Images of Research

Adapting to advance

University of Strathclyde Glasgow

Welcome

I am delighted to welcome you to **Images of Research 2022: Adapting to advance**.

In a world that seems uncertain, and that is witnessing rapid changes in response to the unprecedented challenges of recent times, I hope that the focus and outcomes of our global research endeavours serve as a beacon of hope.

This year's exhibition highlights just some of the innovative work being carried out across the University's four Faculties that aims to make a difference and have positive impacts for society. We invite you to join us in a celebration of the research that strives to enable the world to adapt and advance in the face of adversity, accelerating the transition to a more agile and sustainable way of living and working.

The competition categories draw inspiration from the University's Strategic Themes – our areas of strength which underpin the research, demonstrating not only the great diversity of our work but also its relevance on a local, national and international scale.

The Images of Research exhibition forms part of our annual Engage with Strathclyde Programme – a celebration of the University's partnership with the public, private and third sectors. Taking place over the first two weeks of May, we are pleased to be able to host the exhibition in our Technology and Innovation Centre once again, as the collection of images embarks on its year-long tour of venues across Scotland and beyond.

I hope these compelling images illustrate the breadth and quality of research taking place at the University of Strathclyde, and encourage you to engage further with us.

Best wishes,

Professor Sir Jim McDonald
Principal and Vice-Chancellor

Contents

Images of Research 2022

Images of Research is an annual competition for staff and students, showcasing Strathclyde's innovative work through compelling images. The images form a print exhibition which embarks on a roadshow across venues in Scotland and beyond (details to be announced as they become available). This year's collection, as well as previous years, is also available to view on the competition website.

The 36 shortlisted entries – comprising an image and short story – illustrate the big societal issues being tackled by researchers across our four faculties – Engineering, Science, Humanities and Social Sciences, and the Strathclyde Business School.

Some entries also have an accompanying digital story – a two minute video which provides further insight to the research behind the image. Visit our YouTube channel to see all the digital stories, past and present:
https://www.youtube.com/channel/UCWUE9ksVXjDuKZnU6UbdIXw/videos

The competition and exhibition is sponsored by Engage with Strathclyde.

For more information and to view all of the competition entries in the online gallery please visit:
www.imagesofresearch.strath.ac.uk

Meet the Judges

Tim Bedford

Professor Tim Bedford is Associate Principal of the University, leading the Research and Innovation portfolio in the University Executive Team. This includes developing collaboration with industrial and societal partners, our relationships with UKRI and other government research and innovation funders, and international research, as well as working with Glasgow and Government agencies to develop the Glasgow City Innovation District and the Advanced Manufacturing Innovation District Scotland.

He is a member of the Board of Directors of CESAER, the European Association of Universities of Science and Technology, and co-chairs its Taskforce Innovation. He was recently appointed the Chair of the UUKi International Research Development Network.

Professor Bedford is a researcher in Risk Analysis and Decision Making, and a Fellow of the Royal Society of Edinburgh.

Ben Johnson

Ben is Executive Head of Strategic Research and Innovation Development at the University. His role is to develop and grow the University's contribution to key national policy agendas. Before this, Ben was the policy adviser to three UK ministers for science, research and innovation, playing a key role in shaping the UK's research and development policy landscape. Ben has spent over a decade working in government university and research funding, with a particular focus on infrastructure, research culture, and place-based innovation.

Gillian Docherty

Gillian is Chief Commercial Officer at the University, with responsibility for Innovation & Industry Engagement, Research & Knowledge Exchange Services, Campus Support and Marketing & Development. As a member of the Executive Team, she works across the institution to drive forward the University's sector-leading activities with industry and support Scotland and the UK's economic recovery from the global pandemic.

Prior to joining the University in 2022, Gillian was the Chief Executive of The Data Lab, Scotland's innovation centre for Data Science and Artificial Intelligence, with a mission to help Scotland maximise value from data and lead the world to a data-powered future.

Meet the Judges

Beth Lawton

Beth is our Chief Digital and Information Officer (CDIO). She provides digital leadership for the University and leads the University's Information Services and Continuous Improvement Directorates.

Beth has delivered technology and digital transformation in a range of public sector organisations, including the NHS, Big Lottery Fund and the Royal Households.

In 2007, Beth was appointed a Member of the Royal Victorian Order (MVO) in recognition of her transformational work within the Royal Households.

Michael Kelly

Michael is a team leader at our competition sponsors, Jessops. With a background in filmmaking and photography, he has a specific interest in fine art portraiture and street photography. At Jessops he plays a part in their educational branch, which involves teaching photography to a wide range of participants. He also works as a freelance photographer.

Connected world

Female entrepreneurship: bridging the digital divide?

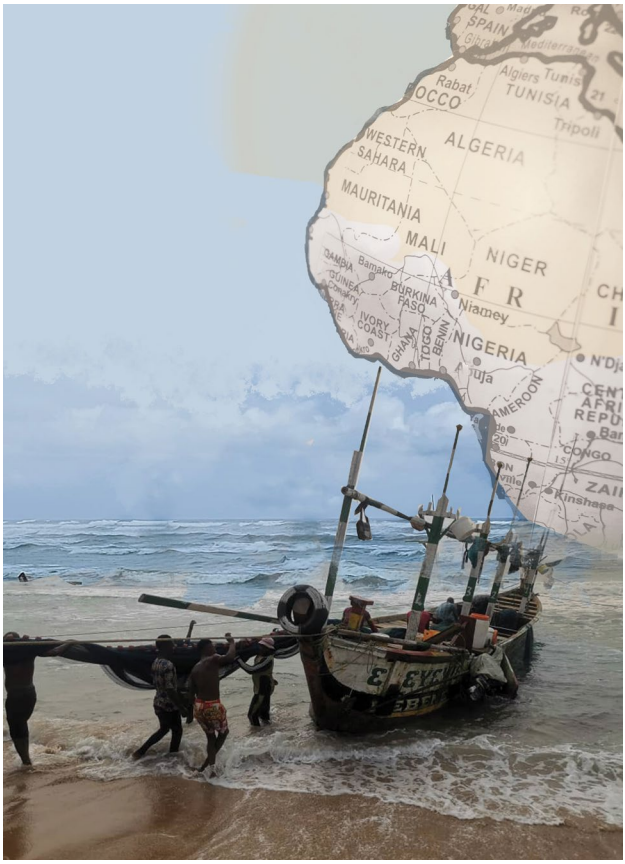
Whilst some progress has been made to level the playing field for persons in business, many constraints still exist, particularly to female entrepreneurs. This research aims to gain deeper insight into how tools provided by digital technologies – despite the digital gender divide caused by inherent biases – offer new and impactful opportunities to alleviate existing constraints among female entrepreneurs, with special focus on developing countries such as Latin America and the Caribbean.

