in health law. She was invited to give the Australian Centre for Health Law Research's (Queensland University of Technology) 10th Annual Public Oration on 1 December 2022. The oration considered how the sufficiency of young adults' autonomy is judged in light of evidence that adolescence can impact on developmental immaturity which can in turn affect risk taking, impulsivity, and independence in decision making. Emma proposed that the right to full decision-making about medical treatment refusals at 18 based on the adult status of the individual should accommodate greater sensitivity to individual developmental attributes and set out some of the steps necessary to achieve this. The oration was based on a forthcoming article Emma co-authored with her daughter, Assistant Psychologist, Hannah Cave (Newcastle University).

Project Cross Cuts

Ageing Academy, Brain, Body and Behaviour Academy, Mental Health Academy, Race, Culture and Inequality Academy

Now and Men

The Centre for Research into Violence and Abuse (CRIVA, see page 22) podcast 'Now & Men' recently celebrated its 20th episode. Dr Stephen Burrell, CRIVA Deputy Director, and Sandy Ruxton reflected on the year since they started and their experience of running the podcast so far.

They reflect on the year since we started Now and Men, and our experience of running the podcast so far. The episode was recorded live at a workshop at a conference called 'Boys at the Crossroads – Insights and Innovations in Young Masculinities', organised by Bristol Young Men's Network in the UK on 14th October 2022. We discuss why we set the podcast up in the first place, what it has achieved thus far, and the role that podcasts and other media can play in engaging with men and boys about gender equality and influencing constructions of masculinity.

You can listen to the podcast here: <https://now-and-men.captivate.fm>

Project Cross Cuts

Race, Culture and Inequality and Mental Health

The Youth Academy cont.

Babies in the womb can taste the flavour of their mother's food

Research conducted by the Fetal and Neonatal lab suggests that human fetuses can detect food flavors from their mother's diet and some things may not be to their taste. Fetuses ranging from 32-36 weeks were exposed to either carrot or kale flavors while their facial reactions were recorded using four-dimensional (4D) ultrasound video. This study is the first to measure frame-by-frame facial movements in response to maternal diet. Fetuses exposed to carrot flavor showed "laughter-face" patterns more frequently, while those exposed to kale flavor showed more "cry-face" patterns. This discriminating behaviour shows in this instance that there is a clear preference for carrot.

The last press release of the paper below resulted in over 10 billion views (according to the Press office email communication 13.10.22 and see updated report Babies can taste and smell in the womb (vuelio.co.uk) The research paper in Psychological Science was in the top five per cent of all research outputs tracked by Altmetrics as of 11 October 2022. As of the same date, the paper was also ranked as the number one research output from Psychological Science from more than 4,000 outputs measured. The research was listed as the top impactful article for 2022 among articles published in six peer reviewed Association for Psychological Science journals.

Ustun, B. Reissland, N., Covey, J., Schaal, B. & Blissett, J. (2022). Flavour Sensing in Utero and Emerging Discriminative Behaviours in the Human Fetus. Psychological Science

<https://doi.org/10.1177/09567976221105460>

Another project led by Cambridge University and conducted by fetal and Neonatal lab seeks to uncover whether human fetuses move their lips to sounds that they hear.

"Human neurocognitive development: early-stage processing, modifiers, and outcomes".

(Includes Prof Jonathan Green Manchester; Prof Simon Baron Cohen Cambridge; Prof Declan Murphy, Cambridge; Prof Clare Elwell UCL; Prof Marc Johnson, Cambridge lead: with Dr S Lloyd—Fox Cambridge & Birkbeck London [oi.org/10.1177/09567976221105460](https://doi.org/10.1177/09567976221105460)



Project Cross Cuts

Women, Brain, Body and Behaviour Academy and Mental Health Academy



Smoking effects on the fetus and baby after birth

Infant neurobehaviour provides an insight into the development of the central nervous system during infancy, with behavioural abnormalities highlighting a cause for concern. Research has demonstrated that prenatal exposure to cigarettes leads to deficits within neurobehavioural development, along with negative birth outcomes detrimental to subsequent development. With the growing use of e-cigarettes amongst pregnant women, this study explored how prenatal e-cigarette exposure compares to prenatal cigarette exposure.

To our knowledge, this is the first research study assessing a neurological outcome as a result of e-cigarette exposure. Findings of this have potentially important implications for public health policies regarding the safety and use of e-cigarettes throughout pregnancy.

Project Cross Cuts

Women's Academy, Brain, Body and Behaviour Academy and Race, Culture and Inequality Academy

LGBTQ+ Inclusive Relationships and Sex Education Briefing Paper

Cait Jobson, a second year CRiVA PhD researcher, compared Scottish and English relationships and sex education (RSE) policy and guidance and experiences of young LGBTQ+ people in schools.

Relationships and sex education (RSE) often lack LGBTQ+ inclusivity and young LGBTQ+ people's voices are often ignored. Until 2000 in Scotland and 2003 in England, Section 28 banned the promotion of LGBTQ+ identities in schools. This has left a legacy 'of oppression, discrimination and harassment' for LGBTQ+ people.

LGBTQ+ invisibility and heteronormativity lead to negative implications for young LGBTQ+ people's knowledge and skills within relationships. Young LGBTQ+ people feel that formal forms of support are not inclusive of their identities or experiences.

Read her 10 top tips in what we can do to improve RSE teaching here: <http://tinyurl.com/mwmmf5hdd>



Project Cross Cuts

Brain, Body and Behaviour Academy

Child of the North

Durham University is involved in the Northern Health Science Alliance (NHS) Child of the North research partnership. It aims to act as a new focal point for the harnessing of research evidence to achieve transformative impact for children living in the North and beyond. It will also seek to add value to the nationally and internationally significant initiatives and collaborations in this area that already exist within the region.

Co-production with children, practitioners and policy makers will be a core element of Child of the North. This will build on existing N8 strengths in engaging children and young people in participatory science, co-design and co-creation of research, and crowd-sourcing data collection. Please contact the Durham Institutional Champion, Charmele Ayadurai for more information on this partnership.



Project Cross Cuts

Mental Health Academy, Physical Activity Academy, Brain, Body and Behaviour Academy, Women's Academy, Ageing Academy and Race, Culture and Inequality Academy

New N8 report paints a stark picture of inequality for children in the North

A major report released in late 2021 reveals widening inequalities for children growing up in the North of England post-pandemic compared to those in the rest of the country. The considerable costs to society and the UK's economy of rising inequality are outlined in The Child of the North: Building a fairer future after COVID-19 report, produced by the N8 Research Partnership and Northern Health Science Alliance (NHS), and written by over 40 leading academics from across the North of England including Durham University WRIHW fellows.

The report looks at a wide range of factors, from child poverty to children in care, to build up a picture of the Child of the North. It sets out 18 clear recommendations that can be put in place to tackle the widening gap between the North and the rest of England. To read the report and view its recommendations visit thenhsa.co.uk/app/uploads/2022/01/Child-of-the-North-Report-FINAL-1.pdf

The Women's Academy

From the concept of the glass ceiling to the #MeToo movement, the role of women in our world is slowly being recognised. And yet gaps still exist. From the exclusion of women in early clinical trials (due to the variability introduced by cyclical hormones) to policies aimed for inclusion and recognition that are not fit for purpose, there is still much work to be done to ensure the health and wellbeing of women everywhere.

Shame in Women's Reproductive Health

The awareness of being seen and judged pervades so much of women's* experience but comes into acute focus in the context of reproductive health. Women's bodies in this context become a locus of shame whether relating to sexual activity or lack of it, being pregnant or not achieving pregnancy, and the perception of the 'appropriateness' of sexual activity as we age. In a talk given in April 2022, Professor Jane Macnaghton draws upon experience as a clinician working in cervical screening and as an academic interested in the menopause to examine shame in this context. The talk explored the origins of shame in both contexts exploring how societal views about women and sexual activity make women turn in upon themselves in negative ways with often devastating consequences. It also examined the misogyny that surrounds the clinical approach to women's health, drawing particular examples from historical work on the menopause. Feminist condemnation of this misogyny and its consequences has had positive results but also negative outcomes for women who feel uncomfortable accessing clinical services.

