Annual Report 2021

Edited by Peter Sammonds, Rosanna Smith and Rebekah Yore

www.ucl.ac.uk/rdr/
The UCL Institute for Risk and Disaster Reduction (IRDR) was launched in 2010 with a mission from the Provost to lead transdisciplinary research, teaching and knowledge exchange in risk and disaster reduction in the UK and internationally. 2020-21 has been a tough year for everybody and the IRDR has been no exception. The reactive UCL-wide staff recruitment freeze did damage. Some staff and students have struggled during the lockdowns. But IRDR students have shown real resilience pursuing their studies, face-to-face and online, under challenging circumstances. When face-to-face teaching resumed, staff and students really enjoyed and drew strength from the contact, even if constrained. With our global engagement we are only too well aware of the impact of Covid-19 around the world. We wish to offer our support. Our research and impact projects have pivoted to addressing Covid-19 both in the UK and around the world.

The IRDR is under-going a rapid phase of expansion, supported by the MAPS Faculty, as we became UCL’s newest academic department in 2020 and prepare for the start in September of our BSc Global Humanitarian Studies. We have over 80 confirmed student acceptances on the programme - far ahead of expectations. There has been a 60% surge in student numbers on our masters programmes in Risk, Disaster and Resilience and Risk and Disaster Science, with such relevant modules as emergency planning, epidemics and big data, and business continuity, as well as also covering natural hazards and impacts of the climate crisis. Coming out of the freeze, the IRDR has been recruiting strongly. We are delighted that Dr Mohammad Shamsudduha is joining us as Assoc Prof in Humanitarian Science; Dr Rozana Himaz as Assoc Prof in Humanitarian Economics; Dr Yulia Ioffe as a Lecturer in Humanitarian Law and Human Rights; and Dr Lisa Guppy as Lecturer – Teaching in Humanitarian Crisis Response. We have approval for further appointments in Humanitarian Policy and Intersectionality and in Crisis and Catastrophe Modelling.

Our mission is to develop the IRDR themed around disaster resilience, cascading crises, natural hazards, humanitarian crisis response, conflict and migration, climate change adaptation, health emergencies, and gender responsive resilience, in order to integrate education, research, innovation and enterprise for the long-term benefit of humanity. There is so much work to be done. We welcome you to join us. If our vision appeals to you, we invite you to join with us. You may join the IRDR through our webpage: www.ucl.ac.uk/risk-disaster-reduction

Peter Sammonds
Director and Head of Department, UCL Institute for Risk and Disaster Reduction

Contents

02 From the Director
03 IRDR at a Glance in 2021
04 Public Engagement
05 Making Impact
06 Enterprise and Innovation
07 Humanitarian Institute
08 IRDR Centres and Research Groups:

Research, Cascading Disasters, Space Health Risk
Education and Training
Doctoral Research Centre
Masters and BSc Programmes
Research Achievements
Academic and Research Staff
PhD Research Students
Publications 2020-21
Calendar 2021-22

Cover: UCL Front Quad during restrictions
IRDR at a Glance in 2021

Below we highlight some of the developments and achievements within the IRDR during 2020-21:

- IRDR became UCL’s newest academic department in September 2020.
- Flipped teaching between in-person and online and back in response to the Covid-19 crisis while supporting research and knowledge exchange.
- 60% surge in MSc student numbers.
- BSc Global Humanitarian Studies starting in September 2021 with 50 firm student acceptances - well above target.
- We are delighted that Drs Mohammad Shamsudduha and Rozana Himaz have joined us as Assoc Professors and Drs Yulia Ioffe and Lisa Guppy as Lecturers.
- Gender Responsive Resilience (GRRIPP) project adapting due to ODA cuts.
- Professor David Alexander was appointed as Specialist Adviser to the House of Lords Select Committee on Risk Assessment and Risk Planning.

- IRDR Centre for digital Public Health in Emergencies won a raft of awards for how they have risen to the COVID-19 challenge including ‘Team of the Year' from Computing Magazine. Professor Patty Kostkova was named ‘Innovator of the Year’ for the second year running.
- Launch of Space Health Risks Research Group and the Warning Research Centre
- Welcomed Lillian Anyadi and Sonia Fullerton, as well as Dr Patricia Martuscelli as social science Research Fellow on the Rohingya Exodus project.
- Congratulated Omar Velazquez, Patrizia Duda and Mark Shortt on graduating with PhDs, while welcoming Sangita Thebe Limbu, Qiushuang Shi, Olafiyinfoluwa Taiwo, Joshua Anthony, Rob Davis, Alexander Thompson, Petr Dodd, Naif Alrehaili and Lan Li as new IRDR research students.
- 800+ participants attended IRDR online events.
- Published over 60 peer-reviewed papers