Entrant: Beverly Best

Addressing major challenges to minor safety

Children have become daily users of the internet, however, safeguarding controls to prevent them from being exposed to adult content are still vastly under par. Current online age verification technologies range from ineffective to being highly invasive to privacy; they can also prove costly for websites to implement. We are working to develop an effective, privacy-preserving and affordable online age verification solution to protect children online.

Entrant: Chelsea Jarvie



Amplifying small-scale fishers' voices

Over-exploitation, pollution and rising sea temperatures cause fish stock to decline putting coastal communities at risk; and with limited access to resources and decision-making processes, small-scale fishers are often unable to properly voice their concerns. During the pandemic, the Strathclyde-led One Ocean Hub facilitated small-scale fishers' participation in regional and international online workshops, and continues to advocate recognition of customary laws and implementation of international human rights law to advance communities' wellbeing.

Entrant: Elisa Morgera (map/boat)

Breaking down barriers to inclusion

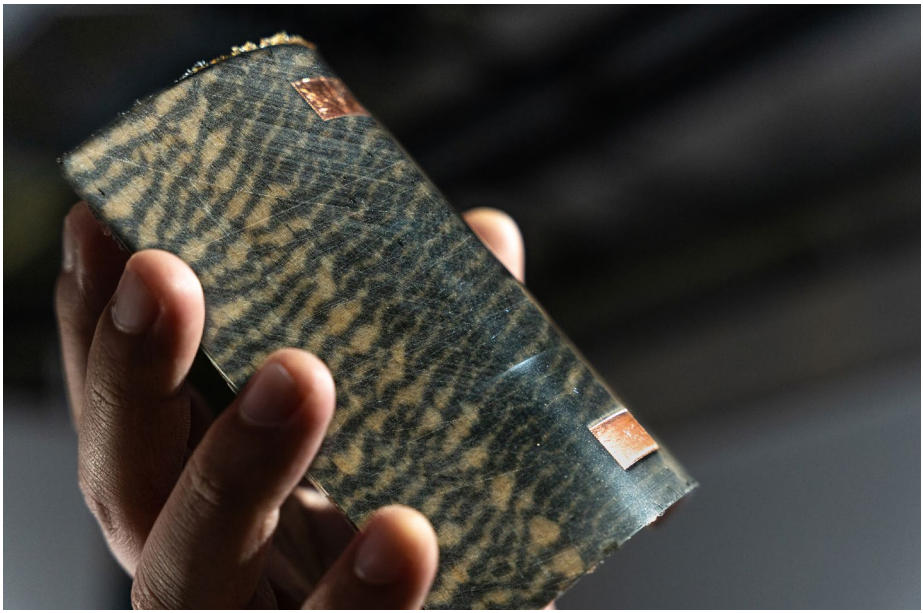
This image symbolises the struggle of those with disabilities feeling trapped in a society that doesn't fully accept them. With the highest prevalence of albinism in the world (40%), our research is focussing on Malawian youngsters with the condition. Through exploration of how they negotiate and cope with exclusion within their families, communities and systems, we aim to ensure greater inclusion for all within society by critically challenging existing disability policies and practice.

Entrant: Elita Chamdimba

Raising Gaelic voices

With spoken Gaelic progressively in decline, we are exploring methods to increase its use. Based on our research, we have created a social space (the Taigh Ceilidh) to encourage users to speak Gaelic (as our findings show that people are more inclined to use the language when others do), make new connections with other Gaelic speakers and contribute their voices to the Gaelic social linguistic soundscape of the wider community.

