



RENKEI Anniversary Climate Adaptation & Resilience Early Career Researcher Fellowships and Winter School

RENKEI Early Career Researcher Fellowships

To celebrate the tenth year of the [RENKEI](#) network, we are delivering a fellowship programme and Winter School for Early Career Researchers (ECR), which will engage a range of disciplines within five climate-focused themes. The programme will enable UK/Japanese collaborations that advance cutting-edge research into climate adaptation and resilience, and facilitate national and international policy engagement and impact.

The programme will focus on the researcher response to the interdisciplinary, global challenge of climate adaptation and resilience across the following RENKEI themes:

- Future risks and adaptation in floods and water shortage
- Future risks and adaptation in food production and security
- Managing future risks and building resilience in urban areas
- Future risks and adaptation in ecosystems
- Future risks and adaptation in human health

The network will consist of a cohort of up to 36 Early Career Researchers coming together for a programme of cohort-based virtual events, individual virtual mentoring fellowships, an in-person 1 week Winter School in Kyoto, Japan and opportunities for extended UK/Japan visits and small project funding.

The RENKEI programme will have a variety of events in 2022 and early 2023 that will bring together the members of the network to advance relationships and build collaborations. The main programme events that will occur are as follows:

- Virtual Mentor and ECR Conference: 22 September 2022, 8-10am UK 4-6pm Japan.
- In-person Winter School at Kyoto University, from 28 November to 2 December 2022.
- Virtual RENKEI Programme Closing Conference, 3 March 2023, 8-10am UK 4-6pm Japan.

All fellows must attend all events in the programme and be willing and available to fully commit to the programme opportunities.

Application Process

Prospective fellows should complete the below application form and submit it along with a two-page CV to intlsenryaku@jimu.kyushu-u.ac.jp by Friday, 15th July, 2022. After an internal selection at your home institution, the RENKEI Fellowship and Winter School organising committee will make the final selection of fellows based upon the below application criteria, disciplinary and thematic spread, equality, diversity and inclusion considerations and match to the available mentors. Up to 3 fellows per RENKEI member institution will be selected.

Application Criteria

- For the purposes of this programme the definition of ECR will not be rigidly defined and prospective fellows should judge for themselves whether they would derive value from taking part in the programme. As a rough guide, second year of PhD through to around 5 years post-PhD is the broad expected range, but level of experience may differ if the prospective fellow is looking to change focus or work in a different way.
- Applicants who will likely derive most benefit from the Fellowship and show clear interest and enthusiasm from taking part will be prioritised.
- Priority will also be given to those applicants whose research best fits the climate adaptation and resilience thematic areas listed above.
- All candidates must commit to attending all of the main RENKEI programme events - the virtual Mentor and ECR Conference, the in-person Winter School at Kyoto University and the virtual Closing Conference.
- Applicants must have the support of their primary supervisor/line manager and their suitability will be judged partly on the strength of their statement of support.

Benefits of being a RENKEI Fellow

- Attendance at the Climate Adaptation and Resilience Winter School in Kyoto University, Japan and the virtual pre and post School conferences
- Opportunity to work with and learn from academic mentor(s) in climate adaptation and resilience from Japan and the UK
- Networking with peers across the RENKEI member universities from a variety of disciplines
- Opportunity to apply for further funding for travel to the UK/Japan and/or project seedcorn funds
- Access to career enhancing professional development opportunities and training



RENKEI Anniversary Climate Adaptation

Early Career Researcher Fellowships and Winter School

RENKEI Mentor Biographies



Professor Glenn McGregor

Glenn is Professor of Climatology at Durham University, UK. Qualifications include a MSc (1st Class): University of Auckland and a PhD: University of Canterbury, New Zealand. Research interests cover synoptic climatology and climate and health. As well as an IPCC lead author (6AR), Glenn is a member of Public Health England's Health Protection Unit's Research Advisory Board, the Global Heat Health Information Network's steering committee and editor of Springer's Biometeorology book series. Previous international leadership roles include World Meteorological Organisation's Lead Expert Climate and Health, Chief Editor the International Journal of Climatology and President the International Society of Biometeorology.