IRDR Global Reach

Europe: Cascading crises, earthquakes, Covid-19
Arctic: risks, disaster governance
Bangladesh: Landslides, water risks, and the Rohingya crisis
UK: Emergency planning and Covid-19 crisis response
China: Earthquake DRR, vaccinations, farming insurance
Cameroon: Volcanic risks
Japan: Earthquake, transitional housing
Caribbean: Multi-hazard and Covid-19 risk assessment
Thailand: Climate change
Nigeria: Public health apps, Emergency management
Philippines: Housing, shelter and safer schools
Brazil: Health engagement
Indonesia: tsunami hazard
Sub-saharan Africa: Ground water
Mauritius: Climate change
India: Natural hazards in conflict zones
Oman: Emergency management
A key aim of the IRDR is to engage in public debate on issues in risk and disaster reduction, creating a space for academic discourse in the public policy and political arenas, and raising the profile of UCL. To achieve this, we organise discussion meetings, lectures, symposia and an annual conference open to the UCL community and the general public, as well as organising workshops with local communities as part of our research projects and participating in external public engagement events. With the launch of the new Global Humanitarian Studies BSc, we invited a new audience of Year 12 students, their parents and teachers, and welcomed applicants to a series of special events. We have held a number of taster days for prospective students to give them a taste of the degree programme, the sector and the IRDR. Our 2020/21 monthly seminar series, which is open to the public, has covered a broad range of topics including a five-year perspective on the Sendai Framework by Prof Virginia Murray, natech risks by Dr Elizabeth Kraumann, and understanding human behaviour in a disaster by Dr Sarita Robinson. Our public engagement programme has been enhanced through events hosted by the IRDR Centre for Digital Public Health in Emergencies, including the inaugural lecture by Professor Patty Kostkova, the new Space Health Risks research group and the Humanitarian Institute. We also created a programme of online special lectures that ran over the summer.

Public Events in 2020-21

July 2020: IRDR 10th Annual Conference, on Covid-19 Pandemic - A Global Perspective convened by Dr Bayes Ahmed was attended by 300 people, saw the Rt Hon Hilary Benn MP in conversation with journalist Christopher Gunness and a keynote speech by the UNDRR’s Marc Gordon.

July 2020: Humanitarian Summit on Climate and Covid-19 as Humanitarian Crises saw the launch of BSc Global Humanitarian Studies.

August and September 2020: IRDR Webinar series on Risk and Disaster Reduction.

October 2020: Climate Change and Human Migration webinar, convened by Dr Bayes Ahmed,


December 2020: 2nd International Conference on the Rohingya Crisis in Comparative Perspective hosted in collaboration with the Centre for Genocide Studies, University of Dhaka, convened by Dr Bayes Ahmed, attended by 100 people.

January 2021: dPHE 2nd Anniversary Celebration and Professor Patty Kostkova’s Inauguration Event.

February 2021: UCL Humanitarian Institute Masterclass: Earth Observation and Natural Hazards

March 2021: COVID and the Urban: cross-disciplinary perspectives on emergency as part of UCL Urban Laboratory.

May 2021: Space and Health Series: Space, Remote Medicine and Health new seminar series, convened by Myles Harris.
In the IRDR, we aim not only for our research to advance understanding and knowledge in the area of risk and disaster reduction, but also for those findings to have an impact on reducing those disaster risks in the real world.

The UCL IRDR Centre for Digital Public Health in Emergencies (dPHE)’s Zika project (real world deployment of mobile surveillance app for early warning with local PH authorities) and award-winning Gadsa (real world prescription app with impact on behaviour change evaluated in surgeons in 3 hospitals in Nigeria) are excellent examples of research impact of changing health outcomes through innovative technology. The award winning My Lockdown Journal has also helped citizens to improve their wellbeing through journaling in lockdown periods and throughout the pandemic.

Anubhav Dutt Tiwari and Jessica Field’s 2020 submission to the UN Special Rapporteur on Contemporary Forms of Racism was included as evidence in her report to the 75th United Nations General Assembly in November. The report was entitled: ‘Racial and xenophobic discrimination, emerging digital technologies in border and immigration enforcement’. This year, Jessica Field and Ali Johar submitted a legal brief to the Institute on Statelessness and Inclusion to support in an ongoing case challenging the detention and deportation of Rohingyas in India. Bayes Ahmed has continued advising the National Security Intelligence (NSI) of Bangladesh in tackling the Rohingya crisis in Bangladesh, as well as Cox’s Bazar Natural Hazards Technical Working Group (NatHaz TWG), Inter Sector Coordination Group (ISCG), Rohingya response, Bangladesh.

From the Centre for Gender and Disaster, Maureen Fordham was nominated by UKRI and its partners to join the COP26 Adaptation and Resilience Series post-event workshop in June 2021, while Louisa Acciari organised the delivery of a weekly webinar with domestic workers’ unions in Brazil in April 2021, with themes ranging from women’s labour during the pandemic, modern forms of slavery, domestic work and migration, to labour rights and legal achievements of domestic workers, celebrating 85 years of struggle.

Media Engagement

The IRDR maintains a high-profile media strategy, providing both immediate comment during disasters, and features for documentaries and magazines.

