

# reSHAPE

## Welcome to reSHAPE

Welcome to the first edition of reSHAPE. With this event we hope to feed a rumble to grow into a beat that becomes a rhythm with which we can celebrate the pioneering ventures in the social sciences, humanities and arts taking place across the UK and beyond.

SHAPE ventures are a reality, we now need to look at the funding structures that support them. This is the purpose of reSHAPE, and it is a dialogue that is not possible without bringing together relevant sectors in front of the innovations that are taking place; and it is a dialogue that must extend beyond the springboard of the presentations here today, through you, reading this, to re-shape the landscape.

reSHAPE is made possible by a growing coalition of partners who share a belief in encouraging socially responsible innovation; The British Academy, Aspect, the Aspect Research Commercialisation Accelerator (ARC) and Aspect Angels.

A very special thank you also goes to Julia Black, Frida Koslowski, Morven Fraser-Walther, the ARC Management Team, Emma Salgard-Cunha, Hannah Leach, Rebecca Glenapp, Pippa Christoforou, Sarah Umar, Studio Harris Blondman, Studio Mundo and the RSA.

We hope you enjoy this edition.  
Chris Fellingham (ARC) & Sean Farran (ASPECT)

### Insights become transformations

The journey to SHAPE

### Creating bold new opportunities

University ventures as the pathway to impact

### reSHAPE venture showcase

Details on the SHAPE ventures presented today

### Social Science Ventures vs. Social Ventures

What's the difference?

### Unlocking impact with financial innovation

New financial ecosystems needed to effect major positive change



Professor Julia Black,  
President of the British Academy,  
Strategic Director of Innovation  
at the London School of Economics  
and Political Sciences,  
Chair of the Aspect Steering Group

# Becoming SHAPE

Professor Julia Black explains why SHAPE (social sciences, humanities and arts for people and the economy) came into being.

Our aims in developing SHAPE are fourfold: to inform people about the nature of the social sciences, humanities and arts, to illustrate their value and relevance, to inspire people to study them and follow careers using the knowledge and skills they gain in doing so, and to include as many as possible in all of those endeavours. For we need SHAPE insights now, more than ever.

SHAPE subjects are not only essential for understanding the human world, but to understanding the interaction of people with the natural and physical world. It follows that those working in STEM and SHAPE subjects need to engage closely with one another. SHAPE is not in opposition to STEM – rather we want to encourage more joint working between them. We also want to encourage a broad educational curriculum, where students have the opportunity to learn both SHAPE and STEM subjects throughout their educational journey. For no matter what the context, we know that insights become transformations when people from a wide range of backgrounds, experience and knowledge work together towards a common end.

We also want to celebrate the richness and diversity of SHAPE subjects and their different mindsets, methods and modes of expression. The mindset may be one of objective inquiry, of analysis, critique, observation, subjectivity, empathy, expression, creativity, and more. Methods may be quantitative, qualitative, performative, empirical, theoretical, and more. And their modes of expression are equally varied. But they all share a focus on being human – on cultures, behaviours, on how we organise our economies, societies, communities in different places and at different scales – now, in the past, and in the future.

So working with the Arts Council, the Arts and Humanities Research Council, the Economic and Social Research Council, the London School of Economics and a few 'friends' of our subjects, including the creative agency Porter Novelli, we are thrilled to have launched SHAPE. We are delighted to see the acronym being increasingly used by universities, colleges, museums and individuals and by journalists and members of Parliament. Other organisations, such as Oxford University Press, are using it as an organising principle to drive strategy and the positioning of their activities. As the term SHAPE becomes more widely used, we think it can become an incredibly powerful and inclusive way to inform, illustrate and inspire people about the value of understanding our human world.

**SHAPE subjects are not only essential for understanding the human world, but to understanding the interaction of people with the natural and physical world.**

# Social science spinouts – a neglected pathway to impact?

**The abstract nature of knowledge derived from the social sciences has often led to it being written off as common sense, or as being ill-suited to practical application. Can creating businesses and social ventures based on social science insights present bold, new opportunities for social science research to deliver impact?**

By Chris Fellingham, Co-Founder and Director of the ARC Accelerator, Social Sciences and Humanities Lead at Oxford University Innovation

Social Science has long had a problem demonstrating what it knows to be true – its impact on the world. STEM colleagues happily demonstrate tangible outcomes, new molecules, new engines, new vaccines – the impact is tangible and linear. The molecule improves a chemical process, the drivetrain is 3% more efficient, the vaccine prevents disease. The problem of impact, while abstract on the one-hand, is very real on the other, as the social sciences constantly have to fight their corner for research funding and defend itself from a political culture that often rejects their relevance.

Social Scientists know their work has tangible impacts – John Maynard Keynes' famous quote that 'Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually slaves of some defunct economist' demonstrates aptly that Social Scientists shape ideas at a macro and micro level that fundamentally influence society and the economy. But, how do you demonstrate that your research altered the idea of someone else? The traditional approach has tended towards communicating evidenced theories at end users – be that the public or policymakers. Take for example, Thaler & Sunstein's 'Nudge' theory, which was both a popular book and led to the establishment of the Nudge unit in the UK Government. While this is a notable example of the impact of an idea, such clear examples are outliers.

One means of fixing and making such ideas tangible, often scorned and neglected in the social sciences, but widely used in STEM, are spinouts. For universities, a spinout is a company formed on the basis of Intellectual Property from a University or research institute. Spinouts make sense for STEM. Producing (usually physical) things requires capital, time, expertise and space – a company can take capital in, optimise itself to achieve that end and scale rapidly in a way that is neither desirable nor optimal within a university faculty whose processes are geared towards research not production. Science spinouts have had a dramatic and growing effect on our world; Genentech developed at Stanford translated pioneering research to create synthetic insulin, Oxford's Nanopore's DNA-sequencers are massively reducing the cost of DNA-sequencing to unlock a new world of precision diagnostic medicine. Spinouts in the social sciences though, remain a rarity.

What does a Social Science spinout look like? How does one make a company from a theory? The most typical example is a consultancy (already the business of universities), where research insight is translated into policy, but more typically business advice. For example, economists have long engaged with the financial sector. Some companies are even founded on specific research insights, such as Roubini Global Economics – based on Roubini's theoretical research. Nor are they limited to finance. Two companies; Oxford Policy Management (University of Oxford) and Innovations for Policy Action (Yale University) – both emerged from their respective universities to implement academic insights in the field of International Development.

While consultancies are a familiar means of translating Social Science expertise into practice, other kinds of spinouts are rapidly emerging. One sector in particular that has benefited from social science insights has been digital. In education, a slew of Edtech has emerged from leading universities, translating academic research into interventions and transforming them into digital technology. Datasets, such as those compiled by economists and political scientists, have also been spun out into companies (or licensed) as businesses and governments seeking to understand the world and their place in it, tap into them for insights to inform their strategies from political risk to economic transactions.