This paper forms the groundwork for research Jane hopes to pursue in the Institute of Medical Humanities in the next two years on the how the entangled cultures of feminism, medicine and women's health activism.

Project Cross Cuts

Mental Health Academy, Brain, Body and Behaviour Academy and Ageing Academy



Us Too: Alisha's Story

Us Too: Alisha's story was co-created by Open Clasp Theatre Company, and researchers from the CSJCA at Durham University, and Sunderland University, in collaboration with women from Us Too. Written by Julie Tsang and directed by Katja Roberts, Us Too Alisha's Story focuses on the experiences of women with learning disabilities reporting sexual violence. The film was co-created by Open Clasp Theatre Company, and researchers from Durham and Sunderland University in collaboration with women from Us Too.

Research shows that people with learning disabilities are at higher risk of sexual abuse, and that women with learning disabilities are particularly vulnerable. When women with learning disabilities report sexual violence to the police, their reports are less likely to result in a conviction. Us Too: Alisha's story was co-created to effect change and to develop inclusive criminal justice responses to sexual violence. The film will be used in an ESRC funded participatory theatre-based project to develop criminal justice practice in Durham in 2023.

The film was shown as part of the 2022 ESRC Festival of Social Sciences.

Project Cross Cuts

Youth Academy, Race, Culture and Inequality Academy and Brain, Body and Behaviour Academy

India's bidi cigarette workers need to be at the heart of discussions about finding alternatives to working in the tobacco industry.

India's bidi cigarette workers need to be at the heart of discussions about finding alternatives to working in the tobacco industry, according to a new study involving Andrew Russell. Bidis are hand-rolled leaf cigarettes and are the main way tobacco is smoked in India. Ninety per cent of workers are women who largely work from home and earn a lower-than-average wage of approximately £1.50 (about 150 Indian rupees) for rolling up to 1,000 bidis each day. Bidi production can cause a number of health issues for workers and their families, while children are also sometimes enlisted by bidi rollers to help meet targets. New research by the Bidi Workers' Alternative Livelihoods Project - which includes partners in India, the UK and the USA - has found that despite awareness of the industry's adverse effects, bidi rollers saw the work as convenient in the absence of different jobs that could fit around other commitments such as cooking or childcare.

Community health volunteers used a questionnaire to interview 46 women involved in bidi rolling in two cities in the north of Tamil Nadu state, southern India.

Questionnaires were followed-up with focus groups and a panel of 11 bidi rollers also attended a workshop where the findings and possible alternatives to bidi rolling were discussed.

Alternative sources of income could include the production of masala spices or tie-dye fabrics where workers could continue to work at home while managing their other responsibilities, the study found.

Bidi rolling fits the remit of the World Health Organization's Framework Convention on Tobacco Control, Article 17, which aims to provide economically viable alternative jobs to tobacco. India and the UK are both signatories to the Convention.

Project Cross Cuts

Mental Health Academy, Youth Academy, Brain, Body and Behaviour Academy, Ageing Academy, Work Academy and Race, Culture and Inequality Academy



The Mental Health Academy

We recognise that mental and physical health are contingent upon each other. Long-term illness has severe and lasting mental ramifications both for the patient and those around them. Equally, poor mental health affects our physical wellbeing making life even more difficult.

It is also clear that keeping our mental health in balance is important across every aspect of our lives. That is why we represent our work which seeks to understand how and where we live influences how we feel, act and react as cutting across each of our Challenge Academies. This can be in relation to how loneliness is experienced by stroke survivors and how this affects their interaction with rehab (Brain, body and behaviour academy) to mental health issues in our Youth Academy (CRIVA). However, mental health is also interrelated with our other cross-cuts such as Race, Culture and Inequality and Work for example.

Leadership Alphabet of Disposition Development Engagement and Reflection (LADDER) intervention - a feasibility study

This year, Beng Huat See and Kulwinder Maude (WRIHW Fellows) along with their team at the Durham University Evidence Centre for Education have been working in partnership with the Louisiana State University Leadership Development Unit, the Institute of Education (UCL), Leeds Trinity University and Mendel University (Czech Republic) to pilot test the feasibility of the LADDER intervention, which is aimed at supporting the mental health and wellbeing of

our teacher trainees. The LADDER (Leadership Alphabet of Disposition Development Engagement and Reflection) approach is a comprehensive model of assessment and coaching support, which uses the principles of reflective practice and cognitive-behavioural approach to guide the conversation between the coach and the teacher. It helps trainees to be aware of those critical dispositions that are likely to cause stress and to reflect on them prior to their school placement experience. Early results from our evaluation are promising. Trainees who received the coaching showed bigger improvements than the matched comparison group in self-reported self-efficacy (effect size = +0.51) and mental wellbeing (ES = +1.67) over a three-month period. Intervention teachers were also more likely to indicate intention to stay in teaching, after receiving the coaching (ES = +0.46). These results are reassuring as teachers' wellbeing is known to be strongly correlated with teacher attrition as well as student wellbeing.

This partnership has led to an application for the Spencer Foundation Research-Practice Partnerships grant to develop collaborative research for educational change.



Project Cross Cuts
Work Academy and Youth Academy

“Better Research Together” - Building Sustainable Research-Community Partnerships in Neurodiversity

Mary Hanley (PI), Keren MacLennan, Ben Alderson-Day, and Debbie Riby (Co-I's) were successfully awarded from the Research England Participatory Research Fund for the project “Better Research Together” – Building Sustainable Research-Community Partnerships in Neurodiversity. This provides the opportunity for the Centre for Neurodiversity and Development to expand their panel of ‘experts by experience’ and to co-produce supporting resources, including research methods training videos and safeguarding documentation to support sustainable participatory research. They aim to pilot projects, co-produced with the panel of ‘experts by experience’, towards the end of the year.

Project Cross Cuts
Physical Activity Academy, Youth Academy, Brain, Body and Behaviour Adademy, Ageing Academy and Race, Culture and Inequality Academy

£2bn cost of mental ill health in the North

WRIHW Fellow and Anthropology of Health Research Group member Dr Nasima Akhter co-authored a report which shows that the negative effect of the Covid-19 pandemic on mental health was the largest and most prolonged in the North of England. The Northern Health Science Alliance (NHSA) study estimated that mental ill health in the region cost the UK's economy £2billion during the two years of the pandemic. It also showed showed the pandemic had caused a sharp rise in regional inequality in mental health with ethnic minorities in the North worst affected, and found ethnic minority women from the North persistently had the worst mental health scores throughout the pandemic

The report's authors said their findings reiterated that the Covid-19 pandemic had been very unequal, with people in the most deprived communities suffering most in terms of death rates, dying younger and in on going ill-health such as long covid.



Project Cross Cuts

Race, Culture and Inequality Academy and Brain, Body and Behaviour Academy

This reflects long-term inequalities in how social circumstances determine health, how we live, work and age, they added. The report suggests that greater initiatives are needed to address inequalities in mental health in the North, if the UK Government's 'levelling up' agenda is to be achieved.

Key recommendations include calling for an increase in National Health Service (NHS) and local authority resources and service provision for mental health in the North, focussing on prevention and improving resilience. The report also calls for investment in research and development of area level measures of physical and mental health to better understand place-based inequalities.

Immigration and mental health

Dr Mohi Ziyachi, Wolfson Fellow and NENC Applied Research Collaboration Fellow is looking into Immigration and mental health. She aims to demonstrate that the mental health care services in the UK are problematic due to individualised, biomedical, and power-based approaches. She argues that this status is more controversial and complicated for refugees and asylum-seekers who experience a variety of pressures, tensions, and deprivations. By reflecting on immigrants' experiences, participant observations in charity organisations, and interviewing professionals and stakeholders, Mohi will characterise problematic aspects of this system and provide recommendations for the grass-root intervention.



Project Cross Cuts

Race, Culture and Inequality Academy

Solitude Research

Research interest in solitude has been increasing steadily. Solitude – time alone – is not synonymous with loneliness, which is a subjective sense of unwanted social isolation that's known to be harmful to mental and physical health. In contrast, in recent years, many observational studies have documented a correlation between greater wellbeing and a healthy motivation for solitude – that is, seeing solitude as something enjoyable and valuable. But, by itself, this doesn't prove that seeking solitude is beneficial.