Since March 2020, IRDR staff have made numerous global media appearances on Covid-19, commenting on the prevention, preparedness, and emergency management of pandemics, as well as the international political effects, the consequences of lockdown, and digital epidemiology. Professor David Alexander has made over 50 appearances on television, radio, video and podcasts relating to the Covid response. Dr Louisa Acciari was interviewed by France Culture, for the programme World Cultures, Episode 4: “Workers of the World, Stay Home!”, forming part of a series on Covid-19 and labour. Dr Ilan Kelman wrote on natural disasters and pandemic in The Conversation and has appeared in numerous podcasts. Dr Joanna Faure Walker appeared on BBC Radio Cambridgeshire’s “Naked scientists” programme discussing why we cannot predict earthquakes, as well as publishing in The Conversation on why we need to look thousands of years into history to get better at predicting earthquakes.
Enterprise and Innovation

At IRDR Enterprise and Innovation, we are motivated by our passion for bridging the gap between academia and practice.

The GADSA app developed by Professor Patty Kostkova and team continues to deliver impact as a highly innovative digital solution tackling the global challenge of antibiotic resistance. Offering a gamified decision support tool, it aims to increase compliance with antibiotic prescription guidelines. International Antimicrobial Resistance societies, the NHS and commercial companies have noticed the potential of GADSA, while the project has won a number of prizes. It has also won Patty for the second year running, the Innovator of the Year award by the Computing Women in Tech Excellence Awards 2020.

Dr Virginie Le Masson this year has designed and delivered training on Gender and Resilience for the GREAT program based at Cornell University and Makerere University, April 2021. She also delivered a virtual workshop at KIT (Royal Tropical Institute) on Gender Equality and Social Inclusion (GESI) integration in research on climate change adaptation and resilience as part of her extensive outreach role in the Gender Responsive Resilience and Intersectionality in Policy and Practice (GRRIPP) project.

Enterprising IRDR PhD students

Myles Harris became Coordinator of UCL IRDR Space Health Risks Research Group, Mohamed Alwahedi was appointed UAE youth delegate to the United Nations 2020-2021, and Peter Dodd co-authored the Prime Ministerial Daily Winter Summary Report during the 2020 Winter Covid lockdown.

Careers and Students

At UCL IRDR, we provide our students with not only academic excellence but also practical knowledge and training to support their career development.

This year, Emily Warburton-Brown (Risk, Disaster and Resilience MSc 2015-17), led a career-focused session on how business continuity is managed in commercial estates such as Canary Wharf and the London Metal Exchange. We also welcomed Laura Heykoop, Shelter and Settlements Officer at the IMO, who lead a session on working in the humanitarian sector. We hold an annual Careers and Opportunities Fair, specifically targeted at opportunities in Risk and Disaster Reduction. Recruiters, students and alumni find this event useful for making connections with each other and finding out more about the opportunities available throughout the sector. We also offer networking opportunities at our conferences and hold the IRDR Alumni Mixer events, where current students and alumni can meet, share experiences, and help build the global IRDR network. We are proud to see so many of our Master’s students prospering in careers. Recent graduates have found jobs in companies such as Amazon, Global Parametrics and RMS, and NGOs such as Rescue Global, while others have gone on to further study.
The Humanitarian Institute is a UCL Provost’s Strategic Initiative, launched at the 2017 UCL Humanitarian Summit. Its mission is to mobilise UCL’s research, expertise and teaching to impact global humanitarian challenges and to promote education for global citizenship. It is led Professor Peter Sammonds and Dr Rosanna Smith.

Research

The Rohingya Exodus is one of the biggest global humanitarian crises of today. With research funding from the British Academy, the Royal Society, and UCL’s Global Challenges Research Fund allocation, Professor Peter Sammonds and Dr Bayes Ahmed are building a growing research team investigating the historical and contemporary perspectives of Rohingya journeys, their experiences of gendered violence, and ensuring resilient futures for the Rohingya stateless people. We are developing a landslide early warning system for the refugees and host communities in Cox’s Bazar, and are also leading a project, supported by UCL’s Global Engagement Funds, to investigate the impact of climate change and the COVID-19 pandemic on informal human migration patterns in Bolivia.

Teaching

Following an exercise in summer 2018 to map existing teaching at UCL in humanitarian issues, we found that UCL has a strong suite of thematic Masters programmes that cover a range of aspects of humanitarian studies, and that there were many undergraduate modules that address or could be applied to humanitarian issues and contexts. However, there was no existing undergraduate programme to bring this together, yet there was an identified need from employers for undergraduates trained in this area. It is also an area that we believe many aspiring UCL students would like to pursue. So we proposed a new UCL undergraduate degree in Global Humanitarian Studies, which was subsequently approved by UCL in October 2019. Since April 2020, we have organised 50+ virtual events related to BSc promotion and recruitment (e.g. taster lectures, subject talks, offer-holder events, and open days). We are pleased to announce that we will be welcoming the first cohort of undergraduate students in September 2021. We invite students, teachers, educational professionals, practitioners, and employers who are interested in being involved to get in touch.