Entrant: Ingeborg Birnie



Structural fingerprinting for live monitoring

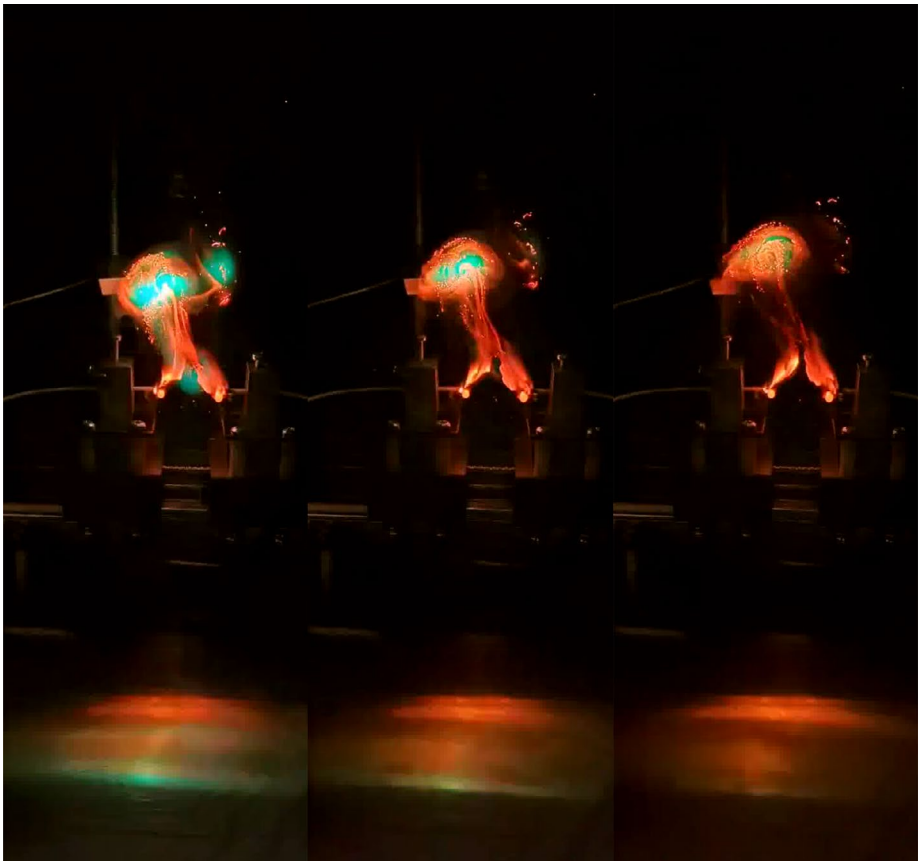
Inspection and maintenance of large man-made structures, such as wind turbines, can be a risky business for engineers. Following creation of a novel composite material (Chromatic carbon), that is anti-corrosive and highly conductive, we have developed this hybrid sensor strip that will evolve over time with any structure it is applied to. Enabling remote scanning, the developing fingerprint will provide live information about the current health and performance of each turbine blade.

Entrant: Sheik Abdul Malik

Big brother is watching

A data rig, moored at Crammond Island off the coast of Edinburgh, looms over an unsuspecting tourist. Beneath the towers, huge underwater tanks house passively-cooled, deep-sea data servers. In response to the development of ever more intrusive technologies and surveillance, this research is exploring an alternative future, where data is stored using sustainable technologies, internet activity is secure and anonymous, and the infrastructure of the internet is transparent and accessible.

Entrant: Tiia Partanen



Towards sustainable and safe aviation

Electric arc faults (high-power discharge of electricity between conductors) can develop in any electrical system. Generating heat, these faults can trigger dangerous electrical fires. In our quest to develop greener transport, we are studying the occurrence of these faults in direct current (DC) systems, aiming to assist industry in the safer development of aircraft electrification and robust protection technologies.

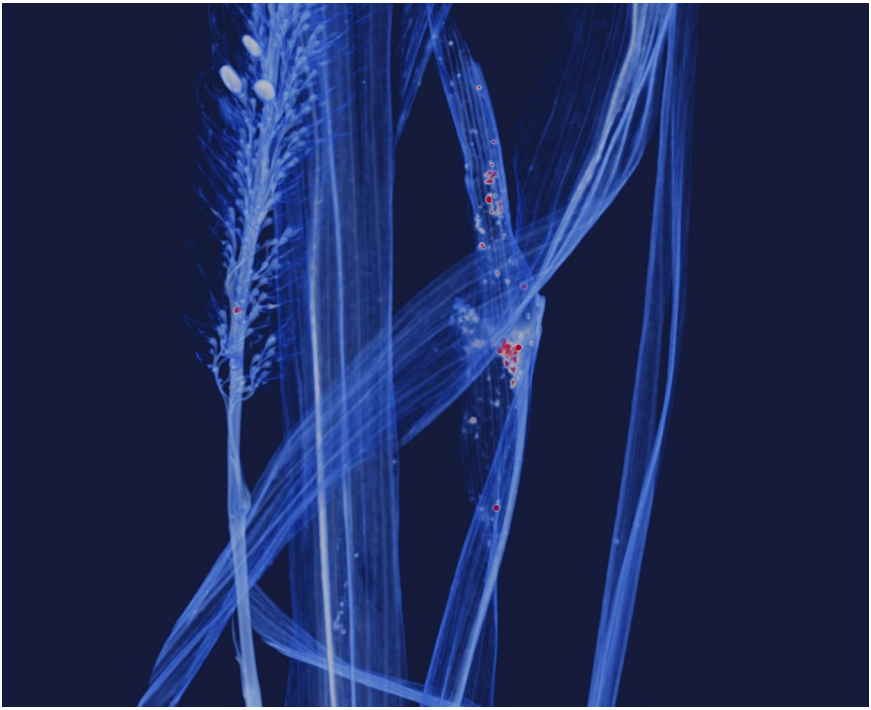
Entrant: Yljon Seferi

Redressing the balance: small-scale fisheries

“They are more concerned on [sic] exporting our resources out of the country, but we can’t make life for our own people here.” A worried Namibian fisherwoman describes the issues facing the small-fisheries sector. The Strathclyde-led One Ocean Hub is leading efforts to engage local communities in blue economy, education initiatives and capacity-building opportunities, aiming to redress structural inequalities and ongoing injustices related to ocean governance, whilst fostering sustainability, in Southern Africa.

Entrant: Elisa Morgera (women/coastline)

Green recovery



Blooming biomass: cultivating contaminated land

Biofuels are an increasingly popular alternative to fossil fuels, however, growth of plant-based biomass takes valuable land away from food production. Our research is exploring the potential to grow bioenergy crops, such as reed canary grass, on contaminated land. Using X-ray computed tomography, we are examining whether the contamination is simply dust on the plant or has been absorbed into the plant material from the land, aiming to inform pre-treatment options.