Dr Thuy-vy Nguyen, WRIHW Fellow, and Ellen Taylor-Bower completed a systematic review aiming to explore the roles of norms and physical environment in shaping perceptions of solitary experiences. Dr Nguyen is also studying how we can improve people's attitudes toward solitude and help them cope better in it.

Project Cross Cuts

Brain, Body and Behaviour Academy



The Mental Health Academy cont.

Evaluating the use of ‘ecotherapy’ as a preventative mental health strategy in active service personnel.

Leanne Trick (Assistant Professor in Mental Health, Psychology), together with a network of collaborators in the region including RAF Leeming in North Yorkshire, is investigating whether ‘ecotherapy’ (nature-based outdoor activities) offers an effective preventative mental health strategy for active service personnel. Military deployments and combat exposure are unique sources of stress, and mental health difficulties are common among active service personnel. Preventative strategies to reduce stress and promote mental wellbeing among active military personnel are therefore critical. Nature exposure and ecotherapy has been shown to promote wellbeing in other clinical and vulnerable populations. This project aims to extend previous work by investigating whether and how ecotherapy can reduce self-report and physiological markers of stress and improve other aspects of mental health among non-treatment seeking active military personnel. Early feedback from users has indicated that ecotherapy (e.g. allotment gardening) is valued by service personnel as an opportunity to relax with their families.

In parallel, Leanne (along with MSc Behavioural Sciences students Raven Hsu and Leia Kennedy) has also been researching the mental health benefits of nature-based activities among Durham University students. Preliminary data from a small pilot study using a week-long daily diary to sample ‘in-the-moment’ experiences among student gardeners suggested that mental wellbeing improved during a gardening session, and the effects were larger in students with higher levels of ‘academic burnout’ at the start of the study. The team are currently working to confirm the findings in a larger sample, investigating a wider range of nature-based activities, and hope the findings will have implications for improving student mental health.

Project Cross Cuts

Physical Activity Academy, Brain, Body and Behaviour Academy, Work Academy and Youth Academy



Dissociative Mental Health in the general population

Psychology Teaching Fellow Hayley Dewe’s work looks at dissociative mental health in the general population (specifically depersonalization / derealization), and levels of emotional arousal to negative stimuli (such as videos of body-threats) in the general population. Feelings of dissociation or estrangement from the self or world, and a reduced sensation of emotional experience are prevalent symptoms in Depersonalization / Derealization (DP/DR) experience. This has been observed even for non-clinical (healthy) populations (Dewe et al., 2016; 2018). Two hundred and eight participants observed dynamic movie clips from a novel battery of highly aversive body-related threats (the Body-Threat Assessment Battery, Braithwaite et al., 2020). Measures of latent biases to DP/DR experiences were quantified using the Cambridge Depersonalization Scale (CDS: Sierra & Berrios, 2000). Emotional arousal was measured via event-related skin conductance responses (SCRs), which were compared against non-event related SCRs (NS-SCRs) and baseline non-body-threat movies. Predisposition to DP/DR experience was associated with significantly reduced SCRs for the body-related movies but was not observed in relation to the baseline non-body-threat movies. In addition, no differences were observed between participants in relation to NS-SCR activity during a period of anticipation before body-threat exposure. Our findings extend previous research on DP/DR experience by showing reduced emotional arousal in relation to a diverse collection of direct body-threat stimuli; and this was observed in a general (sub-clinical) sample. Data are interpreted within the frameworks of self-consciousness and the fronto-limbic neurobiological account of depersonalization.

Project Cross Cuts

Physical Activity Academy, Brain, Body and Behaviour Academy, Work Academy and Youth Academy.

Understanding procrastination and its impact on well-being

Fuschia Sirois, Wolfson Fellow and Professor in Health and Social Psychology, has published a new evidence-based self-help book on procrastination. Published by the American Psychological Association 'Procrastination, What It Is, Why It's a Problem, and What You Can Do About It' includes tools and exercises for addressing procrastination and improving well-being.

This book was featured as one of the GreaterGood.com 2022 Editor's pick of "the most thought-provoking, practical, and inspirational science books of the year." It was also featured in an article by The Guardian entitled 'There is hope': expert writes guide to tackling procrastination'.

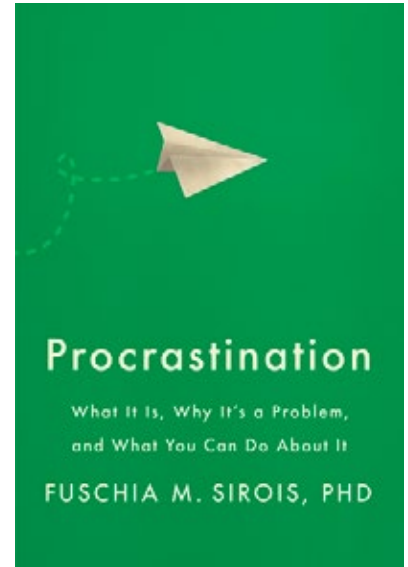
TED Talk: Here's the real reason you procrastinate

Many believe that laziness, poor time management, or disorganisation are the reasons why people procrastinate. In this TED talk, Fuschia Sirois, Wolfson Fellow and Professor in Health and Social Psychology will explore the science behind why people procrastinate to reveal the "real" reasons why people unnecessarily delay, the toll it can take, and what you can do to reduce procrastination. For over 20 years Fuschia has researched the causes and consequences of procrastination, and in particular the health consequences of procrastination, as well as how emotions play a key role in explaining why people procrastinate. Her research also examines the role of positive psychology traits, states, and interventions for supporting self-regulation and enhancing health and well-being.

To view this fascinating talk please visit <https://www.youtube.com/watch?v=xTEPNxx0MsA>

Fuschia also collaborated on a TED animation around how your body triggers a procrastination response, and how you can break the cycle.

To view the animation, visit <https://ed.ted.com/lessons/why-you-procrastinate-even-when-it-feels-bad>



Project Cross Cuts

Race, Culture and Inequality
Academy



The Physical Activity Academy

The interdisciplinary Physical Activity theme welcomes membership from all areas of the University where there is an interest in physical activity. We are aligned to the Fuse (<http://www.fuse.ac.uk/>) physical activity special interest group which comprises members from all five north east Universities. The remit of the SIG is broad, but ultimately focused on understanding not only the wide-ranging determinants of physical activity, but how best to support engagement, generating and evaluating evidence for policy and practice. The SIG has multi- and inter-disciplinary expertise to address a range of complex questions from a variety of paradigm perspectives. By working together with our public health, public sector, and community partners (present and future) we strive to advance knowledge and understanding of physical activity in terms of what works, for whom, and in what circumstances, and ultimately to create impact through policy change.



Solitude is the time when you are not interacting with another person, either in person, on the phone, or online.

Solo walks can be nice too

Science suggests that nature can improve our mood, especially in solitude. Taking a short walk in nature creates a unique experience that can help us recharge and feel free from our daily obligations.



Create your own solitude

Our solitude is better when we welcome it. Think about the benefits that solitude brings you: some say it brings peace, others say freedom. Whatever about solitude that makes you happy, nature can make it better.



Plan a safe path

Safety is important when we explore nature space. You might prefer walking during the day. You might prefer a well-tended space. You might prefer seeing other people. Plan ahead to help you feel safe during your walk.



Prepare for your journey

A short 15-minute walk in nature can be just the thing you need, but you might prefer to go a bit longer. Knowing your path helps you prepare for the journey. Is the path the right terrain for you? Is the ground too wet? And of course, make sure you bring the right shoes!



Tell a friend

You might want to let someone know when you plan to take your solo walks. Solitude is better when we know that someone will have our back when we need them. Seeking solitude does not mean we have to feel completely cut off from the world.

Walking Solo

Spending time in solitude can be relaxing and restorative – if we welcome it positively. Wolfson Fellow Thuy-vy Nguyen has looked into the potential of physical activity to make the time people spend alone more positive.

So often, physical activity is promoted for its social benefits. But for many of us, physical activity presents a much-needed opportunity for some restorative alone time. Especially if it gets us outside and engaged with nature. And especially as we move into the busy (and sometimes overwhelming) festive season. Using their knowledge of the research – in collaboration with County Durham Sports and AgeUK – Thuy-vy and her team have put together some handy tips to help people use their time alone positively for getting active.