Humanitarian public events

We run public events with the aim of providing a platform to develop humanitarian themes and networks. Despite the ongoing Coronavirus pandemic restrictions, we are running and successfully organised a number of virtual events:

- Masterclass: Earth Observation and Natural Hazards, February 2021.
- Webinar on Climate Change and Human Migration, October 2020.
The Centre for Gender and Disaster (CGD) is a trans-disciplinary research centre aiming to develop awareness of and responsiveness to gender in humanitarian contexts, through excellence in research and teaching. It is led by Centre Director Prof Maureen Fordham and Centre Co-director Dr Punam Yadav.

The CGD team together with their UK and international partners secured a £5 million UKRI Collective Fund award for the Gender Responsive Resilience and Intersectionality in Policy and Practice (GRRIPP) project launched in November 2019. This project aims to disrupt mainstream development discussions on gender and build a sustainable structure and increase resilience and capacity in Official Development Assistance countries.

Throughout 2020 and 2021 so far, the project team have launched the new GRRIPP website, begun a series of blogs, co-hosted with UKRI/GCRF a Gender Workshop (November 2020), taken part in a number of Public Engagement activities, such as those with the Tomorrow Cities Project, and run a series of Virtual Conversations on the core themes of GRRIPP, including Infrastructure, Resilience, Gender and Intersectionality (see GRRIPP website for summaries). The disappointing UK Government cuts to development assistance and the cuts in grants with an Official Development Assistance (ODA) funding component have meant a reprioritisation of GRRIPP to deliver its outcomes and impacts within a shortened funding time limit. However, postgraduate teaching, PhD recruitment and Masters supervision continues while the team plan an ambitious programme of work for the coming year, centred around creating a community of support and interest that extends beyond GRRIPP, and continuing to advocate for and influence policy-making. Projects across GRRIPP’s three regions of LAC, Africa and Asia are to be commissioned and followed by wide and creative dissemination of research through publication and media.

Centre for Digital Public Health in Emergencies dPHE

In 2020, the team have risen to the COVID-19 challenge and rapidly launched several new initiatives helping citizens in lockdown, recognised by a number of prestigious awards and prizes.

Our current projects include:

☐ ZIKA MEWAR Project: a mobile app improving surveillance of mosquito populations workers and web app for managers to combat ZIKA virus

☐ DR-TB: decision support app to empower doctors in South Africa to manage drug resistant Tuberculosis (DRTB)

☐ My Activity Journal: a wellbeing app and research project and app launched in response to COVID-19 and is now piloted with users living with obesity

☐ iNRIC: International Resource for Infection Control – an invaluable resource for health and infection control professionals globally

☐ Zoom or not to Zoom: longitudinal survey of citizens lifestyle changes since the March 2020 lockdown and a year of the pandemic restrictions

☐ COVID-19 on Twitter: in collaboration with WHO, an analysis of social media discourse around public health policies and measures

The Centre is sharing a passion for digital global health through postgraduate teaching and student supervision, dPHE public engagement, Frontiers in Digital Public Health journal, Conference for Digital Public Health, IRDR and HI events, along with our newsletter and growing following on social media. Read more on our achievements in the 2nd anniversary report here.
UCL Warning Research Centre

The UCL Warning Research Centre (WRC) is unique in bringing together global expertise to explore the role of warnings in managing vulnerabilities, hazards, risks, and disasters. Founded in 2020, the WRC brings together expertise already established at UCL with warning expertise at universities globally to work with businesses, government, non-governmental, and intergovernmental organisations to address the growing need for effective warning and alert systems via cutting-edge research, policy guidance, applications, and collaborative expertise. WRC transforms research into warnings and alert solutions by being strongly interdisciplinary and innovative. The WRC has 25 core members from across UCL and 20 affiliates from all over the globe, bringing a wealth of expertise to the Centre. The WRC has two launch events during 2021: first, hosting the UCL IRDR 11th Annual Conference titled ‘Why Warnings Matter’ and second, a dedicated Department of Science and Technology Studies launch event titled ‘What warnings mean?’

Cascading Disasters Research Group

IRDR Cascading Disasters Research Group has spent five years researching the causes and consequences of complex disasters, and how cascading events interact with concurrent, coincident, compound and interconnected risks. These events include major infrastructure failures, with particular emphasis on prolonged, wide-area electricity failures, as well as global navigation satellite outages of the kind that could occur in 'space weather' incidents caused by coronal mass ejections on the surface of the Sun. The group has produced theory that acts as a ‘roadmap’ to an improved understanding of cascades. It has also produced a cascading disasters magnitude scale and series of guidelines for recognising and dealing with cascading events. This will enable planners to foresee and prepare for sequences of events and to avoid much of the inefficient improvisation that goes with failure to foresee impacts and the needs that they generate.