An example of this kind of spinout is sOPHla, the University of Oxford's first social enterprise spinout from the Department of International Development. sOPHla took econometric research to create a multidimensional poverty index – How do you measure poverty beyond dollar value such as access to food, services and education? The typical route to impact for such research would be through Government and international bodies like the UN by quantifying poverty in new and measurable ways. Yet, when a major bank in Costa Rica asked to be audited against the index to better understand poverty in its own workforce and their families, sOPHla had the makings of a new business model. Now sOPHla works across Central America helping companies understand, measure and address poverty within their workforce. The income and data generated facilitates more research and the relationships at both private sector national and international level are opening up pathways to impact and further opportunities that would've been difficult to achieve had the spinout not been created.

Even in STEM the more acute emphasis on spinouts is relatively recent and has required the confluence of push and pull factors. Externally, the pull of REF impact case studies, growing interest in research-led innovation and increasing pressure for universities to be the engines of economic growth. Internally, the push towards ideas of the researcher as an entrepreneur is only starting to diffuse, investors have to build confidence and understanding and the ecosystems (incubators, accelerators, mentors and training) have taken time to develop. Whilst some lessons can be learnt from the experience of STEM, the infrastructures and ecosystems required to develop social science spinouts are still nascent.

Universities are only at the cusp of realising the opportunity spinouts can offer Social Science research. This is where the work of organisations, such as the Aspect network is significant. The Aspect Network, is a network of Universities committed to building an understanding and ultimately an ecosystem, where social scientists can use spinouts as a means to translate research into impact. This year the Aspect Network launched the inaugural SUCCESS programme, which is committed to helping academics looking to use ventures to further their research through training, mentoring and financial support. Spinouts won't be for every researcher, or every area of research, but they present an important pathway by which social science can shape the world for the better.

# Social Sciences Ventures vs Social Ventures: What's the difference?

Lately there have been a lot of social ventures, lately there have been social science ventures. Confused? Read on.

By Morven Fraser-Walther, IP and Innovation Manager, University of Glasgow

The more well understood are social ventures, in particular those whose social mission is based on research, which we can term rooted ventures (discussed in the second section of this newspaper). Universities, like Oxford, are seeing an ever-growing number of these ventures emerge as researchers seek to maximise the impact of their research with a venture. Social Science ventures, such as SOPHIA from Oxford University, are also emerging and more broadly from UK universities as part of the ARC Accelerator, the world's first accelerator for social science research. With both now emerging the two terms are being used interchangeably with some confusion.

**Are social science ventures the same as social ventures? Do all social science ventures have to be social ventures too? Spoiler alert, no and no.**

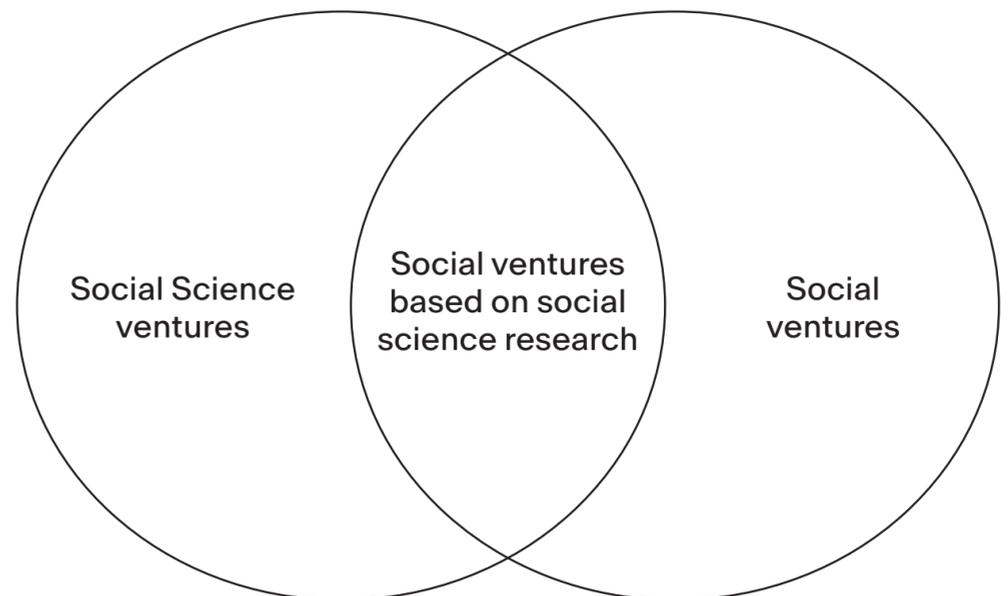
Let's start with a simple definition. At Oxford University Innovation we define a social venture as a company whose mission and purpose (formalised in the company's articles) is a social or environmental goal, and any profit goes back into the company for that purpose. Goals could include; tackling poverty, or domestic violence or providing medical support. As the goals suggest, social ventures can come from all corners of a university and across from every research discipline, from medical, life, physical and social sciences to the humanities.

What then is a social science venture? This is a slightly more contested space given how recent they are but it doesn't need to be. Science ventures are well understood – they are based on scientific research, such as DNA sequencing at Oxford Nanopore or fusion physics such as First Light Fusion. Social science ventures are similarly defined: ventures whose product or service is based on social science research. What does that look like?

- OxEd and Assessment is based on decades of education research to measure children's language skills and identify those at risk of falling behind through a tablet app
- Augmented Intelligence Labs develops tool for early detection of marketing trends based on Future of Marketing research at the Said Business School
- SOPHIA – uses econometrics to help companies measure different types of poverty and by measuring it, helps them alleviate it in the families of their employees

Just as one might stretch the definition of a science venture e.g. any venture created by someone with a science degree even if the company is unrelated to science as well as one directly based on science research, so can that of a social science venture be stretched. Roubini Global economics is *informed* by Nouriel Roubini's economic research into financial markets. Social science undoubtedly contributes to formation of products and services, such as systems change approaches to identify social interventions, and builds ventures around them. But these aren't core to the product or services. So, while many things can be social science based, a social science venture is specific.

Is there any link between the two? Yes, quite a bit. Combining ARC accelerator and the University of Oxford's social science ventures and pipeline provides a data set of around 40 ventures or venture ideas and we can estimate that just over half of social science ventures will also be social ventures.