RENKEI Theme:

Future risks and adaptations in human health

Dr Sim Reaney

I am an Associate Professor in the Department of Geography and Co-Director of the Institute for Hazard Risk and Resilience at Durham University. My research focuses on hydrological dynamics, simulation of environmental processes and water-based risks. These water-based risks include diffuse pollution impacts on water quality and projected climate change impacts on water resources, low flows and flooding. I design, build, and apply a range of environmental simulation models, using both full physics and reduced complexity approaches. I am current working on flooding and diffuse pollution in the UK, Indonesia and Nepal.



RENKEI Theme:

Future risks and adaptation in floods and water shortage.



Dr Alistair Ford

Dr Alistair Ford is a Lecturer in Geospatial Data Analytics in the Civil and Geospatial Engineering discipline of the School of Engineering at Newcastle University. Dr Ford's research explores the use of geospatial data, models, and analytics in climate change impacts, adaptation, and resilience. His interests lie in the use of simulations of future land-use and urbanisation to explore their impact on climate risk and to improve urban planning responses to climate impacts such as flooding and extreme temperatures. He is also interested in public engagement on climate change, working with local school children and cultural organisations.



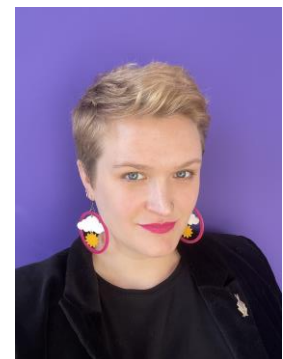
RENKEI Themes:

Future risks and adaptation in floods and water shortage.

Managing future risks and building resilience in urban areas.

Dr Cat Button

Dr Cat. Button is a Senior Lecturer (associate professor) in the School of Architecture, Planning and Landscape at Newcastle University, UK. Water has been Dr Button's research focus for over a decade, particularly looking at domestic water shortages in India. She is interested in how people deal with not having enough water (and also what happens when there is too much water in the wrong place). She is increasingly drawn to *why* people make these decisions around water provision and use. She is a co-Investigator on two international and transdisciplinary UKRI GCRF research hubs. Her current research focusses on cultural, social and spiritual significances of water.



RENKEI Themes:

Future risks and adaptation in floods and water shortage.

Managing future risks and building resilience in urban areas.

Dr Vicky Macrae

Dr Vicky MacRae, is a cell biologist with over 15 years of experience investigating the mechanisms of calcification in cardiovascular and bone tissues. Vicky has over 75 publications and was the first to demonstrate a link between osteocytes and arterial calcification. She has investigated calcification extensively through mouse models lacking *Enpp1* and elucidated novel metabolic mechanisms. Additionally, she is a founding member of the International Scientific Society of Ectopic Calcification. Vicky is passionate about career support, and is currently co-lead for her Institute's early career researcher experience, and a mentor for the BBSRC Discovery fellowship scheme.



RENKEI Theme:

Future risks and adaptations in human health.



Professor Jouni Paavola

Jouni Paavola is Professor of Environmental Social Science in the School of Earth and Environment at the University of Leeds. He is also Co-Director of the ESRC Centre for Climate Change Economics and Policy (CCCEP), a joint research centre of the University of Leeds and London School of Economics and Political Science chaired by Sir Nicholas Stern. He is an interdisciplinary social scientist whose research examines environmental governance institutions and their environmental, economic and social justice implications, particularly with regard to climate change adaptation, biodiversity, natural resources and ecosystem services. He was a member of the Scientific Committee of the European Environment Agency (EEA) in 2008-2016. He has authored 90 peer-reviewed articles published in journals such as Science, Nature communications, Nature Climate Change, Philosophical Transactions A, Global Environmental Change, Climatic Change, Ecological Economics and Energy Policy. He obtained his PhD in Resource Development (Environmental & Development Studies) at Michigan State University in 2000.



RENKEI Themes:

Future risks and adaptation in floods and water shortage.

Future risks and adaptations in human health.



UNIVERSITY OF LEEDS

Dr Vasilis Sarhosis

Dr Vasilis Sarhosis is an Associate Professor in Structural Engineering at the School of Civil Engineering, University of Leeds and CDRI (Coalition for Disaster Resilience Infrastructure) Fellow 2022. He holds both undergraduate and postgraduate degrees in Civil Engineering from the University of Leeds and worked as a consultant Civil Engineer in the UK. He is a Chartered Engineer (CEng) and Fellow of the Institute of Civil Engineering (FICE), Fellow of the Institute of Mechanical Engineering (FIMEchE) and Fellow of the Higher Education Academy (FHEA) in the UK. His research focuses on understanding the long-term behaviour of masonry infrastructure subjected to natural and man-made hazards. His team has a strong translational focus, while his work encompasses both “blue skies” research and “near-to-market” development. He has published more than 110 peer reviewed journal manuscripts, with his research cited more than 2,400 times.