Project Cross Cuts

Mental Health Academy, Youth Academy, Brain, Body and Behaviour Academy, Ageing Academy and Race, Culture and Inequality Academy

New collaborative MSc programme launched for the Departments of Sport and Exercise Sciences and Anthropology.

We are delighted to note that in November, 2022 a new MSc in Physical Activity, Health and Society was launched. The programme will examine social and health inequalities and explore how we might use physical activity to improve equity. We will offer a cutting-edge curriculum which builds on our collaborative expertise in these areas and associated research methods. For more information, please contact caroline.dodd-reynolds@durham.ac.uk

Physical activity inequalities

Work was undertaken for Sport England to model volunteering data at local level. This commissioned project was a collaboration between the Department of Sport and Exercise Sciences, and the Durham Research Methods Centre (DRMC). We estimated frequencies at which individuals aged above 16 years in English local authority areas volunteered in sport activities, using the Sports England national ActiveLives survey. Although the survey included questions on whether an individual volunteered in the past month and past year, we found that missingness in these responses was non-random, dependent on local authority area and other responses. We devised models to impute these missing values, allowing unbiased estimates of volunteering rates to be made linked future policy objectives in this important area. Thanks to Jochen Einbeck and James Liley from DRMC for their work on this project.

Project Cross Cuts

Mental Health Academy and Brain, Body and Behaviour Academy



Children's experiences of the journey between home and school

Steph Morris and Emily Tupper worked as postdoctoral researchers with Tessa Pollard and Carolyn Summerbell and have been writing up papers from an NIHR SPHR2 funded project on active school travel in Healthy New Towns in deprived and affluent areas.

Active school travel (AST) such as walking, cycling, scooting or skateboarding to and from school is associated with increased overall physical activity and fitness in children. Increased AST has the potential to contribute to public health and provide local environmental benefits by reducing congestion and CO2 emission risks posed by private cars around schools. However, AST has been declining since the 1970s in high income countries in particular.

Key 'barriers' to AST such as dangerous built environments, 'stranger danger' and traffic are often reported by parents. Some scholars suggest that parental views regarding AST have a greater influence on children's travel modes than children's perspectives but others show that children's perceptions and wishes are important in household decision making regarding school journeys. A systematic synthesis of parents' and children's views on walking and cycling in the UK showed children's views to be much more positive than parents' and suggested interventions could encourage children and young people to critically challenge social norms that encourage their parents to chauffeur them.

More qualitative work with children and young people has been published in the last decade and recent active travel projects across the globe are engaging children in co-designing their school streets. Several authors have called for more child-centred approaches to studying journeys to/from school which can offer a means to voice children's experiences and recognise their agency in constructing a sense of place. This call reflects the shift in thinking in the 'sociology of childhood' regarding children's rights to participation in research, whereby children are understood as knowledgeable experts on their own experiences, and have specific contributions to make.

A synthesis of qualitative and ethnographic research about children's experiences of their school journeys is thus timely in putting children's voices centre stage. A qualitative systematic review using meta-ethnography as a qualitative synthesis method was conducted. Such a review can provide a child-centred comprehensive account of current understandings of how the environment on the school journey influences mode of travel to school. Such a review can also uniquely show how physical environmental factors identified as affecting children's experiences of school travel are interwoven with social factors, and how socio-material environments are engaged with, negotiated and explored. Following up on this work, Tessa Pollard, Cassie Phoenix and colleagues from Exeter and Cambridge also submitted to SPHR3 with a project on active travel in economically deprived rural areas.

Project Cross Cuts

Youth Academy, Brain, Body and Behaviour Academy and Ageing Academy

The Race, Culture and Inequality Academy

We cannot address any of our challenges without framing our enquiries around race and culture. We must identify inequalities where they are found in each of our academies and find ways to mitigate them in a way that is fit for purpose. What works for one population strata will not work for all. In order to improve the health and wellbeing of all in our region, country and across the world, we need to resist the urge to help some of the people some of the time through inclusion and diversity. Only then can we truly help all of the people, all of the time.



Diabetes is often dubbed a rich man's disease. But is it fair to call it that in India?

Data from the National Family and Health Survey-5 showed that, more than the wealth of a person, awareness levels play a relatively superior role in diabetes incidence. But do ground realities support this conclusion drawn using data? In this episode, The Hindu speaks to Emilija Zabliute: Lecturer, Anthropologist, Durham University (Department of Anthropology) and member of the Anthropology of Health Research Group about the wealth-awareness-diabetes link.

The podcast can be accessed here: <https://www.thehindu.com/podcast/whats-more-important-to-control-diabetes-awareness-or-money-data-point-podcast/article66407676.ece>

Project Cross Cuts

Brain,Body and Behaviour Academy and Ageing Academy

We are Hongkongers: Contested Identities, Communities and Home-Building

The new British Nationals (Overseas) (BN(O)) visa route entitles 5.2 million Hong Kong BN(O) passport holders and their dependents to settle in the UK. This project aims to explore how Hongkongers settle in different cities and towns in the UK and they ways by which they rebuild their Hongkonger identities and community, most importantly their homes.

This is a 3-year project funded under the British Academy/ Wolfson Fellowship scheme. Through questionnaire, interview and documentary filmmaking, the project also examines how their migration experiences may impact pre-existing and new relationships with local and transnational communities, friends and families and support agencies. Research findings will help the UK government, community groups and social care professionals develop suitable services for Hongkongers. The project is led by Dr Sui-Ting Kong, partnered with Trafford Hongkongers and other Hongkonger communities in the UK.



Project Cross Cuts

Work Academy, Mental Health Academy, Youth Academy and Women's Academy

The impact of social prescribing during Covid lockdowns

Steph Morris and Tessa Pollard collaborated to complete outputs from Tessa's and colleagues' NIHR funded ethnographic evaluation of social prescribing, including a paper exploring the impact of social prescribing during Covid lockdowns, highlighting the importance of inequalities in access to outdoor spaces (Morris et al 2022).

COVID-19 public health restrictions, such as social distancing and self-isolation, have been particularly challenging for vulnerable people with health conditions and/or complex social needs. Link worker social prescribing is widespread in the UK and elsewhere and is regarded as having the potential to provide support to vulnerable people during the pandemic. This qualitative study explores accounts of how an existing social prescribing service adapted to meet clients' needs in the first wave of the pandemic, and of how clients experienced these changes.

The research found that service providers quickly adapted to remote intervention delivery aiming to serve existing clients and other vulnerable groups. Service providers experienced improved access to some existing clients via telephone in the first months of remote delivery and in some cases were able to engage clients who had previously not attended appointments at GP surgeries. However, link workers also experienced challenges in building rapport with clients, engaging clients with the aims of the intervention and providing a service to digitally excluded people. Limited link worker capacity meant clients experienced variable contact with link workers with only some experiencing consistent support that was highly valued for helping to manage their conditions and mental wellbeing. Limited access to linked services also adversely affected clients. Clients living in less affluent circumstances and/or with worse health were more likely to experience negative impacts on their long-term condition. Some found their health and progress with social prescribing was 'on hold' or 'going backwards', which sometimes negatively affected their health.



Project Cross Cuts

Mental Health Academy, Physical Activity Academy, Brain, Body and Behaviour Academy, Ageing Academy, Youth Academy, Women's Academy and Race, Culture and Inequality Academy

HERE North East: Intersecting Culture, Heritage, and Health

Wolfson Fellow Jordan Mullard is leading HERE North East. The aim is to establish the first ever community culture and wellbeing hub for the North East. Ideas for the culture hub originated in a research partnership between several cultural organisations and individuals in the North East, funded through AHRC grants. The first away day was held at Gateway Studios. Three days of collaborative working with Black-led community cultural, arts and well-being groups to establish and develop the anti-racism and wellbeing cultural archive and hub.

Our ambition is to develop a hybrid, mobile, and physical regional space that combines the strategic priorities of local authorities; NHS providers; grassroots community groups and individuals; the needs of higher education institutions; research centres; and their students and staff - all seeking opportunities for collaboration, community, and wellbeing.

Project Cross Cuts

Mental Health Academy, Women's Academy, Ageing Academy and Youth Academy

The Race, Culture and Inequality Academy cont.