**What does that mean?**

**SOPHIA provides a good example:**

- Its core product/service is based on social science research – in this case econometric modelling of multi-dimensional poverty – therefore it is a social science venture
- Its purpose is to help alleviate poverty, a clear social mission – therefore it is a social venture

Why is this so? There are two strong hypotheses for this (1) the nature of social science research that can become a social science venture and (2) the motivations of researchers in general.

In the first instance, a lot of social science research that is applicable to forming a venture – tends to be fairly applied. Theories are less likely to form the basis of a venture but applications of those theories – in education, in international development for example – can be. A lot of the applications are solutions to social or economic problems – especially in key areas (environment, education, social policy, international development and health) so a social venture is the logical choice as the core purpose allies to the research.

The second lies in researcher motivations. In my experience most researchers do not want to profit themselves or have their research be profited from, therefore, a social venture is then the ideal vehicle because any profit made is directly channelled back into the social purpose of the business.

What about those that are social science ventures but not social ventures? Plenty of social science ventures are not social ventures, that doesn't of course mean they aren't solving real problems or improving society or the economy. Typical ventures in this space solve problems for businesses such as algorithms for marketing, or trade and strategy advice. Social ventures are a very specific pathway that dictates how a company operates (such as recycling profit), how governance is designed and operates, what finance they can access and even who they can work with.

Social science ventures and social ventures are distinct. Yet distinct as these are, it's inconceivable that the strong overlap seen in the early pioneers from across UK universities will not endure. The key of any venture is what it enables, and for social science researchers – having both options gives them more flexibility to pick the best vehicle for maximising the insights and impact of their research.



# reSHAPE venture showcase

## Wise Responder – Jamie Coats



Wise Responder's ground-breaking, scientific methodology brings the power of quantifiable metrics for UN SDG 1 – No Poverty – application to where it's most needed: the financial and business community in emerging and developed markets, for use by financial institutions, corporations, and institutional investors eager to create and broaden access to sustainability-linked financing and investment.

Wise Responder was launched in 2022 by Sophia Oxford, an incubator formed by Oxford University and OPHI, an economic research and policy centre within the Oxford Department of International Development. Over the past decade, OPHI developed the field of multidimensional measurement, focused primarily on poverty and wellbeing, expanding its research and social policy uses. The OPHI multidimensional poverty approach has been adopted by the United Nations Development Programme, the World Bank and as an official measure of poverty by more than 30 countries. Wise Responder is delivering this powerful, world-class methodology to financial markets and to private-sector companies with operations in developed and emerging markets.

Wise Responder's proprietary multidimensional poverty index (MPI) metrics and SDG1 Index enable clients to effectively align, target, and measure their business, operational, and investment strategies to SDG 1 by accessing standardised metrics, comparable measures across countries, a suite of measures consistent with the United Nations' SDG Framework, and a means through which to adhere to EU Articles 8 and 9 Funds of the Sustainable Finance Disclosure Regulation.

Among Wise Responder's early corporate adopters are four Fortune Global 500 companies and one Fortune 500 company, including a global brewing and beverage company, a multinational oil and gas company, the world's largest fresh produce company, and two global financial services companies.



Jamie Coats is the co-founder and CEO of Wise Responder, Inc. He is a passionate thought leader on the global imperative to use powerful social data to help eradicate poverty and build a sustainable, more equitable world.

Wise Responder's mission is to close the 'social data gap' by empowering financial institutions, corporations, institutional investors, and governments to use its MPI metrics and SDG1 Index to make objective, metrics-driven decisions that improve sustainable investing impact, reduce business and operational risks, and foster economic growth through the creation of sustainability-linked financing and investment. Wise Responder's innovation is based on Oxford Poverty and Human Development Initiative (OPHI)'s ground-breaking, scientific global MPI methodology that captures interlinked poverty deprivations across areas such as education, health, and living standards.

Jamie is a co-author of the 2022 Citi GPS report 'Eliminating Poverty: The Importance of a Multidimensional Approach in Tackling SDG 1.' He is based in the greater Boston area and London.

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## OxCarbon – Atif Ansar



OxCarbon was formed with a mission to create positive climate impact through the support of innovation and academic enquiry. It seeks to create confidence in climate impact projects through a principle-driven approach supported by transparency and scrutiny from the academic peer review community. OxCarbon is a not-for-profit company that was established in 2021 and spun-out from the University of Oxford. All surplus revenues generated by OxCarbon are used to support climate research, primarily at the Smith School of Enterprise and the Environment, University of Oxford.

OxCarbon sources and validates science-based analytical tools for impact verification with a view to improve the accuracy of carbon estimation techniques and support the much-needed scaling of supply in voluntary and potentially mandatory carbon markets. Its explicit ambition is to support the development of highly scalable approaches to carbon estimation. Recent advancements in satellite remote sensing and machine learning can provide scalable and accurate impact assessment which will decrease entry barriers currently faced by local communities that want to launch regenerative land-use projects and earn an income in carbon markets from protecting and restoring nature.

The venture's primary role is to provide formal validation of submitted approaches that use a combination of AI/ML, remote sensing (drones, satellites), plantation technologies (on-the-ground data collection), and scientific methods to determine carbon sequestration and conservation in climate impact projects. Its subsequent goal is to provide system-based validation of submitted approaches such that an Approved Approach can be deployed in similar contexts.



Atif Ansar serves as a Founder and Director of OxCarbon. A Fellow of Keble College, Atif is Senior Teaching Fellow on the MSc in Major Programme Management and the Australian Major Projects Leadership Academy (AMPLA). He is the Founding Director of the Oxford Programme on the Sustainable Future of Capital-Intensive Industries, Smith School of Enterprise and the Environment. Atif is also the Executive Chairman of Foresight Works – an Oxford based technology firm building next-gen software for the world's megaprojects.

From 2015 until 2020, Atif was Programme Director of the MSc in Major Programme Management at the University of Oxford and continues to be one of the senior teaching fellows on the course's faculty. Atif also teaches at the UK and Australian Governments Major Projects Leadership Academy. In 2018, Atif began an appointment as a visiting scholar at Stanford University's Global Projects Center and a Visiting Professorship at Tsinghua University.

## In Place of War – Ruth Daniel



In Place of War (IPoW) is a global organisation that uses artistic creativity in places of conflict as a tool for positive change. It was founded in 2004 as a University of Manchester project to conduct academic research around the role of arts in places of conflict. This kick-started the creation of a new network of young creative change-makers spanning over 24 countries. IPoW enables grassroots change-makers in music, theatre and across the arts to transform cultures of violence and destruction into opportunities of hope and collective resilience. Their work is based upon creating cultural spaces in areas of upheaval and instability, providing education and training in artistic development and enterprise in the Global South, and enabling international artistic collaboration and mobilisation.