RENKEI Theme:

Managing future risks and building resilience in urban areas



Professor James Cooper

I am Professor of Hydrology and Faculty Director of Postgraduate Research in Science and Engineering at the University of Liverpool. I am based in the School of Environmental Sciences and use a combination of physical and numerical modelling to study how storms affect flows and sediment transport in rivers, estuaries and on hillslopes. I use these tools to examine how climate change will affect storm-related hazards to critical infrastructure, such as flooding and erosion.

RENKEI Themes:

Future risks and adaptation in floods and water shortage.

Future risks and adaptations in human health.



Dr Sharon Zytynska

I am a BBSRC David Phillips Research Fellow at the University of Liverpool. My research aims to understand how we can reduce insect pests on crops by exploiting natural species interactions. We inoculate barley plants with beneficial soil bacteria and measure the response of aphid insects feeding on the plants, across variable climate environments. We study this from the molecular level to identify relevant plant genes, all the way up to field trials. Developing practical solutions for pest control in cropping systems is important for building more sustainable agroecosystems.

RENKEI Themes:

Future risks and adaptation in food production and security

Future risks and adaptations in ecosystems



Professor Andrew Cundy

Andy is Professor of Environmental Radioactivity, and Director of the SPITFIRE and INSPIRE NERC Doctoral Training Programmes at the University of Southampton. Having originally studied oceanography, Andy graduated with a PhD in Geology from Southampton in 1994, and since then has worked at various UK Universities before rejoining Southampton in 2016. He has over 30 years' research experience in aquatic and terrestrial pollution; contaminated land and water management; the Anthropocene; coastal change; and climate change and pollution. Andy has worked across four continents in projects funded by government, environmental bodies, industry and other sources, and has published over 140 scientific papers and 2 patents.



RENKEI Themes:

Managing future risks and building resilience in urban areas
Future risks and adaptation in floods and water shortage.
Future risks and adaptations in human health

Dr Jasmin Godbold

I am Associate Professor in Marine Ecology and I lead the Marine Biology and Ecology Research Group in the School of Ocean and Earth Science, University of Southampton. My research focuses on understanding how environmental change and human activity affects marine biodiversity, organism characteristics within and between populations of different environmental history and the associated impacts on ecosystem properties, such as carbon storage and nutrient cycling. Within this context a key question I am interested in exploring is how we take this context dependency into account when developing nature-based solutions or adaptive management strategies for coastal and shelf-sea ecosystems.



RENKEI Theme:

Future risks and adaptations in ecosystems



Professor Yasuto Tachikawa

Prof. Yasuto Tachikawa works at Department of Civil and Earth Resources Engineering, Kyoto University in Japan. He specializes in hydrology and water resources engineering. His main expertise as a hydrologist is in rainfall-runoff modeling and development of real-time flood prediction techniques. Hydrologic projections under a changing climate are also his interest. Recently, he and his group have worked through prediction of largest-class floods and non-stationary hydrologic frequency analysis using a large ensemble of climate simulations.



RENKEI Theme:

Future risks and adaptation in floods and water shortage.

Assistant Professor Tomohiro Tanaka

Assist. Prof Tomohiro Tanaka works at Department of Civil and Earth Resources Engineering, Graduate School of Engineering, Kyoto University in Japan. He obtained his doctoral degree at Kyoto University in 2016. After working a postdoctoral fellow at Japan Society of Promotion of Science, he became an assistant professor at Graduate School of Global Environmental Studies then Graduate School of Engineering, Kyoto University. His research field is hydrology, especially focusing on flood risk assessment and its impact assessment by climate change based on hydrological/hydraulic numerical modelling and simulations. He also addresses socio-hydrological research employing agent-based economic models for describing societal response to climate change and flood risk management policies.