Social Policy, Political Economy and the Social Contract

In this challenging and original study, Jonathan Wistow, WRIHW Co-Director positions social policy within political economy and social contract debates. Focusing on individual, intergenerational and societal outcomes related to health, place and social mobility in England, he draws on empirical evidence to show how the social contract produces long-standing, highly patterned and inequitable consequences in these areas. Globalisation and the political economy simultaneously contribute to the extent and nature of social problems and to social policy's capacity to address them effectively.

Applying social contract theory, this book shows that society needs to take ownership of the outcomes it produces and critically interrogates the individualism inherent within the political economy.



Levelling Up the UK Economy: The Need for Transformative Change

This book contributes to emerging debates about Levelling Up the UK Economy, considering these alongside the nature of, and trends in, both the political economy and spatial disparities. Drawing on a complex systems framing, the book pulls together a range of evidence to provide insights about the agenda from macro, meso and micro levels of analyses, including utilising qualitative data from a small scoping study with Directors of Regeneration across several 'left behind' places and 25 residents of 'left behind' Redcar & Cleveland in Teesside. The book, co-authored by Wolfson Research Institute for Health and Wellbeing Co-Director Jonathan Wistow, outlines phases in capitalism's development, particularly the shift from post-war capitalism to a post-industrial and neoliberal society and the implications for spatial inequalities. The 2022 Levelling Up White Paper is analysed alongside a focus on the role of local government relative to the agenda. We suggest that only a transformative change in the political economy, including significant and sustained investment at different spatial levels, is likely to achieve the ambition to Level Up.

Project Cross Cuts

Brain Body and Behaviour Academy, Work Academy, Mental Health Academy, Youth Academy and Ageing Academy



Behavioural Endocrinology and Physiology Lab

Profs Gillian Bentley, Ann MacLarnon and Val Affleck (Lab Manager) are delighted to announce the lab is now completely set up and reopened following the Pandemic and associated shut-downs. Below you can find information on recent work completed by the lab, and involving the lab.



Project Cross Cuts
Brain Body and Behaviour Academy
and Women's Academy

No impact of developmental conditions on serum estradiol levels among Bangladeshi women in the UK and Bangladesh.

While many aspects of female ovarian function respond to environmental stressors, estradiol (E2) appears less sensitive to stressors than progesterone, except under extreme ecological conditions. However, earlier studies relied on saliva samples, considered less sensitive than blood. Here, we investigated E2 variation among 177 Bangladeshi and UK white women, aged 35–59, using single serum samples. Bangladeshi women either grew up in Sylhet, Bangladesh (exposed to poor sanitation, limited health care, and higher pathogen loads but not poor energy availability), or in the UK.

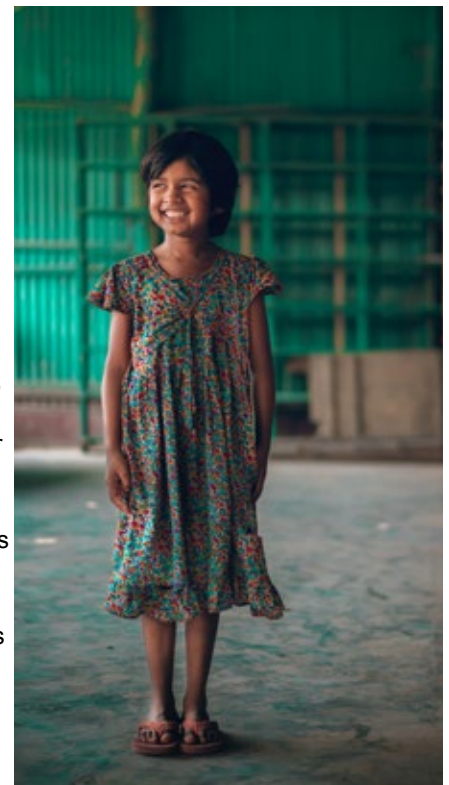
E2 levels did not differ between migrant groups after controlling for age, BMI, physical activity, psychosocial stress, parity, and time since last birth (parous women). Paralleling results from salivary E2, serum E2 did not differ among women who experienced varying developmental conditions. These results reinforce the hypothesis that E2 levels are stable under challenging environmental conditions. Interpopulation variation may only arise under chronic conditions of extreme nutritional scarcity, energy expenditure, and/or high disease burdens.

American Journal of Human Biology 34(3):e23631. <https://doi.org/10.1002/ajhb.23631>

Childhood environment influences epigenetic age and methylation concordance of a CpG clock locus in British-Bangladeshi migrants.

Migration from one location to another often comes with a change in environmental conditions. Here, we analysed features of DNA methylation in young, adult British-Bangladeshi women who experienced different environments during their childhoods: a) migrants, who grew up in Bangladesh with exposure to comparatively higher pathogen loads and poorer health care, and b) second-generation British-Bangladeshis, born to Bangladeshi parents, who grew up in the UK. We used buccal DNA to estimate DNA methylation-based age (DNAm age) from 14 migrants and 11 second-generation migrants, aged 18–35 years. 'AgeAccel,' a measure of DNAm age, independent of chronological age, showed that the group of women who spent their childhood in Bangladesh had higher AgeAccel ($P = 0.028$), compared to their UK peers.

Since epigenetic clocks have been proposed to be associated with maintenance processes of epigenetic systems, we evaluated the preference for concordant DNA methylation at the luteinizing hormone/choriogonadotropin receptor (LHCGR/LHR) locus, which harbours one of the CpGs contributing to Horvath's epigenetic clock. Measurements on both strands of individual, double-stranded DNA molecules indicate higher stability of DNA methylation states at this LHCGR/LHR locus in samples of women who grew up in Bangladesh. Together, our two independent analytical approaches imply that childhood environments may induce subtle changes that are detectable long after exposure occurred, which might reflect altered activity of the epigenetic maintenance system or a difference in the proportion of cell types in buccal tissue. This exploratory work supports our earlier findings that adverse childhood environments lead to phenotypic life history trade-offs.



Project Cross Cuts
Brain Body and Behaviour Academy
and Women's Academy

The Work Academy

The focus of the Work Academy is on how work can influence an individual's well-being and brings together academics from different disciplines and health professionals to develop strategies that employers can use to improve employees' health and wellbeing.

On average, we spend more than half of our lives working or engaging in work-related activities. The time we spend at the workplace, the tasks we perform, the work environment, and social relationships with colleagues and friends at work, all affect our health and wellbeing. For many employees, the job they perform is a great source of joy and fulfillment, for others, work means working long hours under stressful conditions, lacking income security, and inability to balance work and non-work commitments. When people experience a lot of stress over a long period of time this can lead to a feeling of physical, mental, and emotional exhaustion, this was especially the case for occupations classified as key workers during the Covid-19 pandemic.

The Work Academy emphasises disease prevention and health promotion and, aims to tackle health and wellbeing at the intersections of personal characteristics and working conditions, and space that can individuals, family members, and communities.

Research Conversations aimed at developing pathways to research grant proposals

A group of researchers from different Departments at Durham University and Oxford University and disciplines (Anthropology, Business, Education, Geography, and Sociology) organises monthly Research Conversations. The team's research focus is 'precarity', this is an old but very timely topic, and the aim is to explore old and new challenges by 'Revisiting precarity in light of new global developments' to research precarity and its existential, phenomenological relevance emphasising the experiential component of living in uncertainty and how it affects people's health and wellbeing.

Another group, established in November 2022, brings together academics from the Durham Law School and Business School, bringing together disciplines such as accounting, business, law, and psychology. The team looks at current legislation, its practicality and motivation, and cultural factors by which a company adheres to the rules, policies, and procedures that regulate health and safety in the workplace. The focus of the research is on 'Legal compliance with health and safety in the workplace', underlying problems for non-compliance, and the potential of ethical reporting to be sufficiently motivated to change behaviour.