IPoW is co-creating spaces through business planning, funding, and the collection of over \$500,000 of donated music, theatre and dance equipment. The creation of cultural spaces gives those in marginalised communities the opportunity to express themselves non-violently and build new opportunities. By providing creative entrepreneur training designed specifically for conflict zones, they also give people the tools and capacity to build their own opportunities and futures, which is essential for long-term, impactful and meaningful change. They have trained 200 trainers, in 18 countries, developing skills via their Creative and Social Entrepreneurial Training Programme (CASE). Most recently, IPoW has developed modules around the development of cultural spaces, creative organisations, and refugee integration. By curating international artistic collaborations as an antidote to violence and vehicle for shared skills, knowledge and hope, they have already mobilised over 1000 artists from 25 countries with the creation of gigs, festivals, conventions, tours, collaborations and theatre performances.



Ruth Daniel is CEO and Creative Director of In Place of War. She is also an Honorary Research Fellow at the University of Manchester, Visiting Scholar at the Hip-Hop Education Center New York, and Cultural Ambassador at Somerset House. As CEO of In Place of War, Ruth has led a diverse range of arts and peace-building initiatives across the globe. She has developed and implemented over a hundred cultural programmes in sites of conflict and disadvantage such as war zones, post war zones and areas of economic deprivation. She prepared numerous successful funding applications, recently receiving a £1 million AHRC research grant for a 3-year programme that will explore how grassroots organisations can create social change using art.

She works closely with the music industry to build music spaces, mobilise equipment and musicians to conflict zones and to that end, has established a Global Music Industry Advisory Board with members including Native Instruments, Roland, Pioneer DJ, The Recording Academy and Spotify. Most recently Ruth has pioneered a new global fundraising initiative called Around The World in 80 Raves, creating a global shared challenge working with some of the biggest DJs, labels and management companies in the world.

Twitter: @inplaceofwar

## OnTrack Rehab – Gianpaolo Fusari



OnTrack Rehab is a new digital rehabilitation platform that pairs wearable technology with clinical expertise to support patients in the management of their recovery after stroke. OnTrack enables the tracking of arm movement that is specific to stroke and provides a window into activity data that is otherwise invisible. The platform combines data insights with evidence-based, tailored coaching support to create a unique recovery program for the user.

Stroke is the number one cause of disability in the UK and arm impairment is the most common type of disability for stroke survivors, affecting 450,000 people in the UK alone. The resulting loss of independence and isolation can be devastating for both survivors and their relatives. Clinical research shows that early access to intense rehabilitation is critical for recovery yet stretched health services and the hurdle of hundreds of hours of isolated, repetitive exercises make this a challenge to achieve consistently.

OnTrack is being developed by the Helix Centre in close collaboration with over 200 stroke survivors, therapists, and world-leading neurorehabilitation experts to address these issues. Exploiting technology embedded within smart devices, such as smartphones and smartwatches, the application uses a machine-learning algorithm tailored to pick up stroke survivors' movements to gather minutes of arm activity and provides real-time feedback alongside personalised advice and education. Coupled with face-to-face sessions at regular intervals, the digital platform is designed to motivate the individual to engage with their rehabilitation, and to show both the user and the therapist their progress in a tangible way. OnTrack looks beyond the one-hour session with a therapist, is more holistic and gives a sense of accountability to the patient. The aim is to reduce dependency on the therapist, whilst not leaving patients to their own devices.

In January 2022, OnTrack was awarded Phase 1 funding from SBRI (£100k). The funding was used to complete product development, set up a trial with 3 NHS Trusts, and continue market validation activities. The team are now awaiting results for Phase 2 funding (£1M), which will be used mainly to run the trial with the 3 Trusts and for further commercialisation activities.

Future work will also investigate whether OnTrack could have applications beyond stroke, such as for people with Parkinson's disease or those recovering from surgery. In the long term, the vision is to be able to support and to create a platform of rehabilitation that suits different needs and different conditions globally.



Gianpaolo Fusari is the OnTrack Project Lead and a Senior Designer at the Helix Centre, a collaboration between the Royal College of Art and Imperial College London. He has over 10 years' experience in design and innovation in healthcare and leads a variety of healthcare projects employing human centred design approaches.

Since joining Helix, Gianpaolo has applied his strategic and product design skills in different projects, including improving uptake to bowel cancer screening and reducing pressure ulcers caused by oxygen therapies. He currently leads Helix Centre's work in neurorehabilitation, where he is working with stroke survivors and clinicians to develop solutions to improve the experience and outcomes of recovery. Before joining Helix, he was a Senior Research Associate at the Helen Hamlyn Centre for Design at the Royal College of Art, where he led the design work on the award-winning redesign of the UK ambulance. He holds a joint MA/MSc from the Royal College of Art and Imperial College London.

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## Parenting for Lifelong Health – Laura White



Parenting for Lifelong Health (PLH) is a charitable social enterprise working to make evidence-based parenting support available to every parent, everywhere. PLH pursues this mission by forming innovative partnerships to scale parenting support programmes, strengthen ecosystems of parenting support within Global South Countries, and respond rapidly to support parents in humanitarian crises. The overall aim is to prevent violence against children and improve child learning, health, and wellbeing.

In collaboration with UNICEF, the World Health Organisation, and academic and non-profit partners, PLH have developed and tested a suite of open access, non-commercialised, in-person, remote, digital, and multimedia parenting programmes for the Global South. The academic partners involved were Stellenbosch University and the University of Cape Town in South Africa, and the universities of Oxford, Bangor and Reading in the UK. The PLH programmes have been rigorously tested in 15 randomised controlled trials demonstrating positive results across multiple child and family outcomes. These programmes are currently being delivered in over 30 low- and middle-income countries across Africa, Asia, Europe, Latin America, and the Caribbean.

Since Parenting for Lifelong Health's inception in 2011, they have reached over 300,000 families through their in-person programmes. They have also recently co-led the inter-agency COVID-19 Playful Parenting Emergency Response which provided evidence-informed parenting resources to over 210.5 million people during the pandemic.



Laura White is a consultant in education, health, and social enterprise and part of the founding team of the PLH charitable social enterprise. Within PLH, Laura's supported the team with establishing the organisation as a charity, creating its 3-year strategic plan, setting up operational systems for PLH to deliver parenting support around the world, and leading the discovery process for earned income social enterprise models.

Prior to this, Laura has held leadership roles in early childhood social ventures and taught children aged 1 to 5 in early intervention and school settings. Laura holds a master's degree in early childhood special education from George Washington University and an MBA from Oxford's Saïd Business School.

Twitter: @Laura\_White @ParentingLH

## Senseful AI – William Short



Senseful AI is a search engine that allows you to search text by concepts and by conceptual relations. It is part of a new generation of semantic search engines that aim to make search more efficient, more productive and more rewarding by leveraging people's understanding and use of natural language.