RENKEI Theme:

Managing future risks and building resilience in urban areas



Dr Hisako Nomura

Her specialization is the development and environmental economics, such as stated preference methods and field experiments in agriculture and resource use. The main research focus is to evolve research to develop evidence-based policies. For sustainable development, behavioural change of the consumer and producer of resources is essential. Thus, her research interest resides in researching the decision-making of both consumers and producers and how to promote sustainable use or practice of resource use, and whether to adopt new agricultural technology and sustainable practices in order to establish sustainable use (a mechanism) of them and finally to provide evidence-based policy implication.

RENKEI Theme:

Future risks and adaptation in food production and security





Associate Professor Ryota Tsubaki

Ryota Tsubaki is an associate professor in the Graduate School of Engineering Civil and Environmental Engineering at Nagoya University, Japan, where he has been a faculty member since 2016. He received his Doctorate in Civil Engineering from Kobe University, Japan, in 2006. After working at Nagoya University as a post-doctoral researcher, he worked at Hiroshima University, Japan, then moved to Nagoya University, Japan, in 2016. His current research interests include

(1) high-resolution inundation flow simulation and its application to mitigate physical and environmental risks, and
(2) development of advanced field monitoring methods for quantifying flow and sediment transport in open channels based on flow visualization and pressure and hydroacoustics measurement approaches.

RENKEI Themes:

Future risks and adaptation in floods and water shortage.

Managing future risks and building resilience in urban areas



Professor Koji Shimada

Prof. Koji Shimada is currently working for College of Economics, Ritsumeikan University located in Kyoto, Shiga, and Osaka. He is an environmental economics and policy researcher. His research interest includes renewable energy policy, energy consumption behavior and climate change adaptation. In the field of climate change adaptation by farmers, he published a paper “The effects of multiple climate change responses on economic performance of rice farms: Evidence from the Mekong Delta of Vietnam” in collaboration with Dr. Thanh Tam Ho in 2021. He obtained Ph. D at Kyoto University and has 17-years experiences at Ministry of the Environment, Japan.



RENKEI Theme:

Future risks and adaptation in food production and security



Professor Brendan Barrett

Brendan Barrett is a specially appointed professor at Center for Global Initiatives, Osaka University, Japan and a Fellow of the Royal Society of Arts, Manufactures and Commerce, UK. He is an adjunct professor at the School of Media and Communications, RMIT University, Australia. His research interests cover ethical cities, climate change, accelerated decarbonization, sustainable energy transitions, sustainability science, and local environmental management. He is an award-winning documentary filmmaker and has been extensively involved in the development of various science communication projects and teaching programmes.



RENKEI Theme:

Managing future risks and building resilience in urban areas

Associate Professor Sayako Kanamori

Dr. Sayako Kanamori is currently an Associate Professor at Center for Education in Liberal Arts and Sciences at Osaka University. Her previous positions at the University included Specially Appointed Associate Professor at the Center for the Study of Co*Design and Institute for Transdisciplinary Graduate Degree Programs. Before joining Osaka University, she was a Director of Research at the Japan Institute for Global Health, a health specialist at Japan's Ministry of Foreign Affairs, and a business consultant specializing in finance and accounting management. Her main research focuses on global health policy and diplomacy, global health human resource development and healthcare business.



RENKEI Theme:

Future risks and adaptations in human health



Professor So Kazama

So Kazama is a Professor at the Graduate School of Engineering, Tohoku University, Japan, and has more than 25 years of research and education experience in several universities. His study regions are mainly the Tohoku district with a lot of snow and Southeast Asia with the gradual flood. Kazama applies hydrological models to some fields, which are not only water resources and flood prevention, but also economics, health science, and ecology, by combining models from several different fields to estimate quantitative amounts. Also, he likes going to actual fields for observation and measurement to see the real phenomena.



RENKEI Theme:

Future risks and adaptation in floods and water shortage

Associate Professor Daisuke Komori

I am currently an Associate Professor in the Department of Civil Engineering and Graduate School of Environmental Studies, Tohoku University, Japan. Since late April 2022, I have been staying at the University of Nottingham, UK, for the international collaborative research regarding the changing climate under the JSPS Fostering Joint International Research (A). Regarding the Climate Adaptation, board members on "Promoting Observation and Monitoring of Climate Change Impacts" Ministry of the Environment; Countermeasures against Woody debris in Reservoirs" and "Urban Flooding Countermeasures in Light of Climate Change" Ministry of Land, Infrastructure, Transport and Tourism, etc.



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