Space Health Risk Research Group

UCL Space Health Risks Research Group is a multidisciplinary community of researchers and practitioners, who are investigating how space health can contribute to promoting good health and well-being in remote environments on Earth. The research group strategy is aligned with UCL 2034 vision and HM Government, UK National Space Policy, ensuring that UCL and the UK lead the world in this topic for science, technology, policy and practice. The overall aim is to rigorously investigate the risks to health in space and the mitigation of disaster, to inform healthcare systems on Earth. One of the primary projects is a symposium, aiming to establish a multidisciplinary consensus on the provision of prolonged, holistic healthcare during the exploration of another planetary body by an interdisciplinary healthcare practitioner, and how this can inform remote health on Earth. The other key output is a pilot of the first human analogue research mission in the UK to simulate the exploration of another planetary body, planned for 2022.
Education and Training

Education and training are part of the core mission of the IRDR. We have established teaching in hazards, risk, resilience and disaster risk reduction as an integrated discipline at UCL and run three masters programmes with over 70 masters students in 2020-21. We are excited to launch the BSc Global Humanitarian Studies undergraduate programme in September 2021.

We are delighted how both staff and students have risen to the challenge of teaching and learning in the 2020-2021 academic year and we have several successes through awards, award nominations and Higher Education Authority (HEA) Fellowship recognition. With the masters programmes in 2020-2021 being taught both through a blended face-to-face and online learning experience and entirely online, additional academic support was introduced. This year was unique for IRDR in having students studying across multiple time-zones and physically in multiple continents. We are committed to teaching excellence; fundamental to our masters teaching and learning environment are multidisciplinary and holistic viewpoints, research and evidence-based approaches, and interactive and inclusive teaching and learning. As in previous years, our teaching methods and diverse student body brought a richness to in-class discussion and debate, challenging us all to think, analyse, question and progress. Dr Ilan Kelman and Dr Joanna Faure Walker were recognised through nomination for the UCL Student Choice Award in ‘Excellent Research-Based Teaching’ and Dr Punam Yadav for ‘Diverse and Inclusive Education’. In addition, we congratulate Dr Jessica Field and Dr Punam Yadav for achieving the status of HEA Fellow. We now look forward to the ‘Blended by Design’ approach to teaching in 2021 combining the best of the in-person and online environments.

Doctoral Training

The IRDR has a well-established and respected Doctoral Research Centre, with over 30 PhD research students who conduct interdisciplinary, wide-ranging, and international research.

From arctic risks to flood vulnerability, and emergency management to seismic hazard, our PhD programme in Risk and Disaster Reduction is generating extensive interest, especially from international students. All of our doctoral candidates contribute to the vibrancy of IRDR life and support the IRDR’s mission. Many of our PhD students have supervisors from different disciplines and from different universities, extending their knowledge, networks, and contributions. Some work part-time for government, NGOs etc. Our PhD training programme - including participation in the IRDR Student Forum, Spring Academy, and Annual Conference - fosters a new type of graduate student who is comfortable working across sectors. It has been a difficult last year and a half with the Covid-19 emergency. Student research projects have been disrupted particularly because of the suspension of fieldwork. Many international IRDR PhD students returned home. But UCL and IRDR have tried to maintain the research environment with regular online supervisory meetings, continuation of the fortnightly Wednesday Discussion Forums and weekly IRDR Coffee meetings. Research funders, UCL and the IRDR have stepped in to support PhD extensions. The PhD community responded to the emergency through mutual support while many students have been involved in their home country’s emergency response.
Our graduates can benefit from the core themes taught across all our programmes as well as the programme-specific topics across our taught postgraduate courses.

**All of the IRDR Masters Programmes cover four central themes:**

**Understanding Vulnerability**
Covering topics from fragility curves describing damage of buildings to social vulnerability of individuals and society.

**Quantifying Risk**
- What is risk and how do we measure it?
- Components of risk: exposure, hazard, vulnerability.

**Multidisciplinary Holistic Approaches: Theory to Practice**
- Integrating scientific knowledge into disaster risk reduction research, policy and practice.
- Communicating with stakeholders.

**Managing Disasters**
- How to apply plans to manage real emergencies.

**Our programme-specific themes cover a range of additional topics:**

**MRes Risk and Disaster Reduction:**

**Evidence-based research**
- Identify current questions in the field of risk and disaster reduction.
- Learn how to conduct research.
- Develop detailed studies to propose solutions.

**MSc Risk, Disaster and Resilience:**

**Physical and Social Science of Natural and Anthropogenic Hazards**
- What is known and unknown.
- Current research and uncertainties.

**Building Resilience**
- What are the barriers to risk and disaster reduction and how do we overcome them?
- Developing a common language to communicate complex concepts in an accessible way.