Entrant: Benjamin Nunn

Untapped streams of energy

With the ever-pressing need to move away from fossil fuels, our reliance on renewables will greatly increase too. Hydropower was the first form of renewable energy but has been largely forgotten in the current energy mix of the UK. Our research aims to examine the full hydropower picture in the UK, determining how hydropower and tidal energy resources can be developed and sustainably exploited to meet future renewable energy demands.

Entrant: Claire Kennedy

Unearthing the power beneath your feet

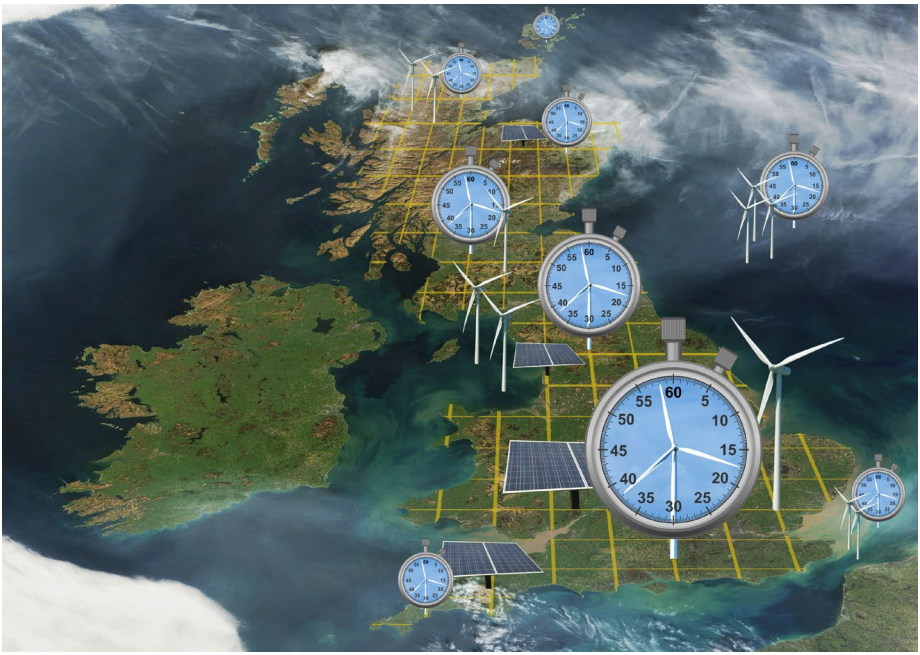
Could the discarded remnants of fossil fuel excavation now provide the answer to clean energy? Here, researchers are reading gas probe data prior to sampling and analysing water samples from disused, flooded coal mines, trying to determine those across Scotland with the greatest geothermal energy potential. As a low-carbon heating alternative for most building types, from housing to factories, this work has great potential to help us reach our net zero targets.

Entrant: David Walls

From redundancy to recirculation

This image captures a before and after landscape, conveying the impact of remanufacturing and recirculation of wind turbine parts. Supporting the journey to a sustainable society, an innovative collaboration has been formed between the Advanced Materials Research Laboratory and Renewable Parts Limited. With many components finishing in landfill at the end of service life, recirculation of parts through remanufacturing is essential in creating a circular economy across the wind industry.

Entrant: Fiona Sillars



Synchronicity and the future grid

The UK's net-zero climate commitments mean the grid must close remaining fossil fuel power plants and adapt to increasing weather extremes. To help enable this without compromising consumers' stable power supplies, we must master the control of power plant synchronicity in a renewables-dominated grid. Our research uses computer simulations and machine learning to contribute to knowledge about synchronicity and blackout avoidance during disturbances, such as weather extremes and plant failures.

Entrant: Jonathan Fallman

The beauty in what lies beneath

A verdant landscape in miniature is revealed following dredging of sediment from the Caledonian Canal at Laggan. Usually bound for landfill, this joint project with Scottish Canals aims to re-purpose the sediment as building aggregate (such as for landscaping or a paving base layer) therefore reducing waste and the carbon footprint of maintenance dredging.

Entrant: Keith Torrance

Building children's futures with nature in mind

Earlier studies have determined that children who lack regular positive interactions with nature can develop apathy, disconnection and even phobias toward it. Working with primary schools in Glasgow and Vietnam, we are measuring children's sensorial experiences of nature and applying our children-nature-distance (CND) methodology, as we aim to support school design decision-making to enhance children's experiences of nature and promote improvements in their health and wellbeing.

Entrant: Phuong To

North Sea revolution: creating greener homes

INDU-ZERO is a collaboration between 14 European organisations from 6 countries that aims to transform approximately 22 million properties across the entire North Sea region. The housing, built between 1950 and 1985, is typically poorly insulated and energy inefficient. However, through the applied expertise of the consortium, a blueprint has been designed to develop a cost-effective, aesthetically pleasing and environmentally friendly technological solution to deliver sustainable, net-zero renovation packages.