The basic problem it tries to solve is known as the 'keyword search problem'. This is the idea that whereas human beings think in terms of concepts and relations between concepts, search engines are limited to literal string matching – placing the burden on us to guess how the information we want to find is actually expressed in words. If you are searching the Internet with Google or even a more limited database like a library catalogue, you often have to work hard to come up with the right wording that will match relevant information. This can mean sitting in front of your computer trying multiple alternative expressions, and perhaps never finding what you are looking for.

Backed by a rich linguistic and conceptual knowledge-base, Senseful AI enables text data to be queried by concepts and by relations between concepts, independently of how these concepts happen to be expressed in words. For example, a user searching for 'parts of the body' with a conventional keyword-based search engine will only obtain results that contain this exact wording. By contrast, Senseful AI understands the relationship of the body to its part and can give results that include 'arms', 'legs', 'heart', 'lungs', etc. In situations where users cannot know beforehand the wording of relevant information, this kind of functionality can be hugely time- and effort-saving – helping, rather than hindering, users find what's important to them.

William designed Senseful AI out of a research need, when he tried to search texts in terms of the concepts and conceptual relationships that appear there. No appropriate tool existed that could identify figurative relationships between concepts and across textual sources of different kinds, so he built one himself. As it turns out, the tool he developed to solve his own problem has applications far beyond this particular use case. Senseful AI delivers a powerful general 'semantic search' solution that can help improve search outcomes with textual data of all kinds – whether in healthcare, law, finance, or any other field. For example, a law firm doing due diligence in the trial discovery process, has to sort through and find relevant information within a huge document trove. With keyword search, this could be hugely inefficient and time-consuming. Semantic search, on the other hand, can make information-finding more efficient and more effective.



William Short is the Founder of Senseful AI and a Lecturer in Classics at the University of Exeter's Department of Classics and Ancient History. He is the first winner of the QantX Blavatnik Prize for Innovation, which he received in October 2022 to support the launch of Senseful AI. It was awarded for his outstanding original thinking and Senseful AI's potential to reimagine the way we search for information through its novel and interdisciplinary approach.

William's research centres on identifying and reconstructing conceptual systems through semantic text analysis. His areas of specialism have been the role of metaphor in the Latin language and in Roman cultural thought, while his work rests at the intersection of linguistics, anthropology and the cognitive sciences. He is the director of several large-scale international Digital Humanities projects in the fields of corpus search, text analysis, and natural language understanding. Previously, he held posts at the University of Texas at San Antonio and Loyola University, Maryland. He earned his Ph.D. in Classics from the University of California, Berkeley in 2007.

# reSHAPE venture showcase

## Humanity Research Consultancy – Mina Chiang



Humanity Research Consultancy (HRC) is a revolutionary research consultancy aiming to end modern slavery using a systems approach with an emphasis on local representation. HRC provides expert supply chain assessment, training and consultancy services to governments, NGOs and corporations. Their local, evidence-based insights empower policymakers to end forced labour, modern slavery and human trafficking, globally. They help governments to shape evidence-based policies ending modern slavery and enable private sector companies to ensure their supply chains are free from extreme human rights abuse too. In many countries, including the UK, businesses of a certain size are required to evidence this by law.

Currently, local policy consultants from developing countries tend to be seen as peripheral in the international development sector – most research and consulting is still carried out by experts from Europe and America. Unlike other consultancies, HRC prioritises training and employing researchers who are local to the region they are researching. By working with local experts, HRC's policy recommendations are informed by a deep understanding of the cultural contexts that enable modern slavery, creating better solutions and enabling change at multiple levels. Connecting clients to experts from more than 50 countries, they specialise in providing local culturally sensitive insights, nuanced field investigation and research.

HRC was selected as one of the ventures in the Cambridge Social Venture Incubator in 2019 and is certified as a UK social enterprise. They have been trusted by various governments and non-government clients to research and solve complicated social issues related to modern slavery, including sustainable reintegration of survivors of human trafficking. Their clients include some major stakeholders in the anti-trafficking space, such as Plan International, the British Institute Of International & Comparative Law, Winrock International, and the International Labour Rights Forum.



Mina Chiang is the Founder and Director of the Humanity Research Consultancy. She has set up HRC having become aware of the need for an organisation with which decision-makers in governments, NGOS, and the private sector could partner in order to access the expertise of local researchers in order to end modern slavery, wherever it was occurring in the world.

Mina has seven years of experience in conducting projects, research and consultancy work in some of the most impoverished and conflict-affected countries, including Sierra Leone, Palestine, Tanzania and Cambodia. With research experience in modern slavery, forced labour, and human rights issues across a wide range of UN bodies, governments and NGOs, Mina is becoming a sought-after expert. She is also a coordinator and board director for the Rotary Action Group Against Slavery (RAGAS) and a Delta 8.7 Policy Guide working group member.

Mina is a graduate from the Institute of Development Studies (IDS) and has an interdisciplinary background in engineering, sociology, anthropology and international development. She speaks Mandarin Chinese, Taiwanese, English, and basic Swahili.

Twitter: @MinaChiang

## EQUAL-Futures – Jess Brown



EQUAL-Futures is a cross-disciplinary enterprise that utilises a range of theoretical and methodological approaches to propose novel and enhanced mechanisms to strengthen equality, diversity and inclusion (EDI) initiatives. It stems from research at the Gender Research Centre at the University of Bristol on equality and diversity policies and approaches in national and international organisations.

EQUAL-Futures is both a programme and a framework. It adapts and updates the 'gender mainstreaming' approach, which was launched and developed quite a significant traction following the Beijing UN Women conference in 1995. This approach revolves around one key principle: gender equality issues are not best addressed in siloed areas. What this means is that in order to address inequalities, we can't just look at gender equality policies because it is cross-sectional and affects all areas of policy. Therefore, to have equity, we need to start to consider the unintended, or potentially intended, gendered and racialised consequences of key decisions across all areas of work and business. For example, the pandemic and lockdown measures led to increased levels of domestic violence, because the assumption was made that the home is a place of safety. That is a very gendered reading of the social environment and safety.

In recent years, there has been an increased uptake in EDI training that focuses on tackling unconscious or implicit bias, to demonstrate organisations' commitments to equality and inclusion. Whilst this is a useful tool to prompt complex and difficult conversations, it does not go far enough in targeting structural bias and inequality. In fact, a lot of the training is substandard, but 'thin' approaches to equality and inclusion are not just limited in scope, they can also do harm. EQUAL-Futures proposes new methodologies to analyse and evaluate organisational policies, practices, and structures to expose inequalities and the unintended consequences of policy initiatives that are often seen as gender-neutral. It is developing a range of mechanisms, such as toolkits, EDI strategies and roadmaps, targets, indicators, training, and resources that provide a far more comprehensive and transformative approach to equality and inclusion. Ultimately, EQUAL-Futures seeks to promote a more nuanced and deeper approach to equality and inclusion, and it seeks to provide the tools to create a more equal future for all.