Project Cross Cuts

Mental Health Academy, Youth Academy, Women's Academy, Brain, Body and Behaviour Academy, Ageing Academy and Race, Culture and Inequality Academy

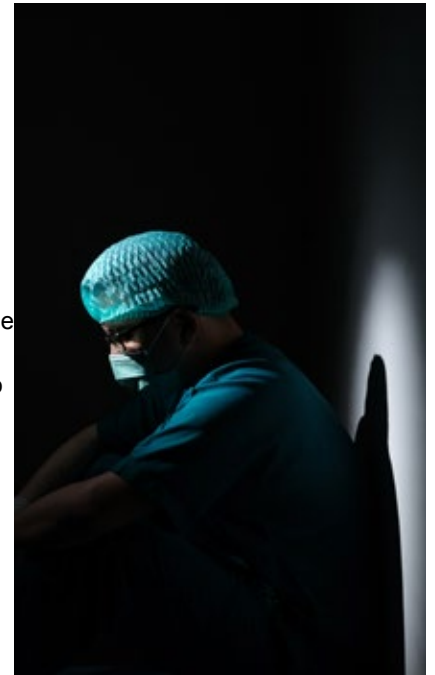


Running towards the bullets”: Moral injury in Critical Care Nursing in the Covid-19 Pandemic

The Covid-19 pandemic has left indelible marks on us all. Psychological and physiological scars that run deep, some that might never heal. For those working on the front line, particularly in healthcare, life has been especially challenging (Maben and Bridges, 2020) with unprecedented strain being placed on healthcare professionals around the globe (WHO, 2020). The particular strain has been placed on intensive care units (ICUs) where the very sickest patients were sedated, intubated, and often ventilated as doctors and nurses fought to wrestle each individual from the grip of a deadly virus with a high mortality rate, no known cure and no known reliable course of treatment (Harris et al, 2021).

This paper by Dr Martyn Griffin (Sheffield University) and Dr Peter Hamilton (Durham University Business School and WRIHW Fellow) explores 110 interviews with 54 critical care nurses across a 12-month period during the pandemic. It does so through the concept of moral injury, described by Williamson et al (2021: 453) as “the strong cognitive and emotional response that can occur following events that violate a person’s moral or ethical code.” They consider four common examples of moral injury experienced by the ICU nurses during these times: i) unsafe staffing levels; ii) lack of support from senior staff; iii) inadequate equipment to provide good care; iv) inability to provide patients with a dignified death.

The paper goes on to consider the implications of repeated moral injury of ICU nurses ranging from experiences of debilitating anxiety to PTSD as well as widespread feelings of anger and guilt leading to an intention to leave the profession. It ends by exploring the ways that organizations have attempted to heal the emotional wounds left by these repeated instances of moral injury but argue that current efforts fall drastically short leaving nurses vulnerable to its lingering effects and the possibility of further damage occurring in the future.



Project Cross Cuts

Mental Health Academy, Brain, Body and Behaviour Academy, Race, Culture and Inequality Academy

Research Workshop on Digital Technologies in Healthcare Delivery

With funding obtained from Durham University’s Global Engagement Grant, Dr. Atanu Chaudhuri, Associate Professor in Operations and Technology Management at the Durham University Business School and a Fellow of Wolfson Institute of Health and Wellbeing organised a two-day workshop titled “Digital Technologies in Healthcare Delivery: Enablers and Policy Implications”, held at the Indian Institute of Technology, Kharagpur on August 27-28, 2022. To promote health-related research, Master and Ph.D. students were invited to participate and engage with academics and industry professionals.

The objective of this research was to identify the value proposition, value creation, value capture, and value provided to users by the healthcare 3DP service providers and to identify the resources and capabilities needed by the healthcare 3DP service providers and the clinical team to co-create value. Interviews are conducted with seven healthcare 3DP service providers, three surgeons, and a healthcare 3DP design expert along with secondary data collected from the service providers to answer the research questions. The results show that healthcare 3DP service providers utilise their exploitative capabilities while the surgeons used both explorative and exploitative capabilities to engage in the co-creation process and to create perceived value for patients. The findings also show that integrated healthcare 3DP service providers by providing knowledge, expertise, insights, and training to the surgical teams are better suited to improve the absorptive capacity of hospitals to adopt 3D Printing than specialised implant developers.

The keynote speaker Dr. Laxmikant Palo, CEO of People-to-People Health Foundation emphasized the need for sustenance of public health programmes beyond pilot projects, the role of digital technology in preventive health, digital upscaling, and the need for follow-up after initial screening. Mr. Sujay Santra, CEO of award-winning of last-mile healthcare delivery company iKure took the participants through iKure’s incredible journey in providing primary healthcare services in rural India through their technology-enabled platform, ably supported by the community healthcare workers.

This was followed by academic presentations and discussions aimed at identifying multi-disciplinary research opportunities in digital healthcare in rural India and exploring opportunities for international collaboration and joint grant proposals.

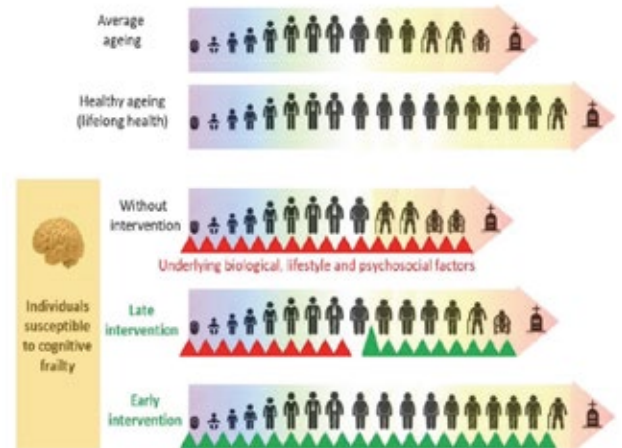
Project Cross Cuts

Race, Culture and Inequality Academy, Brain, Body and Behaviour Academy and Ageing Academy

The Ageing Academy

Ageing healthily is a universal goal but not always achieved. By considering ageing in each of our academies we can identify and effects ways in which people can be healthier for longer across their life course.

Of course, ageing begins from the day we are born and has different profiles across gender, brain health, race, culture, work, activity etc. That is why this truly interrelational cross-cut provides such a fruitful window on how to inform what keeps us well (salutogenesis) in the face of the threat of ill health (pathogenesis).



From Report to Court: Crimes Against Older People

Between 2020-2024 Hannah Bows (CRIVA member) will be working on a project examining criminal justice outcomes and decision making in cases involving victims aged 60 and over, funded by a British Academy Wolfson Fellowship.

Working in partnership with Northumbria Police, Greater Manchester Police and the Crown Prosecution Service, Dr Bows will examine how the criminal justice system (CJS) responds to older victims of crime and the experiences those victims have of the CJS. The findings will influence criminal justice policy and practice and will raise awareness of crimes against older people among the general public through a documentary-style video, media articles, radio documentaries and a short, accessible book.

For further details, see here: <https://www.thebritishacademy.ac.uk/news/british-academy-and-wolfson-foundation-announce-six-new-fellowships-early-career-researchers>

Project Cross Cuts

Mental Health Academy, Pain Academy, Women's Academy, Work Academy, Physical Activity Academy, Brain, Body and Behaviour Academy and Race, Culture and Inequality Academy



Participatory Research

Participatory Research Innovation and Learning Lab

This project, led by the Centre for Social Justice and Community Action, involved a series of workshops during March-June 2022 for Durham University researchers and members of community, voluntary and other organisations. The aim was to enhance learning about participatory research (PR), share experiences, pursue innovative ideas and practices and consider how university systems and procedures might need to change to facilitate PR. A report has been produced outlining the process of the workshops and identifying areas of good practice and recommendations for improved institutional systems at Durham University to support participatory research. A toolkit has also been produced offering guidance about specific innovative methods and approaches developed by participants in the Lab.



Project Cross Cuts

Women's Academy, Youth Academy, Brain, Body and Behaviour Academy, Pain Academy, Work Academy, Mental Health Academy and Race, Culture and Inequality Academy

Community-based participatory research A guide to ethical principles and practice (2nd edition)

Centre for Social Justice and Community Action, Durham University
National Co-ordinating Centre for Public Engagement

November 2022

National Co-ordinating Centre for Public Engagement

Durham University
Centre for Social Justice and Community Action

Ethics in Community-Based Participatory Research

The Centre for Social Justice and Community Action has a particular interest in the ethical issues that arise in research that is community-based and participatory. Ethics relates to doing good and harm; how people are treated; and who benefits from research. In CBPR there may be particular questions about how to share power and resources, and create mutual respect. CSJCA's work on ethics includes a guide to ethical principles and practice, case examples, films, articles and a range of other resources for use by researchers and students based in communities and universities, and anyone interested in planning or evaluating CBPR.