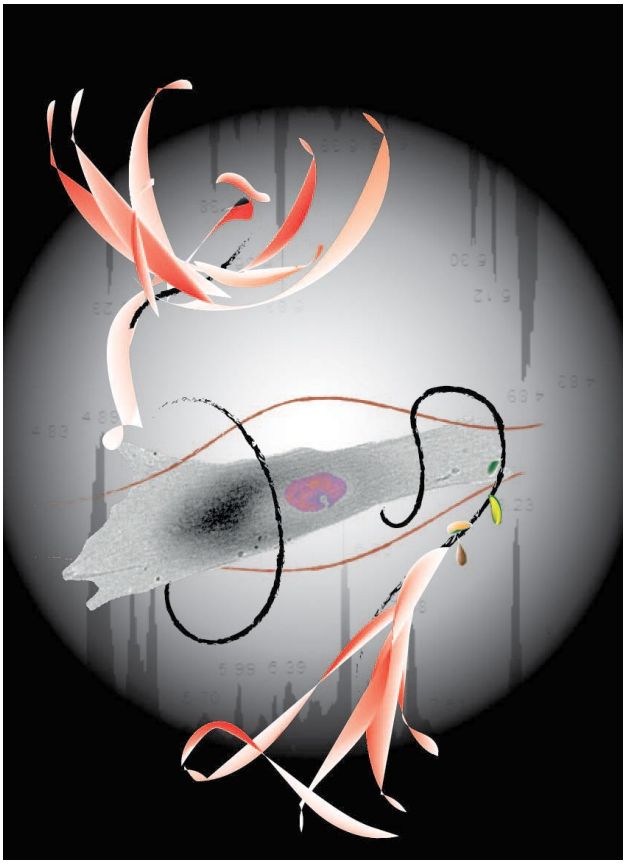
Entrant: Xiu Yan

Health matters

Commuting with health in mind

Owing to the pandemic, the benefits to mind and body of physical activity and fresh air have become more widely appreciated. However, as we aim to get more people to change their commute from car to bike or walking, for environmental and health benefit, we must consider the subtle barriers that exist to those who struggle with mental wellbeing. Our research is exploring these barriers, aiming to inform local authority planning and intervention.

Entrant: Deirdre Harrington



The art of cancer research

An artistic representation of our research using metabolomics – a promising emerging technology – in studying breast cancer (black ribbons) and ageing (green to brown leaves). The phoenix rising from the central orbitrap (a highly-sensitive mass spectrometer able to analyse complex cells), symbolises our endeavours to study the metabolic features of aged and cancer cells to reveal key biomarkers in the pursuit of better targeted therapies.

Entrant: Domenica Berardi

Organ transplantation: life after death

Whilst the physical benefits of organ transplantation may be obvious, the lived experiences are more complex. Our research focusses on the relationship between deceased donor and living recipient, exploring how body parts relate to identity, what it means to die if parts live on, and how biotechnologies are altering these definitions and identities. Greater understanding of experiences could lead to better clinical practice, and reduced anxiety for those going through the transplant process.

Entrant: Donna McCormack

Game-changing therapy for the future

Personalised patient therapies could aid healing, and recovery times. The PRIME-VR2 research project is reimagining physical therapy by creating a platform for treatment through a virtual-reality gaming space. Combined with an algorithmically-designed, bespoke gaming controller that is tailored around the therapeutic and comfort requirements of each individual user, PRIME-VR2 presents a tantalizing vision for the future of therapy.

Entrant: Lewis Urquhart

A step up for stroke rehabilitation

Stroke recovery can vary significantly, with many patients struggling with everyday tasks due to long-term restricted limb use. Our research could be the difference between someone regaining full use of a limb or not though. Through development of our real-time motion-tracking technology, used alongside a tailored rehabilitation programme, therapists will be able to review progress in detail with patients, and provide full consultation on any recommended therapy adjustments.

Entrant: Maisie Keogh

Crystallising solutions: improving medicine manufacture

Crystallisation is a key step in the transformation of drug compounds into an easily consumable form such as a tablet or inhalant. It is a complex process that, so far, is not well understood. Crystals are made from, and develop in, liquid solutions; our research is investigating the crucial effect of the solution surface that sparks this process, in our quest to design more effective medicines and their manufacturing methods.

Entrant: Samira Anker

After the devastation, alone again

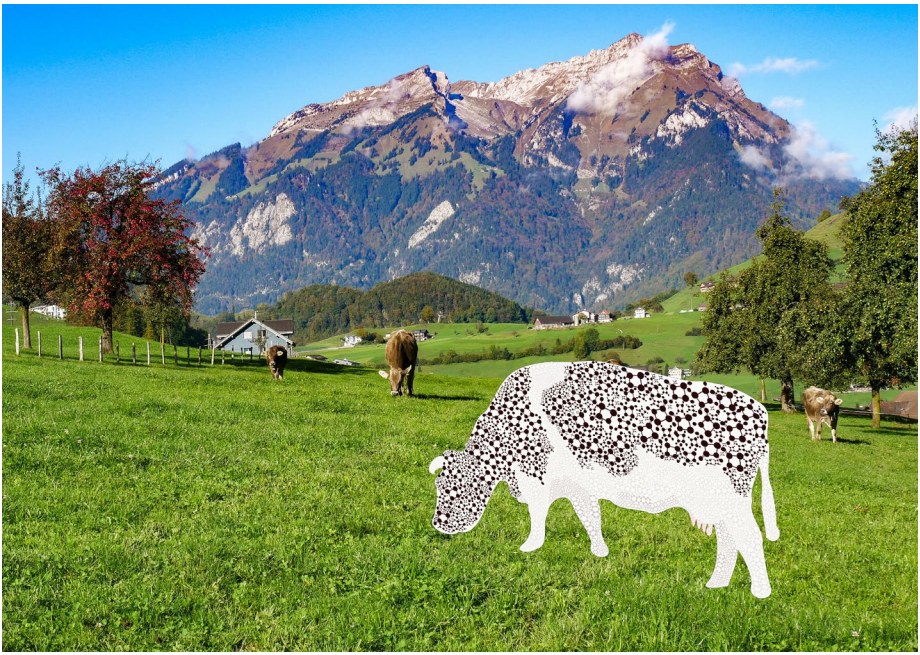
Trauma, grief, cumulative losses, stigma and shame of being bereaved by suicide, are further complicated by ageism for people in later life. Learning from those with lived experiences of suicide, we have developed guidance for policy and practice. This capitalises on people's own knowledge and strengths to build capacity for living with traumatic bereavements, enabling them to access the support they need to tackle any isolation, loneliness, and physical and mental health risks that may arise.