## Vivid Economics – Robin Smale



Vivid Economics is a strategic economics consultancy spanning public policy and support for commercial decision making with a broad, international focus. It is internationally recognised for ‘putting economics to good use’ in tackling some of the world’s greatest challenges.

Vivid Economics was established by Robin Smale and Oxford Professor Cameron Hepburn in 2006, with the ambition to fill the gap between traditional economics and management consultancies in producing economics with impact. With the aim to cater to the growing market for creative economists and an ambition to enhance the quality and robustness of analysis focused on the environment, Vivid Economics initially launched with a focus on natural resources and climate change. Soon, it expanded into new niches and now offers their services in a suite of diverse disciplines ranging from climate change and natural resources, to industrial transformation and energy, international development, trade, urbanisation, earth observation, and transaction support.

As of March 2021, Vivid Economics and its sister company Planetrics, a specialist technology business providing climate change scenario analysis to the financial services industry, are part of McKinsey & Company. Since the acquisition, both have continued to ‘put economics to good use’ by helping clients respond to critical structural changes facing their organisations, such as the urgent implications of climate change and the transition to net-zero carbon emissions.



Robin Smale is a Director and Co-Founder of Vivid Economics, leading teams in the fields of natural resources, earth observation, cities, infrastructure and energy. His special areas of interest are biodiversity and the financial system, nature-based solutions and green infrastructure in cities. He has carried out hundreds of engagements for multinational companies, governments, international organisations, NGOs and governments, often involving partnerships with clients lasting many years. His work takes him across the EU, Africa, North America and Oceania from a London base. He supervises Vivid’s financial and legal administration.

Robin also sits on the Leadership Group of the Finance for Biodiversity Initiative. He was advisor to the Economic Sub-Committee of the UK Cabinet as a founder member of the Natural Capital Committee, 2012-15, and previously advisor to the UK government in policy reviews on energy system reform and water charging. He enjoys close collaborations with academics. Robin holds degrees from the University of Oxford and University College London.

Twitter: @VividEconomics

## Care Quality Evaluation (CQE) – Michela Tinelli



Care Quality Evaluation (CQE) is a decision support platform that was developed by Dr Michela Tinelli from the LSE as a scalable solution to the challenges faced by those delivering care interventions. CQE provides actionable points to support value-based decisions and improve individual lives. It aims to improve outcomes in population health and healthcare, tackle inequalities, enhance productivity and value for money, and support social and economic development.

The idea is to support an Integrated Care Ecosystem using pre-built compliant capability and re-usable tools to deliver a service that can develop new insight at population level through the collection, monitoring and evaluation of data created from patient level interventions and the context in which those interventions were delivered. The underpinning business intelligence capability is intended to be easy to use and will probably be delivered through a Software as a Service model to reduce the time and cost of developing new services and provide healthcare professionals and patients with a consistent user experience. Connecting individual patient outcomes to the economic productivity and social impact of care management on the population will realise a multiplication effect at population level by delivering small incremental differences for individual patients.

So far, feedback has been used to create the specification for a Minimal Viable Product (MVP), a version of CQE with basic features. The MVP will be trialled and tested with user groups and stakeholders, who have already committed to field studies to gain user feedback that will inform further product development in advance of getting the product ready for roll out.

Dr Tinelli has also developed the Business Intelligence Platform (BIS). When acting as an external evaluator for a project on business interventions, she saw the opportunity to apply the same rigour, data management and engagement used in integrated care management to business and organisational settings. BIS combines academic research with data analysis to provide actionable insights. It has two main components: an insights engine of good practices with connections to real stories and an evaluation engine for the production of new business intelligence and insight. As part of the problem discovery and proof-of-concept work with key stakeholders in the UK, a digital demonstrator has been developed to illustrate and test the underlying thinking. The team is currently working with their technical partner to develop the specification for a MVP to test the market for a commercial platform.

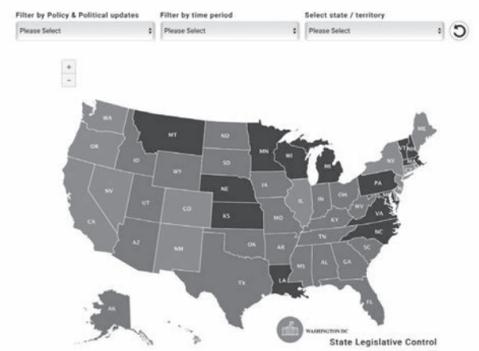


Michela Tinelli is the Founder of CQE and BIS, two LSE Innovation-funded projects looking at the development of new person-centred technologies. She is also an Assistant Professorial Research Fellow and NIHR SSCR Fellow at the Care Policy Evaluation Centre (CPEC) at the LSE.

Amongst other research projects, Michela is currently working on the Economics of Social Care Compendium (ESSENCE) continuation study, which examines the economic case for adult social care interventions. She is also acting as health economist for two other NIHR School for Social Care Research projects led by King’s College London.

Michela’s research is primarily concerned with the performance evaluation of health and social care services in the community. In her work, she develops and applies cost and outcome performance measurements and evaluation to support person-centred care and inform policy and practice decision-making across settings. She has a PhD in Health Economics and Primary Care and an MSc in Public Health and Health Services Research from the University of Aberdeen, as well as an MSc in Pharmacoeconomics and a Professional Doctorate Degree in Pharmaceutical Chemistry from the University of Milan.

## The State of the States – Chris Gilson



Developed by Chris Gilson and the London School of Economics’ Phelan United States Centre, The State of the States is an online professional subscription service platform covering the United States. It aims to increase knowledge and awareness of state and local policy and politics issues, and improve policy making by connecting US state and local government policymakers and practitioners with the best practice they need to do their job.

The platform has two main components, 1) a free, map-based database of US state information aimed at students and educators, and 2) a subscriber-only database of case studies covering state and local policymaking and aimed at practitioners.

More than 10 million people work in US state and local governments. Each one of these employees works in one of 50 states. That’s 50 different administrations, 50 different ways of doing things, 50 different ways of solving similar problems like how to tackle COVID-19, homelessness, and unemployment. Rather than reinventing the wheel 50 times over for every single problem faced by government, wouldn’t it be better for those working in state and local governments to share what works – and what doesn’t – to solve the problems they’re facing?