**MSc Risk, Disaster and Resilience: Management Pathway**
- Integrating management theory to plan for disasters.

**MSc Risk and Disaster Science:**

**Science of Earth and Space Hazards**
- Analysing different hazard risks: seismic and triggered events, space weather, epidemics, conflict and climate.
- Scenarios and case studies drawn globally providing breadth of experience.

**Statistical and Modelling Tools**
- Statistical treatment of risk.
- Bringing together data and theory.
Unique in the UK, this multidisciplinary programme aims to educate and train future generations of humanitarian leaders in the theory and practice of humanitarian action.

We are now accepting applications for the September 2022 intake. The breadth of the programme means that we recruit students across the humanities, natural and social sciences, geography, mathematics, business studies, economics and computing.

**Programme themes:**

Inequality, Social Justice and Ethics
- Understanding culture and identities, inequality, aid, gender and intersectionality, conflict and migration.

Humanitarian Crises Response and Logistics
- Theoretical background and historical context with practical approaches based on scenario simulations.

Climate and Hazard Risks Impacts and Adaptation
- Concepts of risk, resilience, exposure and vulnerability to climate change and hazards in theory and practice.

International Development
- Sustaining development in the face of crises and disasters.

**Programme Optional Pathways:**

Students choose one optional pathways out of:

**Digital Science**
- Humanitarian data science, risk quantification, digital health and big data, for evidence-based decision making.

**Management Science**
- Organisational and project management, decision making and leadership for the complex interconnected world.

**Global Public Health**
- Disease, poverty, conflict and health crises, to challenge policy and interact with healthcare professionals.

**Anthropology and Social Science**
- Social networks, resilience, anthropology of war, to deepen understanding and provide tools for shaping practice.

**Careers:**

Humanitarian organisations and employers have emphasised the need to professionalise the sector. The core skills in the degree programme are based on a framework developed through on-going consultation with global and national employers in the humanitarian sector.

Career opportunities in the sector
- Inter-governmental organisations
- Government agencies
- NGOs
- International consultancies
- Humanitarian enterprises
- Our extensive networks give students access to practitioners across the sector.
Our public engagement, research impact and graduate teaching are underpinned by excellent academic research. In the last year, IRDR researchers have produced over 70 peer reviewed publications, presented at leading international conferences, been invited to speak (remotely) at prestigious academic institutions, organised international meetings and conferences and have won distinguished awards and substantial research funding.

Research has continued throughout the Covid-19 emergency. The major impacts have been continued delays and limits to fieldwork and face-to-face interviews, continued travel bans and conferences moving online. Recently we have also faced the challenge of the government withdrawing funding for GCRF projects, which impacted our research projects in international development. New projects that address Covid-19 have begun and developed. There have been difficulties, but excellent research is being conducted across the IRDR.

Research Recognition
Professor David Alexander, Dr Ilan Kelman and Dr Bayes Ahmed have all been listed in the world’s top 2% of scientists in their respective fields, according to a newly published study (Ioannidis et al., 2020). Read more on our website. Professor Ilan Kelman was also appointed to Academic Board Member for the Human Security Centre and the Science Council for Centric Lab. Patrícia Nabuco Martuscelli received the International Studies Association (ISA) 2021 Martin O. Heisler Award. Patricia is a Social Science Research Fellow in Conflict and Migration. Find out more about her research here.

Research Funding
In 2020-21, the IRDR continued to achieve a great deal, with academic and research staff winning many new research funding awards, including:

- Strategic Partner Fund, £4,500, 2020
- NERC Standard Grant, Co-I (2021-2024), £650k, Roberts, Faure Walker and Milden, “Active fault slip-rates and earthquake recurrence controlled by stress transfer and viscous flow”
- Peter Sammonds, Katerina Stavrianaki, Ilan Kelman, Simon Day and Akhtar Ahmed won £100k GCRF for “Multi-hazard hurricane and epidemic risk assessment for a small Caribbean island developing state”. This project is focussed on Dominica and uses the Analytic Hierarchy Process to assess risk through physical and social research, in collaboration with the Red Cross and IsraAID.
- Bayes Ahmed was Lead-Applicant on: Climate Change and Migration in Times of COVID-19 in Bolivia. [£3,000]
- The UCL IRDR Centre for Gender and Disaster were awarded £4.8 million as part of the UKRI GCRF Collective Programme for their GRRIPP project, which supports knowledge on gender equality. Though this was awarded in 2019, it was only publicly announced in late 2020. Unfortunately this grant has recently been impacted by government withdrawal of GCRF funding.
**Professor David Alexander** is professor of Risk and Disaster Reduction. His research throughout 2020 has primarily focussed on emergency planning, management and response during Covid-19, around which he has documented effects of the pandemic in the field of UK emergency planning and management. Producing a lengthy working paper and making over 50 television, radio, video and podcast appearances connected with this initiative, his campaign proposes to British authorities in parliament, government and leading institutions how to improve civil protection in the United Kingdom in the light of lessons learned during the Covid-19 crisis. David has continued the IRDR’s close collaboration with universities and other institutions in Japan, particularly connected to the Cascading Disaster Research Group, and in 2021 will see numerous prestigious contributions to published works by, among others, the United Nations and the British Government.

