Research Images 2018
Introduction from Dr John Rogers, Director of Research and Innovation Services

I am delighted to welcome you to our Research Images 2018 exhibition. Featuring the nine shortlisted images from our inaugural Research Images competition, the exhibition forms part of the University of Stirling’s Research Week, a week long programme showcasing research at Stirling and facilitating interdisciplinary collaboration.

We were delighted to receive entries from all parts of our research community from Postgraduate Researcher to Professor across each of our three University research themes: Global Security and Resilience; Cultures, Communities and Society; and Living Well. The shortlisted images tell the story of research at Stirling powerfully and demonstrate the importance of the University’s research to contemporary, global society.

I would like to thank our shortlisting panel, which consisted of: Professor Judith Phillips, Deputy Principal (Research); Ms Jane Cameron, Art Curator, University of Stirling and Professor Richard Johnston, Swansea University. The images they shortlisted went out for public vote. We were overwhelmed by the response they generated with over 6,000 votes cast. The top three images will receive funds to further their research.

I would also like to take this opportunity to thank the Stirling Fund for their sponsorship of the competition and exhibition. I hope you enjoy the exhibition and exploring the research stories behind each of the images.

Best wishes,

Dr John Rogers
Director Research and Innovation Services
This photo illuminates thoughts of the essence of rural nursing, the invisible kinship to land, the challenges of isolation, and the intricate patterns of rural culture in the Western Isles of Scotland. There is a paucity of rural nursing research undertaken in the UK so this research will use life history interviews to gain a rich and deeper understanding of the interplay between people, profession and place.
Negotiating the authenticity of replicas

Dr Sally Foster
Lecturer in Heritage and Conservation
Faculty of Arts and Humanities

Returning to its chicks, this soaring swallow captures my own, very special moment with the St John's Cross replica, the sentinel to St Columba's Shrine. Our ethnographic challenge was teasing out the ‘gaze’ of others - the Iona residents, visitors and heritage professionals we interviewed and observed. Iona proved a wonderful arena for exploring authenticity. George MacLeod described it as a ‘thin’ place, but it is ‘thick’ with layers of meaning.

Who’s watching?

Ellie Hopkins
PhD Candidate
Faculty of Arts and Humanities

From the Aberfan Disaster, to “The Unbearable Sadness of the Welsh Valleys” (BBC, 2013) the post-industrial landscape of South Wales is often scrutinised under a harsh, gritty, and arguably not altogether fair lens. The presence of that lens however, is escalating – South Wales now enjoys a bi-annual Photography Festival, gallery and photographic facility hub, and world-leading Documentary Photography degree course at USW pioneered by Magnum photographer David Hurn. What then, does the proliferation of home-grown photographic arts mean for the cultural memory of modern South Wales?
Forest fires are becoming more frequent, more intense and covering bigger areas as our climate warms. This image shows the legacy of a massive forest fire in New Mexico, USA, with a burn so extensive and severe that soils were sterilised and no seed sources remain to regrow the burned forest. Only some small plants are regenerating – with serious impacts for water quality, biodiversity and uptake of carbon dioxide from the atmosphere.
Despite growing international concern, tropical rainforests continue to be logged at a pace exceeding 32,000 hectares (80,000 acres) per day. We know it takes a long time for rainforests to regenerate, but how long exactly? I am looking at the way in which tropical rainforests recover when some of the most valuable trees are logged for timber. By looking at the plant communities of forests up to thirty years after they have been logged, I hope to discover how sustainable this method of harvesting can be and whether there will be permanent impacts on the types of species present.

The foal had fallen into a well in Chernobyl and we were lucky to find it when catching bumblebees for my research on a nearby farm. Przewalski’s horses are one of Europe’s rarest mammals and were reintroduced to the Chernobyl Exclusion Zone (CEZ). Some areas of Chernobyl have high radiation levels but also high biodiversity due to the lack of people. My research looks at the ecological consequences of radiation to wildlife.
Brain research opening the doors on the risks of football heading

Tom Di Virgilio,
Lecturer
Faculty of Health Sciences and Sport
Photo taken by: George Vekic; Communications, Media and Recruitment

We were the first to show direct evidence for short-term sub-concussive changes in the brain following sports-related head impact (Di Virgilio et al. 2016). We found higher levels of inhibition in the brain after heading the ball. This is an important discovery amidst growing concern that even routine head impact in sport may lead to long-term problems in brain health such as dementia. Here I am with Alan Shearer acting as the 20th participant, undergoing brain stimulation before and after heading the ball.
"...I'm a young carer for my dad and little brother...I like it when we go for walks...but it's not always easy for us..." Walking has many health benefits and is an easy and effective way to remain physically active for the general population. However, family caregivers of all ages face a range of barriers which prevent them from engaging in any regular physical activity; our research uses behaviour change theory to identify and address these barriers.

People with fears of cancer recurring is not a visible consequence of cancer but impacts on recovery and how they live their lives. An intervention (Mini-AFTERc) has been developed that targets fears of cancer recurrence and seeks to normalise the presence of these fears. Embedding a new intervention successfully into practice requires careful planning and therefore the views of Specialist breast cancer Nurses was sought at the pre-trial stage.
In our inaugural year of Research Images we were delighted to receive so many well thought through and impactful images. As well as our nine shortlisted images, here are some of the others we received.

**Ross Dolan**  
Agit-Prop Ageing and Living

**Martin Quirke**  
Memorable spaces

**Aileen Ireland**  
Walking and talking research

**Claire Squires**  
Bookfestivalopoly

**Sarah Zipp**  
Sport as Art in Barbados

**Michael and Hannah Connolly**  
A monument for the Irish diaspora in Scotland

**Amaya Albalat**  
Discarded Nephrops and the Landing
The Research Images team would like to express our thanks to the University of Stirling Fund, without whose support this competition could not have taken place.

Maggie Cusack and Peter Chung
Crystals of the prisms of a pearl oyster shell

Sian Lucas
Sweet Explosion