

Images of Research 2020

Flair, Ambition, and Enthusiasm



Research and
Knowledge Exchange



Becky Alexis-Martin

Early Career Researcher
Faculty of Science and Engineering

Laughing in the Face of Death

I took this photo on Kiritimati during my Pacific fieldwork for Atomic Atolls. This project explores the cultural consequences of the nuclear-climate change nexus, through the entangled lives of British nuclear test veterans, and the places and communities where they worked during the Cold War.

On this occasion, I had accompanied a group of octogenarian nuclear test veterans, as they travelled halfway across the world from the UK to “Christmas Island”. Their aim was to commemorate the sixtieth anniversary of their participation in Operation Grapple, Britain’s largest H-bomb tests in 1958.

Both local people and soldiers have experienced long-term health impacts from these tests. Here a group of Kiritimati Island elders threw their heads back and laughed, when a veteran showed them his Grapple album. While British nuclear weapons are no longer tested here, this low-lying small island state must now contend with the consequences of climate change.



Charlotte Arculus

Postgraduate Researcher
Faculty of Education

Illuminating Arts Practices in Early Childhood with More-Than-Human Technologies

The image is from an immersive environment for two-year-olds. This was part of my doctoral project, *More Than Words*, which aims to reconceptualise understandings of young children's communication through improvisational arts practices. Using music and dance with materials such as silk, string, and light, children, parents, artists and educators adopted a practice of stripping back talk in order to tune into the multiplicitous encounters and communications that are going on between children and the world.

My immersive environments offer multiple, varied and open-ended ways to engage. Many things are happening simultaneously yet related through the affects, textures, sonics, bodies and movements of the space.

I used a 360° video camera to create audio/visual data. This more-than-human technology observes in ways radically different to 'framed' video. It makes tangible young children's entangled knowledge through relation and movement in ways that are not perceptible to the adult gaze or traditional video technology.



Carlos Bedson

Postgraduate Researcher
Faculty of Science and Engineering

Britain's Unspoken Wildlife Tragedy

Between Manchester and Sheffield reside small declining populations of mountain hares and brown hares. Society reveres these animals for their value to ecosystems, their beauty and cultural heritage. Yet annually more than 200 hares are killed by motorists upon the local road networks. On a two mile stretch of the A57 Snake Pass alone, more than 100 mountain hares die.

My research statistically models these hare populations. Findings show the roads kill more than 10% of the mountain and brown hares every year. The persistence of these populations is threatened.

Meanwhile people consider roadkill an unfortunate and acceptable consequence of travel. Drivers causing accidents and death are, of course, forgiven. Government highways departments have limited definitions of what constitutes "acceptable" levels of roadkill. Mitigation strategies are quietly avoided.

Embarrassed, society tries not to notice the animal conservation and welfare dilemma. People look away from the horror. Will you?



Rebecca Clarke

Postgraduate Researcher
Faculty of Science and Engineering

The Long Trail Ahead in Stroke Recovery

Stroke is a debilitating condition, it affects how we walk, how we move, how we think and speak. Despite stroke primarily affecting the older population, 26% of adults in the United Kingdom are under the age of 65.

Most young adults who have had a stroke are unable to complete activities of daily living, return to work, participate in social activities or outdoor activity, leading to increased time indoors, lack of independence, social isolation, and depression.

This pioneering research project seeks to develop a new form of stroke rehabilitation, using the positive impact natural outdoor environments have on health and wellbeing. For my PhD project which is match-funded by the Brecon Beacons National Park Wales (and the setting for the photograph), I have organised an outdoor-walking rehabilitation programme for young adults who have had a stroke. My PhD will determine if this programme can improve walking performance and mental wellbeing.



Su Corcoran

Early Career Researcher
Faculty of Education

Exploring Displaced Young People's Belonging and Learning Experiences Through Art

Young artists, displaced by conflict in countries neighbouring Uganda and living as refugees in Kampala, take part in a workshop that explored their experiences of education and provided opportunities to learn new techniques for use within their own art. The artists were experimenting with watercolours and charcoal to visualise their dreams for the future.

The image was taken at the second of three workshops conducted in Kenya (dance), Uganda (visual art) and the Democratic Republic of Congo (poetry and drama) as part of the GCRF/AHRC-funded Belonging and Learning network project. The project aimed to explore the role of arts-based methods in encouraging communication between young people and education-based policy makers. Street-connected young people or refugees were invited to the workshops to create art with, or as part of messages to communicate to, local officials in these countries.