**Dr Ilan Kelman’s** research programme combines disaster research and health research, including the integration of climate change challenges and opportunities into both topics. Two main case studies are priorities: island and archipelago communities, and the poles, so the Arctic and the Antarctic. Specific research questions relate to three main areas. First, disaster diplomacy and health diplomacy including the role of science diplomacy. Second, how climate change will impact physical, mental, and environmental health. Third, how to better connect sustainability and development topics, including health, disasters, and climate change. Intersections occur with island studies, tourism research, polar research, gender studies, and disability studies among other topics. Highlights of 2020-2021 include co-founding the Space Health Risks Research Group led by Myles Harris and the Warning Research Centre led by Dr Carina Fearnley. New research projects include climate change impacts on health in Alaska and Trinidad (Belmont Forum) and multi-hazard assessment and action for Dominica (UCL’s Global Challenges Research Fund).

**Professor Maureen Fordham** is Professorial Research Associate, Centre Director IRDR Centre for Gender and Disaster and PI for the UKRI/ESRC GRRIPP Project. Her research centres around the gender and disaster nexus and exploring complex understandings of gender beyond a simple binary definition. Maureen leads the Gender Responsive Resilience and Intersectionality in Policy and Practice project (GRRIPP): Networking Plus Partnering for Resilience 2019-2023 funded by the UKRI Collective Fund that brings together a range of global partners to disrupt mainstream development discussions on gender. The project aims to deliver insights on process as well as research outputs, a process that involves stepping out of the spotlight and allowing others to step out in front. She is also PI for Plan 2021 Adolescent Girls in Crisis: Voices From The Sahel, and Co-I on RiskPACC - Integrating Risk Perception and Action to enhance Civil protection-Citizen interaction.
Professor Patty Kostkova is professor in Global Health and Emergencies. Her research centres on digital health interventions, Big Data surveillance, early-warning and predictions of outbreaks, pandemics and emergencies. She leads the UCL IRDR Centre for Digital Public Health in Emergencies (dPHE) bringing together experts from UCL and external stakeholders to improve global public health through the use of digital technologies and data systems. dPHE received the prestigious Team of the Year 2020 Award from Computing Rising Starts Awards for the innovative My Lockdown/Activity Journal app. Patty’s research on the ZIKA project investigates a novel approach for early warning of mosquito populations in high risk areas in Northeast Brazil calibrated by unique real-time mobile surveillance data, and she was twice awarded the Innovator of the Year 2019 and 2020 Women in IT Excellent Awards for GADSA and the COVID My Activity Journal app.

Professor Peter Sammonds is professor of Geophysics. His work focuses on increasing resilience to environmental hazards in conflict zones. In the last year, Peter has been working on joint projects between the natural and social sciences on the forced Rohingya Exodus from Myanmar. This year, he has also been working on the confluence of natural hazard risks and the Covid-19 pandemic. He in particular is working on a new project on multi-hazard hurricane and epidemic risk assessment for Dominica and also published on the overlapping of locust swarms with COVID-19 pandemic: a cascading disaster for Africa. He is the Gender and Intersectionality Ambassador on the UKRI network GRRIPP project, Gender Responsive Resilience in Policy and Practice.

Dr Joanna Faure Walker is an Associate Professor in Earthquake Geology and Risk and Disaster Reduction. Through improved understanding of earthquake fault behaviour, Joanna’s research can help to improve quantification of earthquake hazard. Her research further includes (micro)insurance, catastrophe modelling, warning, shelter and risk perception, and her research teams aim to improve disaster resilience through allowing a better understanding of risk, in particular encouraging informed, evidence-based decisions-making allowing those affected to adopt safety-seeking behaviour as needed. Joanna also leads central Apennines laboratory of the Fault2SHA ESC Working Group, launching the Fault2SHA Learning Series to help collaboration across disciplines to increase the use of faults in earthquake hazard and risk assessment in 2021. She will soon be starting as Co-I on the NERC Standard grant: “Active fault slip-rates and earthquake recurrence controlled by stress transfer and viscous flow”.

**Dr Bayes Ahmed** is a Lecturer in Risk and Disaster Science. His principal research aim is to help build resilient futures for the Rohingya refugees and local host populations in Cox’s Bazar district, Bangladesh, through research and practical solutions to reduce hydro-meteorological disaster risks, particularly landslide risks, through a co-produced approach between natural and social scientists. His specific objectives are to develop effective DRR tools of landslide susceptibility maps and a dynamic landslide early-warning system (LEWS) at a local scale, and to improve awareness in vulnerable communities and strengthen capacity of Cox’s Bazar authorities in order to inform policy makers and practitioners on long-term strategic planning with short-term preparedness.

"Infrastructure Pathways: Navigating towards climate resilient infrastructure systems". He has also been a reviewer for EU H2020 "Preventing and fighting extreme wildfires with the integration and demonstration of innovative means.