The team’s research has revealed that policy practitioners want to learn from their peers in other governments about best practices for addressing policy problems, but there is no systematic way for them to do this. Much of this is down to the perennial constraints faced by practitioners: a lack of time and monetary resources; staff churn; legislative term limits; and legacy ways of listening to citizens. The State of the States helps to solve these problems via a subscription service which curates and provides this information for policymakers and governments.

Following conversations with policy practitioners in the US to determine their needs, The State of the States team is now building a Minimum Viable Product (MVP) to test the market for a commercial platform showcasing practitioner-oriented policy case studies. Once it’s completed, we will test the usability and usefulness of this commercial MVP with potential customers and continue to scope users’ needs for the next level of service.

The State of the States is run by the LSE’s Phelan United States Centre and was first developed in the summer of 2018. In 2019, the first version of The State of the States was recognised with a Guardian University Award for digital innovation. The project was seen by a panel of judges as an important tool for exploring US state politics and policy issues and has been added to the Guardian University Awards’ ideas bank.



Chris Gilson is the Creator of The State of the States and Managing Editor of USAPP, the LSE Phelan US Centre’s daily blog on US politics and policy. He was previously Managing Editor of the LSE’s British Politics and Policy blog and of EUROPP, the LSE’s European Politics and Policy blog, both for the LSE’s Public Policy Group.

He is experienced in creating, building and managing digital projects that leverage social science research to create real-world impacts. In 2012, Chris was the recipient of a UK Times Higher Education Leadership and Management Award for Knowledge Exchange/Transfer Initiative of the Year for the LSE’s blog initiatives. He has an undergraduate and a Masters degree in Geography, and a postgraduate diploma in Strategic Management, all from the University of Waikato, Hamilton, New Zealand.

Twitter: @ChrisHJGilson

# Rooted Ventures: The rise of social ventures rooted in research

By Chris Blues, Programme Manager for Social Ventures, Skoll Centre for Social Entrepreneurship

There is a growing consensus: the time has come to use the tools of enterprise and business to solve global social and environmental challenges. Social ventures, ventures intentionally tackling social or environmental challenges, have been an exciting new development in this space through their dynamism and innovation allied to rising impact capital to support them. We believe a new entrant is emerging within this family – the rooted venture.

Rooted ventures take the deep insights from rigorous academic research be that the impact of water shortages in East Africa or the need for affordable diagnostics in low-income countries and generate products and services that can be delivered through a venture.

Fortunately, impact investors are increasingly searching for just such innovations in the understanding, solution or business model. Mainstream impact investing is growing rapidly – between 2014 and 2019 the impact investing market has experienced a 48-fold increase from USD 10.6 billion in 2014 to USD 502 billion in 2019. Unfortunately, social and environmental challenges are increasing apace – it is estimated that to achieve the Sustainable Development Goals (SDGs), we need to trillion a year in suitable solutions.

A gap persists between the demand for investable social ventures and the supply of ventures that have a capacity, capability and understanding when solving global challenges.

Perhaps now is the time for research backed social ventures to unleash their potential? Three celestial elements are manoeuvring to form the perfect time to grow a venture with rooted impact.

1. Impact investors remain frustrated due to the lack of 'investment ready' social ventures – mainstream impact investors are struggling to deploy capital in high impact social ventures.
2. An innovative group of professors and researchers are seeking to do something new – to leverage the immense power and potential within a university ecosystem and create long term, scalable and sustainable impact beyond publishing journals and education. We are seeing a new generation of researchers that are open to entrepreneurship and venture building as a way to express their work.
3. There is a desire from the public sector and government institutions, such as research councils, to accelerate research findings and expertise into practice through social ventures.

## How does a rooted venture differ from a typical social venture?

The key lies not in the business model (although that may be different) but in the understanding of the problem and the solution there-crafted. A typical rooted venture typically emerges out of years – sometimes decades of research into a particular area. Deeply granular understanding of the problem, what works. This may lead to novel solutions, novel applications of solutions but most importantly it is evidenced by the research giving investors confidence their investment will yield impact.

Take SOPHIA from the University of Oxford. SOPHIA is built upon decades of econometric and International Development research around how to systematically measure *types of poverty* such as sanitation, access to water or education. Knowing the type of poverty is critical to crafting the right solutions to tackle it. SOPHIA developed an innovative business model built around helping companies in developing countries understand the types of poverty their employees experienced and thus helped them to tackle it.

Rooted ventures will not be limited to one subject domain, Smart Handpumps predicts when water pumps break in rural Africa, it mixes Geography and engineering to tackle the blight of water shortages. The best social ventures will directly or indirectly blend both, a technically brilliant intervention needs to be rooted in an understanding of a real problem and collaborative engagement with those who experience the problem in order to be effective.

SOPHIA and Smart Handpumps are not the first but until then rooted ventures were often lone pioneers. No longer, with the help of funds like GCRF and growing awareness from impact investors and philanthropists a new generation of academics from every discipline are emerging, leveraging their deep insights into context with technical brilliance and a thoroughly rooted evidence base to tackle societal and economical challenges across the globe.

It's not an either/or. Rooted ventures will be part of a much wider toolkit of ways to harness the power of enterprise to generate new and impactful solutions. We do however think they will unleash innovation in the social venture world, innovation in understanding, innovation in products and services and innovation in business models.

We believe this is an exciting new era for social ventures. Rooted ventures ally some of our brightest minds and a desire for research to improve our world and focus them on some of the toughest challenges from poverty to education to health. Imagine the possible impact if we intentionally curated university ecosystems to support rooted ventures? Sprinkling the knowledge,

tools, connections, inspiration, community and early-stage investment to nurture these innovation professors and researchers.

**Rooted ventures ally some of our brightest minds and a desire for research to improve our world and focus them on some of the toughest challenges from poverty to education to health.**

## Financial innovation is the key to unlocking the impact of Rooted Ventures

It is time for the financial ecosystem to nurture and support the growing wave of rooted ventures and other problem-oriented, social ventures.

Exciting as rooted ventures are and with many more emerging their potential will – as with most ventures – depend on their ability to access the right type and right amount of finance at the critical moments of their growth. Looking at the financial ecosystem today we will need to innovate and diversify if it is to support these emerging ventures and meet them where they are. There is a significant amount of untapped impact potential ready to be catalysed through social ventures, if only we could have the courage to develop and implement new ideas in the financial ecosystem, as much as escaping from the old ones.

The time for diversification has never been better. There are record levels of capital going into investments, with impact investing in particular growing in leaps and bounds in the UK, growing from £830m in 2011 to £5.1bn in 2019. This impact investment grew out of investors wanting to realise social as well as financial gains. Many of the investors (and the capital) emerged from high growth sectors, like tech and so the impact funds were structured with a similar worldview, value system and expectations of the ventures they invested in.