Emily Crompton

Early Career Researcher

Faculty of Arts and Humanities

Documenting Demolition: A Community Evidencing Project at Manchester's LGBT+ Centre

Manchester's LGBT+ Centre is the only dedicated and purpose-built centre for the LGBT Community in the UK. It was built in 1988 after fierce campaigning by activists and volunteers and has served the LGBT+ Community for the last 32 years.

Six years ago, I researched the history of the centre and completed a feasibility study on options for the building for The Proud Trust. Through an engaged design process, proposals were drawn up to demolish and re-build the centre. When the new building opens in 2021, it will more than double the activity space and ensure that the centre is fit for the next 30+ years working with and campaigning for the LGBT+ community.

The main aim of the 'Documenting Demolition' project is to ensure accurate and detailed recording of the demolition and construction process to validate the necessity of community spaces such as these in our modern cities.



Sarah Fox

Early Career Researcher
Faculty of Arts and Humanities

Trust Women

Trust Women, the central argument of the Repeal campaign during the abortion referendum in Ireland in 2018, and a concept that was the foundation of my PhD research during the same time.

My thesis explored the lived experiences of substance use and domestic abuse among women, which is, at its core, about trust. This research was about having a belief in women's stories and fully listening to their words. It was about losing trust in systems that were designed to support women. And it was about asking women to have trust in me as a researcher to represent their experiences.

Feminist movements have shown us that trusting women can create change for women. This was the guiding principle of my PhD journey, and continues to be the theme that guides my career as I explore the lived experiences of substance use among women who trust me to share their story.



Jamila Makarfi

Postgraduate Researcher
Faculty of Business and Law

Corporate Security Responsibility

Over the last decade, North-east Nigeria has been under severe insurgency attacks from the 'Boko Haram' terrorists. The conflict has left over 2.3 million people displaced and thousands killed. The severe conditions necessitated the government and several international organisations to provide assistance to those affected. The lucky ones are placed in camps, where they rely on handouts from philanthropists, businesses and organisations involved in victim support.

This image was taken on 17 March 2017 after a camp housing over 6000 people was razed by fire. This happened less than 100 miles from where 276 schoolgirls were kidnapped 3 years earlier in Chibok.

My PhD research seeks to understand the positive roles that businesses play in contributing to conflict prevention and peace promotion within the conflict region, hence the title. Can the development achieved through the corporate social responsibility of businesses help to sustain peace in the region?



David Tomlinson

Early Career Researcher
Faculty of Science and Engineering

Defining Obesity: BMI or Body Fat Percentage?

“What classification method would best demonstrate the deleterious effects of obesity on skeletal muscle?” This was the final question from my external examiner during my PhD viva and the answer is pertinent in today’s society, with globally ~2.1 billion people being categorised obese.

Before answering this question, it is important to highlight differences in the measurement techniques: one is a relative measure of your overall mass (BMI) and the other is a percentage of your total fat content. The image demonstrates how these contrasting methods can reclassify a normal weight individual into an obese classification, which can have significant implications. My research highlighted this and revealed the answer, as a high body fat percentage in comparison to BMI was associated with decreased relative strength, lower maximal muscle activation and accelerating muscle loss during ageing. These findings indicate the importance of both fat loss and muscle gain irrespective of overall mass/BMI increases.



Alejandra Zamora

Postgraduate Researcher
Faculty of Science and Engineering

Fighting Extinction

The black-eye tree frog, *Agalychnis moreletii*, is a stunning species that inhabits forests of Guatemala, Mexico, Belize, El Salvador and Honduras. They are endangered due to habitat destruction, pollution, pet trade, and diseases. Unfortunately, this species remains understudied and underappreciated due to the fact its most closely related cousin, the red eyed tree frog, garners most of the attention and research money. Officially, this species ranges from central Mexico to Honduras although our research indicates this species may be cryptic, meaning it could actually be several highly endangered subspecies. We are currently doing the genetics to see if this is indeed the case. This would change the outlook dramatically for this species considering it was controversially downgraded from Critically Endangered to Least Concern in 2016.

Images of Research 2020

A research communication competition brought to you by the Research and Knowledge Exchange Directorate.

Postgraduate and early career researchers were challenged to submit a photograph and accompanying abstract which communicate the impact of their research to a non-specialist audience with flair, ambition and enthusiasm.

This is the second year the competition has been held and a large number of high-quality submissions were received. Displayed here are the top ten submissions: five each from postgraduate and early career researchers.

The aims of this competition are to support development of research communication skills and to showcase the diversity and importance of topics covered by the University's emerging researchers.

A prize is available for the entry which receives the most votes from visitors to the exhibition and our online gallery. Please cast your vote using the voting cards or via the competition website:

bit.ly/ManMetImages