Entrant: Trish Hafford-Letchfield

Educational exclusion: tackling imposter syndrome

How do people come to feel like, or become, outsiders in institutional spaces and what can be done to create feelings of belonging and inclusion? Through exploration of how we navigate sameness-difference in institutional settings, including the classroom, our research aims to find ways to embrace the would-be 'imposters' by understanding how we share visions between our different realities and experiences.

Entrant: Yvette Taylor

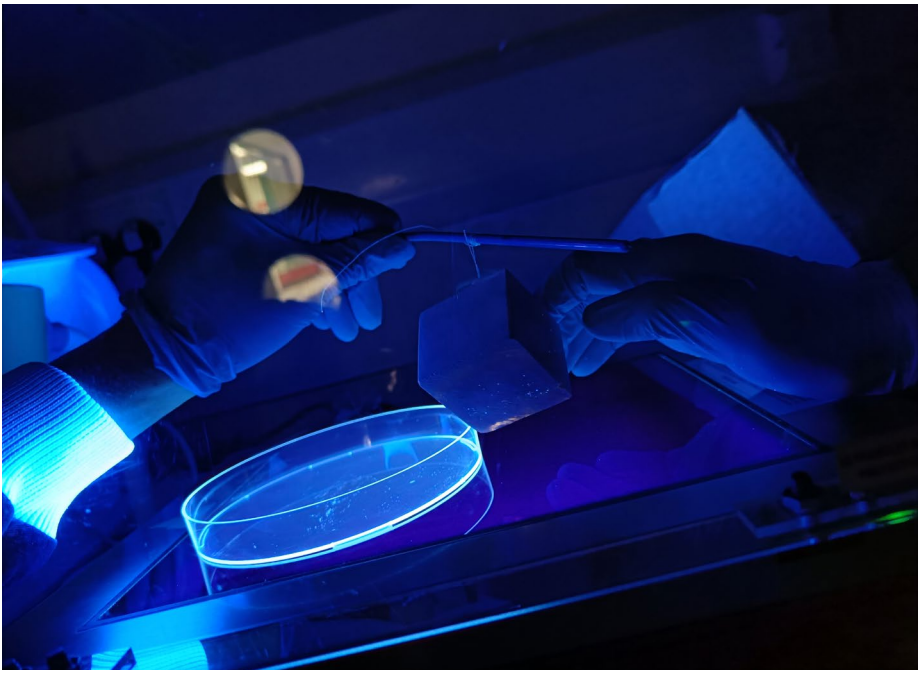


Milk monitoring: averting the antiobiotic crisis

Farm animals use the greatest share of antibiotics worldwide and inevitably dairy-producing animals secrete residues in milk. The disposal of contaminated milk directly exposes the surrounding environment to active drug metabolites leading to pools of antimicrobial resistance: an imminent global threat. Our research is focused on the real-time monitoring of antibiotic residues in cow's milk to help farmers prevent contamination of clean milk and better manage the disposal of contaminated milk.

Entrant: Magdalena Raykova

Shared visions



Stabilising radioactive environments for safer decommissioning

Working in a UV lab, we are trialling a chemical compound, hydroxyapatite – commonly used in medical applications – to shield concrete surfaces (cube) from radionuclides: atoms that emit radiation as they undergo radioactive decay. Our aim is to determine whether hydroxyapatite could be used to stabilise environments, such as reactor containment structures, to further improve safety for engineers during decommissioning, enabling the process to be done more quickly and cost-effectively.

Entrant: Alexandru Golgojan

Into the dark

An international team of researchers sets out to measure light pollution in the Arctic Ocean in the middle of the polar night. Thinning and retreating sea ice, due to climate change, means the pristine darkness of polar night is being disrupted through artificial lighting. Our research aims to understand the impacts on the marine ecosystem, and how it is affecting animal behaviours from zooplankton to polar bears.

Entrant: David McKee

Reflecting on modern leadership

Organisations are spending vast sums on ‘leadership’ training that is not producing lasting change, however, an under-utilised but already recognised aspect of leadership could be a game-changer. Through exploration of followership (purpose-focussed informal leadership), and the importance of stakeholder self-reflection, this research aims to provide organisations with a sustainable and replicable assessment model of potential stakeholder contributions to inform their strategic planning.

Entrant: David Scott

Harnessing diverse learning communities

Through collaborative, hands-on exploration of STEM (science, technology, engineering and mathematics) ideas, creative activities – such as story-telling and rock painting – and engagement with the local environment, Strathclyde's STEM summer school provided an ideal environment for shared learning. Working with young people with additional support needs, we were able to gain the important perspectives of these citizens as they learned about our many research projects that aim to enhance environmental sustainability.

Entrant: Jane Essex

Youth crime: crossing the divide

For decades, academics have studied the causes and consequences of violence in young people – from bullying to threat of weapon use – in a bid to identify strategies for prevention. However, their insights have only partially reached policymakers. Our research is bridging the gap between science, policy and practice, aiming to achieve better violence prevention policies and practices.

Entrant: Marijke Synhaeve

Constructing sustainable futures

This Ban Khamsamakkee School building serves as a model for ecological building. Its hybrid structure constructed from local, sustainable composite materials was designed through the Towards Change programme, developed by University of Strathclyde. Working closely with local residents and academics, the project aims to assist communities to make best use of local materials and resources, enabling them to become self-sufficient whilst reducing their environmental impact.