A revised version of the very popular ethical guidelines for community-based participatory research was published in December 2022, along with an Appendix of toolkits and cases.



Our Events in 2022

Changing bodies: how visual media drive body ideals across development and across cultures

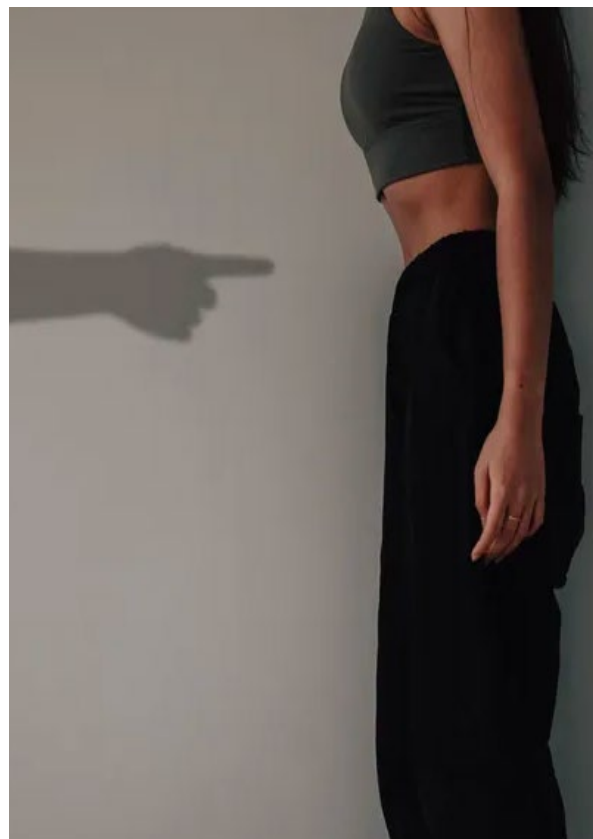
2nd February 2022

Body weight and shape ideals are highly variable across time periods and across cultures, and laboratory research shows that our preferences are flexible. Visual media – both traditional and new social media forms – exert particular influence on conceptions of body attractiveness.

Lynda discussed work examining the influence of visual experience on body preferences, and the downstream impacts on body image, in adults and children, both in the UK and in a population experiencing significant changes in media access and broader globalisation.

Speaker

Lynda Boothroyd is a Professor of Psychology at Durham University. She has spent 20 years researching attraction and more recently focused on body ideals. This involves fieldwork in rural Nicaragua alongside experimental work with children and adults. She takes a multidisciplinary approach to her research, incorporating perspectives from Evolutionary Psychology, Developmental Psychology, Social Psychology and Biological Anthropology, and has incorporated a mixed-methods component in her current work. She is also involved in developing and running body image education programmes.



Predictors of depression among people with long-term conditions

16th February 2022

Depression is common among people with long-term conditions (LTCs), and is linked with worse physical outcomes. However, depression in the context of LTCs is not well understood and standard treatments are not always effective.

In this seminar, Leanne presented findings from her own research in people with coronary heart disease and inflammatory bowel disease as examples, and discussed some potential cognitive, psychological and physiological mechanisms that may contribute to the increased prevalence of depression in people with LTCs (and that could explain how depression relates to worse physical outcomes). She argued that improving our understanding of such mechanisms is important because it could help to identify subgroups of patients at risk of depression and/or worse physical outcomes, identify novel targets for intervention and identify opportunities for providing personalised treatments.

Speaker

Leanne Trick is Assistant Professor (Research) in Psychology at Durham University and is a NIHR North East and North Cumbria Applied Research Collaboration Fellow. Having previously worked as a researcher in phase IV clinical trials and in the field of alcohol addiction, Leanne completed her PhD in psychological medicine at the University of Exeter in 2017. She was subsequently a postdoctoral Research Fellow at the Centre for Addiction and Mental Health in Toronto, before moving to Durham in 2020. Leanne's research interests are in mental health and wellbeing, with a particular focus on special populations, and include factors that influence the development and maintenance of depression and anxiety in people with chronic physical illnesses, and the impact of mental health comorbidities on health and treatment outcomes.



Our Events in 2022 cont.

Electronic Tools for the Assessment and Rehabilitation of Post-Stroke Visual Impairments

6th April 2022

Stroke is a prevalent and disabling neurological condition, and visual perceptual impairments including partial loss of the visual field, or difficulties recognising objects or faces, and are a relatively common consequence.

Such impairments can have a significant negative effect on the stroke survivor's ability to perform everyday tasks like driving, reading, and interacting with their environment and other people. Subsequent reduced independence has further impacts on emotional and social functioning. With improving stroke survivor rates, an increasing number of people are living with the long-term consequences of such visual perceptual impairments. Screening tools are often time-consuming meaning that these sorts of impairments can be frequently over-looked, and there is little

consistency in the delivery of rehabilitation. With an increase in the availability of digital and portable devices, electronic tools have been identified as a credible future direction in health and social care. In this talk Dr Kathleen Vancleef discussed the development of a novel assessment app that could allow more rapid, reliable detection of visual perception impairments in stroke survivors, and Dr Alison Lane discussed the use of accessible and cost-effective e-therapies.

Speakers

Dr Alison Lane is the lead for the Durham WRIHW Brain, Body and Behaviour Academy group. She is an Associate Professor in the Psychology Department, and developer of the Durham Reading and Exploration (DREX) training app for people with partial visual field defects.

Dr Kathleen Vancleef is an NIHR Fellow and Assistant Professor in the Psychology Department. She specialises in the accurate measurement of visual perception, and has developed the Oxford Visual Perception Screen (OxVPS) which is a quick screening tool for visual perception deficits after stroke.



“Running towards the bullets”: Moral injury in Critical Care Nursing in the Covid-19 Pandemic

8th June 2022

The Covid-19 pandemic has left indelible marks on us all. Psychological and physiological scars that run deep, some that might never heal. For those working on the front line, particularly in healthcare, life has been especially challenging (Maben and Bridges, 2020) with unprecedented strain being placed on healthcare professionals around the globe (WHO, 2020).

Particular strain has been placed on intensive care units (ICUs) where the very sickest patients were sedated, intubated and often ventilated as doctors and nurses fought to wrestle each individual from the grip of a deadly virus with a high mortality rate, no known cure and no known reliable course of treatment (Harris et al, 2021). This lecture considered four common examples of moral injury experienced by the ICU nurses during these times: i) unsafe staffing levels; ii) lack of support from senior staff; iii) inadequate equipment to provide good care; iv) inability to provide patients with a dignified death. It considered the implications of repeated moral injury of ICU nurses ranging from experiences of debilitating anxiety to PTSD as well as widespread feelings of anger and guilt leading to an intention to leave the profession. It ended by exploring the ways that organizations have attempted to heal the emotional wounds left by these repeated instances of moral injury but argued that current efforts fall drastically short leaving nurses vulnerable to its lingering effects and the possibility of further damage occurring in the future.

Speakers

Dr Martyn Griffin is a Senior Lecturer in Organization Studies at Sheffield University Management School. He was previously at the University of Durham and the University of Leeds. His research focuses on democratic organizations, power and freedom in organizations and cultural perspectives and influences on how we understand organizations.

Dr Peter Hamilton is Associate Professor in Human Resource Management at Durham University, UK. His main research interests are on discourse and rhetoric within the processes and practices of employment relations and human resource management. Has also conducted research on equality and diversity, and dignity at work.



Our Events in 2022 cont.

The Fifth Annual Early Career Researcher (ECR) Conference

21st June 2022

The WRIHW Fifth Annual ECR Conference was held online for the first time. It was a great success and we attracted submissions from across research disciplines and stages.

We were honoured having Professor Jane Macnaughton, Deputy Pro-Vice-Chancellor (Research), delivering a keynote on research culture and interdisciplinarity, which are in the DNA of WRIHW and our ECR committee. The conference started with three full presentation sessions where participants presented on a wide array of health-related research projects, from palliative care to movement behaviours of pre-school children, and foetal and infant behaviours. Participants continued the discussions on their presented work and received constructive feedback colleagues in the Q&A sessions.