What is that worldview? Most funds are structured asymmetrically, balancing risk and reward across their portfolio, with an expectation that a significant number of ventures will fail but a handful might see exponential growth which delivers the returns. Impact investing while not having the same growth expectations is still structured with this expectation which has manifested itself into the ecosystem we see today. A distorted investment focus on tech or tech-enabled solutions. Tech solutions are undoubtedly a critical part of the ecosystem and can be brilliantly innovative but they are only one segment of the social ventures that we could nurture.

Tech is a broad church but can bias towards less optimal outcomes. Tech can lead to a focus on wide but shallow impact such as solutions generic enough to reach a critical market size; a focus driving growth in app users and an app-only approach to effecting change. We are seeing tech solutions trending towards products/services designed for people with the ability to use them – they presuppose digital literacy, internet connectivity and often the ability to pay for the app services – narrowing the field of users. Tech can also simplify; scalability tends towards uniformity – tech solutions aren't always easily tailored towards local cultural, social and economic contexts – it's the same product to as many people. Many of the most marginalised exist in contexts where a tech solution may be a poor fit for their challenges, yet their need is greatest.

Tech approaches also interact with the market differently – their focus is on seizing market share and Blitzscaling – the incentive is to become the dominant product/service in a market and protect their patch. Collaboration with competitors is very rarely encouraged because it threatens the core growth metrics the venture is optimising for.

The bias to scalability can also be more subversive, with social ventures – in desperate need of finance turning the investor into the true customer, what is possible often becomes, what is investable. Even when tech is on the roadmap, sometimes entrepreneurs are forced into it early to attract investment, grafting tech to attract financing, sometimes it would be better for the tech to wait as social entrepreneurs refine their offering before scaling it with tech.

We are limiting our collective imagination and creativity to align to a narrow definition of 'investment ready'. The result is a far less diverse and homogeneous ecosystem, that incentivises just one approach leaving a larger part of the ecosystem of social ventures and their beneficiaries bereft of the resources to grow and tackle the myriad of problems in our society.

If the above sounds too critical it's not, it's a call to arms. Tech based social ventures under 'Tech for Good' are a powerful, innovative, inspirational and welcome force. But they are only one part of the social venture ecosystem and if we want healthier, more resilient and more equitable societies we will need finance that can enable a more diverse social venture ecosystem.

### What are the attributes this requires:

1. Deepen translational and pre-seed funding for research – Rooted ventures typically emerge from university research, research councils can support impactful ventures by including options for translational research funding – enough for a venture to get up and running for 1–2 years.
2. Early investor engagement with rooted ventures – Some investors may be financially restricted from investing until a company can de-risk, but investors can engage with rooted ventures during their early years – guiding and supporting them on the operational milestones needed for them to be eligible for capital.
3. Move away from exponential growth expectations – Many social ventures, especially rooted ventures begin as service providers as the researcher deliver their solution like a consultancy – they scale with staff and may only see steady rather than exponential growth.
4. Be patient and extend time horizons when deploying capital – Many rooted ventures do become scalable but often it takes 2–3 years as they establish their business model. Sometimes this involves developing tech but the tech is more likely to enable rather than be the product itself.
5. Invest the right amount at the right time – Non tech enabled social ventures tend to have lower capital costs, they are more likely to be service based with the costs primarily being in salaries. The key gap in finance is often at a pre-seed/seed level (such as £50–150k), this is called the pioneer gap.
6. It is time to be innovative with financial products – Equity isn't always the right vehicle, many social ventures will never exit and many founders prefer a company limited by guarantee which has no shares. Debt financing or revenue participation agreements are critical.
7. Invest in good research not just good tech – Some problems are hard, tractable and are not suited to scale but they can effect major change in the lives of the people they seek to serve – big number impact measurements should only be one part of the story.

This won't suit all investors and may not be possible for many who are expected to deliver high growth returns. Yet we believe the marginal social value will be much higher with greater heterogeneity in the financing available, a heterogeneity that matches that which we are seeing on the venture side. It is time to unlock the impact potential we are seeing emerge – financial ecosystems are the key.

9:30–9:45  
**Coffee, tea and welcome**

9:45–9:55  
**What are SHAPE ventures**  
Chris Fellingham, Co-Founder ARC Accelerator, Social Sciences and Humanities Lead, University of Oxford Innovation

10:00–11:00  
**SHAPING Business and Society**  
Vivid Economics – Robin Smale, Director and Co-Founder  
Wise Responder Inc – Jamie Coats, Co-Founder and CEO  
Good Judgment Inc – Warren Hatch, CEO  
Moderator: Chris Fellingham, Co-Founder ARC Accelerator, Social Sciences and Humanities Lead, University of Oxford Innovation

10:00–10:40  
**OxCarbon**  
Atif Ansar, Founder and Director

**SHAPE changemakers lounge**  
with Aspect Angels, Zinc and Impact 12

11:15–11:30  
**Break**

10:40–11:20  
**In Place of War**  
Ruth Daniel, CEO and Creative Director

11:30–12:30  
**Creating an innovation ecosystem for SHAPE researchers**  
ESRC – Melanie Knetsch, Head of Commercialisation  
British Academy – Hetan Shah, CEO  
Research England – Ed Hughes, Director (Insights and Engagement)  
Moderator: Morven Fraser-Walther, IP and Innovation Manager, University of Glasgow

11:40–12:20  
**Versed AI**  
Fenella Boyle, Co-Founder and CEO

12:30–13:30  
**Lunch in Benjamin Franklin Room**

14:00–15:00  
**The finance we need to deliver SHAPE ventures**  
NESTA – Matt Seden, Chief Strategy Officer  
OakNorth – Deepesh Thakrar, Senior Director Debt Finance  
Global Innovation Fund – Francesco Valente, Investment Associate  
Moderator: Julia Black, President of the British Academy, Strategic Director of Innovation, London School of Economics and Political Science, and Chair of the ASPECT Steering Group

13:30–14:10  
**OnTrack Rehab**  
Gianpaolo Fusari, Project Lead

**SHAPE changemakers lounge**  
with Aspect Angels, Zinc and Impact 12

14:10–15:00  
**Parenting for Lifelong Health**  
Laura White, Consultant

15:00–15:30  
**Lightning Pitches**  
Senseful AI, EQUAL-Futures, Humanity Research Consultancy, MFL Mentoring, The State of the States, Care Quality Evaluation

15:30–15:35  
**Closing remarks**

15:35–16:45  
**Reception in the Vaults**

17:00  
**Close**