Entrant: Runda Aduldejcharas

I, victim

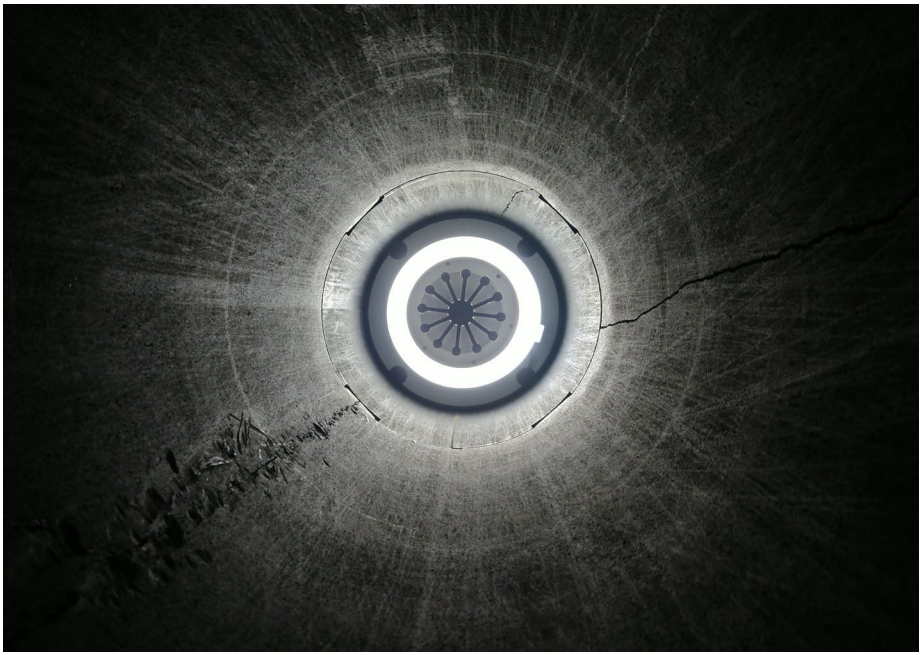
Whilst the term 'victim', and their rights, is believed to be formally understood in public policy and written law, in reality, a victim may be confused by the many labels reflected back at them by our criminal justice system. Our research explores how prosecutors consider the victim at key moments of their decision-making during a criminal case, seeking to clarify our understanding of the victim as a legal concept within Scots criminal law.

Entrant: Scot Dignan

Nothing is real: modelling uncertainty

In weighing up the risks demonstrated by statistical modelling, it is important to understand the context of the predictions reached – as well as the influence of those 'pulling the strings' – in the decision-making process. Whilst this research specifically focusses on risk modelling for uncertainty in offshore windfarming, aiming to inform investment and job marketing decisions, it is very applicable to other industries and even the public in understanding modelling influence on policy decision-making.

Entrant: Solene Huynh



The all-seeing eye

Inspection and maintenance of nuclear reactor components is crucial and safety is, of course, paramount. Use of remotely-operated, radiation-hardened inspection cameras – shown here scanning the graphite surface of a fuel channel – is further improving safety. Our research has developed advanced image processing algorithms to enhance visualisation of these inhospitable environments, supporting the continued operation of a large, stable source of low-carbon electricity as part of the UK's energy mix.

Entrant: Stuart Bennett

Marine engineering as nature intended

Have you ever wondered why ducklings follow their mothers in a line? Studying this phenomenon, our research discovered they are riding the slipstream created by their mother and avoiding the drag waves, enabling them to keep pace. We are now exploring how these principals could be potentially applied to design modern freight carrying vessels, e.g. a water-train, to transport more cargoes with less fuel.

Entrant: Zhiming Yuan

Entry Information

Connected world index

Female entrepreneurship: bridging the digital divide?
Submitter: Beverly Best
Department: Hunter Centre for Entrepreneurship
Collaborators: Philip Wells
Funder: University of Strathclyde JARA Scholarship

Addressing major challenges to minor safety
Submitter: Chelsea Jarvie
Department: Computer and Information Sciences
Collaborators: SRUC, Christopher Davison, Craig Michie, Christos Tachtatzis
Funder: CENSIS and Strathclyde University

Amplifying small-scale fishers' voices
Submitter: Elisa Morgera
Department: One Ocean Hub
Collaborators: Georgina Yaa Oduro, Bola Erinosho, Harrison Golo K (Cape Coast University, Ghana)
Funder: UK Research and Innovation (UKRI) through the Global Challenges Research Fund (GCRF)

Breaking down barriers to inclusion
Submitter: Elita Chambimba
Department: Social Work and Social Policy
Funder: Commonwealth Scholarship Commission; theme: Access, inclusion and opportunity

Raising Gaelic voices
Submitter: Ingeborg Birnie
Department: Education
Funder: Bòrd na Gàidhlig

Structural fingerprinting for live monitoring
Submitter: Sheik Abdul Malik
Department: Mechanical and Aerospace Engineering
Funder: University of Strathclyde studentship

Big brother is watching
Submitter: Tiia Partanen
Department: Architecture

Towards sustainable and safe aviation
Submitter: Yljon Seferi
Department: Electronic and Electrical Engineering
Collaborators: Richard Munro, Mazheruddin Syed, Patrick Norman
Funder: Innovate UK

Small-scale fisheries: redressing the balance
Submitter: Elisa Morgera
Department: One Ocean Hub
Collaborators: Alex Kanyimba, Sirkka Tshiningayamwe, Martha Jonas and Tapiwa Warikandwa
Funder: UK Research and Innovation (UKRI) through the Global Challenges Research Fund (GCRF)

Green recovery index

Blooming biomass: cultivating contaminated land
Submitter: Benjamin Nunn
Department: Civil and Environmental Engineering
Collaborators: James Minto
Funder: This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 101006717

Untapped streams of energy
Submitter: Claire Kennedy
Department: Civil and Environmental Engineering
Funder: University Research Excellence Award (REA) Studentship

Unearthing the power beneath your feet
Submitter: David Walls
Department: Civil and Environmental Engineering
Collaborators: Michael Schiltz, Sean Watson, Simon Walls
Funder: Engineering and Physical Sciences Research Council (EPSRC) IAA funded PhD; grant no: EP/R51178X/1 and the Energy Technology Partnership