Beyza Nur Ustun's presentation on the effects of mothers' food intake during pregnancy on foetal and infant behaviours and **Alice Grace Pearson's** flash talk on the impact of milk protein ingestion on resistance exercise-induced muscle damage won the best presentation awards in their categories respectively. Excellent work and many congratulations! This was our first time holding our ECR conference virtually and we had taken the liberty of sending out wellbeing boxes to participants to be enjoyed on the day, credit to the hard work of our ECR committee. This was definitely an additional highlight of the conference and WE ALL LOVED IT!

We aim to increase the visibility of ECRs within the WRIHW and to the wider audiences as well as to offer them the opportunities to develop their research career. The annual ECR conference is when we bring together our ECRs to showcase the wide range of health and wellbeing research and promote interdisciplinarity amongst ECRs at Durham University.



The En'Light'en Project

12th October 2022

Illness and incapacity confine us. As patients we spend our time in constructed spaces. Once, taken-for-granted experiences become memories: the sound of the sea and the feeling of a salty sea breeze; the smell of freshly cut grass and sound of wind in the trees; light reflected on water; a spectacular sunrise; the view from the top of a hill; etc. As an inpatient, the opportunity to experience landscape and nature is limited and the ability to take oneself out of the clinic, hospice or hospital environment is often fraught with difficulties - hampered by practicalities and need for medical care.

Environment has a direct impact on how we feel. Research has demonstrated clear links between the visual landscape, patient recovery and general wellbeing. A view on to nature is known to have positive effects, reducing length of stay for hospital patients. For many, however, due to the design of hospital buildings, this is not an option.

The En'Light'en Project explored how such spaces impact well-being and recovery and how they may be changed to positive effect. Set up in 2013 by Dr Paul Chazot FBPhS, himself an intensive care survivor and Dr Laura Johnston, professional artist, researcher and ICU carer, their work is driven by the belief that hospital design should aim to create a restorative environment with the importance of beauty, air quality and connection to natural systems as paramount.

Speakers

Dr Paul Chazot is the Director of the Durham WRIHW Pain Academy. He is an Associate Professor of Pharmacology and Fellow of British Pharmacological Society.

Dr Laura Johnston is Creative director of Healing Spaces North East CIC, Laura Johnston Studios and a Postdoctoral Research Fellow, Wolfson Research Institute of Health and Wellbeing



Unmasking Pain - Taking your shoes for a walk

27th October 2022

Beginning with a 15-minute slide show and informal talk, the walk was an opportunity to learn more about the Unmasking Pain research project, bringing a human face to the extraordinary academic studies that are taking place. The walk took attendees through the beautiful landscape of the Botanic garden, animated with surprising moments along the way from sculptures and storytelling to pop-up performances. Traditional Indian Kathak dancers depicted elements of nature like flowers, water, rain, sky, bees, inspiring a deeper connection with nature. Music and rhythm drifted through the scenery from musicians inspired by their surroundings.

Unmasking Pain is a creative collaboration between artists, people living with on-going pain and pain management specialists to explore the shared challenges of living with pain. It seeks to find a voice for those living with pain through artistic collaboration, the artist and the artform and trial different creative approaches to support those living with pain to gain a sense of identity beyond their all-encompassing pain. Unmasking Pain is supporting the arts and health sectors to take a shared approach to exploring the relationship between participating in the creative process and living well with pain.

Facilitators

Paul Chazot, Associate Professor at Department of Biosciences, Durham University

Balbir Singh, Artistic Director of Balbir Singh Dance Company



Understanding and addressing procrastination: Implications for health and well-being

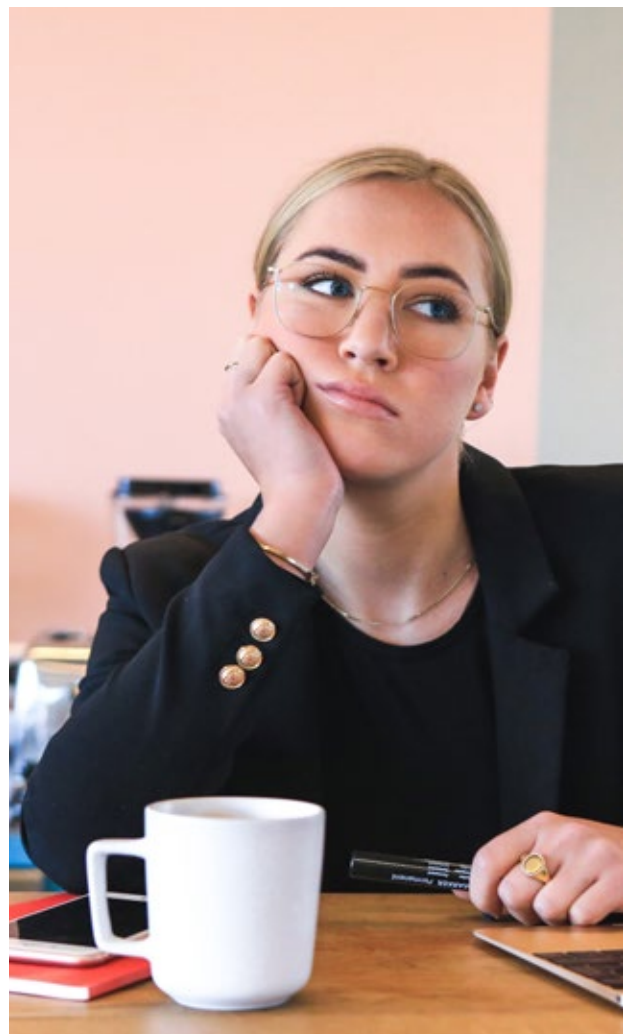
16th November 2022

Procrastination is a prevalent and pernicious problem that can undermine productivity as well as erode health and well-being.

This is especially the case when avoiding unpleasant tasks becomes a habit. The first part of this talk presented evidence that highlights procrastination as harmful form of delay that confers risk and vulnerability for health-related outcomes, including mental health, health behaviours, sleep, stress and coping, and even chronic disease. The second part of the talk then focused on the science behind why people procrastinate using evidence from observational, longitudinal, experimental, and brain imaging studies, which support a central role for emotions in procrastination. The talk concluded with a discussion of potentially fruitful areas of investigation to further understand the role of emotions in procrastination, and for developing novel ways of reducing procrastination and its toll on health and well-being.

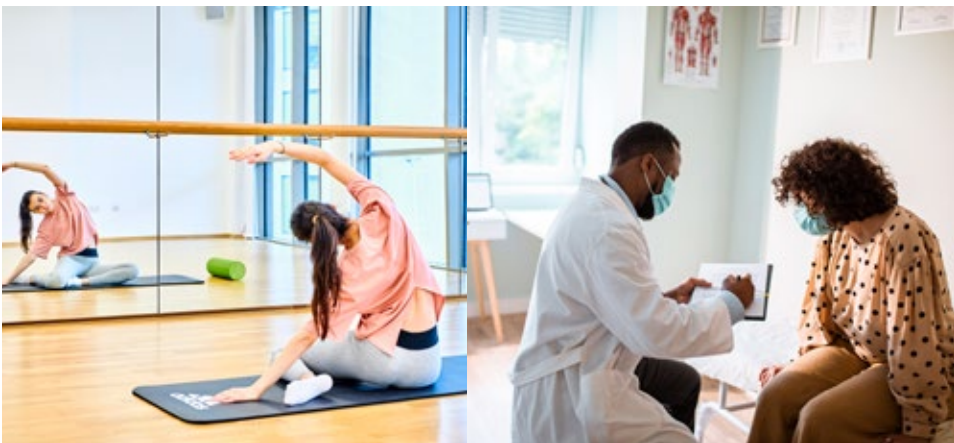
Speaker

Professor Fuschia Sirois is a social/health/personality psychologist interested in the factors that create risk or resilience for health and well-being. She has a particular interest in the how self-regulation (how we manage and direct our thoughts, emotions, and behaviours to reach our goals) can impact health and well-being and the factors and qualities that contour people's capacities to self-regulate. She is passionate about communicating the results of psychological science with the public so that research is accessible and impactful beyond academia. To this end, she regularly engages with the public, media, and journalists about research on health and well-being.



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