From redundancy to recirculation
Submitter: Fiona Sillars
Department: Advanced Materials Research Laboratory
Collaborators: Renewable Parts Ltd (RPL)
Funder: Scottish Institute for Remanufacturing (SIR), EPSRC Impact Acceleration Account (IAA) grant no: EP/R51178X/1 and Knowledge Transfer Partnership (KTP)

Synchronicity and the future grid
Submitter: Jonathan Fallman
Department: Electronic and Electrical Engineering
Funder: Engineering and Physical Sciences Research Council (EPSRC); grant no: EP/L015471/1

The beauty in what lies beneath
Submitter: Keith Torrance
Department: Civil and Environmental Engineering
Funder: This project has received funding from Interreg via SURICATES project NWE 462

Building children's futures with nature in mind
Submitter: Phuong To
Department: Architecture
Collaborators: Dr. David Grierson
Funder: Ministry of Education and Training of the Vietnamese Government

North Sea revolution: creating greener homes
Submitter: Xiu Yan
Department: Space Mechatronic Systems Technology Laboratory
Collaborators: Provincie Overijssel, Ghent University, RCPanels, KAMPC, Johanneberg Science Park, Buro de Haan
Funder: This research was supported as part of the INDU-ZERO project, an Interreg project supported by the North Sea Programme of the European Regional Development Fund of the European Union'

Health matters index

Commuting with health in mind
Submitter: Deirdre Harrington
Department: Psychological Sciences and Health

The art of cancer research
Submitter: Domenica Berardi
Department: Strathclyde Institute of Pharmacy and Biomedical Science
Collaborators: Zahra Rattray, Nicholas JW Rattray, Layla R Alnoumas, Yasmin Hunter, Karim Daramy, Abdullah Alsultan, Patricia Kelly, Jene Hwei, Gillian Farrell, and Joshua Walker
Funder: University Research Excellence Award (REA) Studentship

Organ transplantation: life after death
Submitter: Donna McCormack
Department: English and Creative Writing

Game-changing therapy for the future
Submitter: Lewis Urquhart
Department: Design, Manufacturing and Engineering Management
Collaborators: Emanuel Balzan, Brian Loudon, Milos Stanisavljevic
Funder: This project has been funded by the European Commission as part of the H2020 program, under the grant agreement 856998

A step up for stroke rehabilitation
Submitter: Maisie Keogh
Department: Biomedical Engineering
Funder: Engineering and Physical Sciences Research Council (EPSRC); grant no: EP/R153349/1

Crystallising solutions: improving medicine manufacture
Submitter: Samira Anker
Department: Chemical and Process Engineering
Collaborators: Karen Johnston, Jan Sefcik, Paul Mulheran, David McKechnie
Funder: Engineering and Physical Sciences Research Council (EPSRC); grant no: EP P006965/1, and University of Strathclyde

After the devastation, alone again
Submitter: Trish Hafford-Letchfield
Department: Social Work and Social Policy
Collaborators: Prof Trish Hafford-Letchfield, Dr Jeff Hanna, Dr Evan Grant, Lesley Ryder Davies, Dr Nicola Cogan, Dr Susan Rasmussen, Sophie Martin (University of Strathclyde), Jolie Goodman (Mental Health Foundation)
Funder: Milk monitoring: averting the antibiotic crisis

Educational exclusion: tackling imposter syndrome
Submitter: Yvette Taylor
Department: Education
Collaborators: Samia Singh

Milk monitoring: averting the antibiotic crisis
Submitter: Magdalena Raykova
Department: Civil and Environmental Engineering
Collaborators: Dr Andrew Ward
Funder: Engineering and Physical Sciences Research Council (EPSRC); grant no: EP/T517938/1 and CENSIS Innovation centre

Shared visions index

Stabilising radioactive environments for safer decommissioning
Submitter: Alexandru Golgojan
Department: Civil and Environmental Engineering
Collaborator: Susan Cumberland
Funders: University of Strathclyde JARA Scholarship and the Advanced Nuclear Research Centre

Into the dark
Submitter: David McKee
Department: Physics
Collaborators: Michael Snyder, Finlo Cottier, Jorgen Berge
Funder: Natural Environment Research Council (NERC) Arctic PRIZE

Reflecting on modern leadership
Submitter: David Scott
Department: Hunter Centre for Entrepreneurship

Harnessing diverse learning communities
Submitter: Jane Essex
Department: Education
Collaborator: Gaston Wellisch
Funder: Engineering and Physical Sciences Research Council (EPSRC) STEM Equals project and University of Strathclyde

Youth crime: crossing the divide
Submitter: Marijke Synhaeve
Department: Social Work and Social Policy

Constructing sustainable futures
Submitter: Runda Aduldejcharas
Department: Architecture
Collaborators: Dr David Grierson University of Strathclyde and co operate by Krasang Community, Bam Khamsamakkee School
Funder: AC Wall Inter Group Co. Ltd, Global Envi Consultant Technology Co. Ltd, Home Mega Mart Co. Ltd (Buriram), Buriram Steel Part. Ltd, SCK Engineering & Tool Co. Ltd, Krasang Karset Part. Ltd

I, victim
Submitter: Scot Dignan
Department: Law
Collaborators: Courtney Dignan
Funder: University Research Excellence Award (REA) Studentship

Nothing is real: modelling uncertainty
Submitter: Solene Huynh
Department: Management Science
Funder: University of Strathclyde JARA Scholarship

The all-seeing eye
Submitter: Stuart Bennett
Department: Electronic and Electrical Engineering
Collaborators: Graeme West, Paul Murray, Michael Devereux (University of Strathclyde) Callum Douglas, Ian Lloyd (EDF Energy)
Funder: EDF Energy

Marine engineering as nature intended
Submitter: Zhiming Yuan
Department: Naval Architecture, Ocean and Marine Engineering

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