**Dr Gianluca Pescaroli** is a Lecturer in Business Continuity and Organisational Resilience. His research investigates how to build and improve the ability to maintain operations during disruptive events, how to minimise their impacts, and how to increase the resilience of the public and private sectors. This includes learning to understand complex challenges such as cascading risks, critical infrastructure failures, and compound dynamics. His current research involves stress-testing scenarios for operational resilience, including further waves of COVID 19, concurrent and cascading risk, and hybrid threats. Gianluca has been appointed to the editorial panel of the Crisis Response Journal, one of the most well-established resources for crisis management, and joins the technical panel of Resilience Shift's "Infrastructure Pathways: Navigating towards climate resilient infrastructure systems". He has also been a reviewer for EU H2020 "Preventing and fighting extreme wildfires with the integration and demonstration of innovative means.

**Dr Katerina Stavrianaki** is a Lecturer in Risk Analysis. Her current work focuses on a multi-hazard risk assessment in the island of Dominica in the Caribbean looking at both the risk from natural hazards and infectious diseases. This is achieved by applying an Analytical Hierarchy Process (AHP) methodology and in collaboration with local stakeholders and community through interviews and workshops. She is also interested in flood and earthquake hazard using both a statistical and a geophysical approach, with the aim to improve current forecasting and seismic hazard approaches and flood hazard assessments. Her work includes the modelling of spatiotemporal point processes, hazard and risk analysis, short term magnitude incompleteness and forecasting.
Dr Punam Yadav is a Lecturer in Humanitarian Studies and Co-Director of the IRDR Centre for Gender and Disaster. Her current work centres around examining the gendered impacts of conflict and disaster, including their transformative effects, impacts of political quota and gender related policies in society. Punam is Co-I and Research Director for the GRRIPP project (Gender Responsive Resilience & Intersectionality in Policy and Practice – Network Plus), an innovative project seeking to establish a radical vision which begins and centres upon gender and intersectionality. She is the current co-chair of the Feminist Theory and Gender Studies (FTGS) Section of the International Studies Association (ISA). She has also been serving as a General Secretary of the Britain Nepal Academic Council since 2018.

Dr Roberto Gentile is a Marie Curie Senior Research Fellow whose research proposes an innovative framework to design resilience-enhancing solutions for buildings comprising the optimal combination of strengthening and insurance. He aims to further focus on extending the seismic resilience-enhancing framework to include sustainability and social metrics as among the main drivers for decisions. Following the “philosophical” shift of the seismic design/performance assessment from a life safety-only paradigm to one based on both casualties and direct economic losses, including sustainability (e.g. embodied CO2) and wellbeing losses (loss of consumption due to a shock), he emphasises innovative methods of assessing earthquake risk as more holistic ways forward.

Dr Simon Day is a Senior Research Fellow in the IRDR. He is currently working on a NERC funded project on caldera-forming eruption-generated tsunamis with the British Geological Survey and the University of Rhode Island. This multi-disciplinary study is leading to a new and better understanding of the mechanisms by which caldera-forming eruptions generate tsunamis. Following the December 2018 lateral collapse landslide and eruption of Anak Krakatau (Indonesia) within the 1883 caldera, which produced a destructive tsunami, the focus of the project has shifted to this event.

Dr Akhtar Alam is a Research Fellow whose work focuses on assessing the risk of Rohingya refugees to natural hazards through a monitoring and spatial modelling approach. He aims to understand what the likelihood is of the community being affected by natural hazards, what could be done to minimise their impact and what are the viable measures for ensuring a resilient future for the refugees. He performed a cyclone risk assessment of Cox’s Bazar and the Rohingya refugee camps through the use of the Analytic Hierarchy Process and GIS within the general risk model to produce functional cyclone risk maps.
Dr Anwar Musah is a Research Fellow, whose research interests focus on the application of statistical modelling, geospatial analysis and data science to public health and social sciences (with a regional focus on the Global South). Since joining IRDR in June 2019 he worked with Professor Patty Kostkova (PI) on the UKRI EPSRC IAA funded project ‘A deployment of ZIKA: A mobile mosquito surveillance app to combat arboviruses in Brazil’ which aimed to develop models for the spatial prediction of mosquito populations that transmit arboviruses in Brazil. As of June 2020, the work has broadened into a vast piece of research funded by Belmont Forum CRA (Climate, Environment & Health) aiming to bring together digital health, urban sanitation and meteorology in order to evaluate the impacts of broader climate and environmental changes on breeding habitats for mosquito-borne arboviruses in Brazil.

Dr Eija Meriläinen is a Research Fellow at IRDR. Her work explores the roles and power of various actors involved in politics of disasters, climate change and urbanization. Eija is working in a research project on ‘Community collective action to respond to climate change influencing the environment-health nexus’ led by Ilan Kelman. The project has been exploring the role of community-based organisations in facilitating and supporting community health. The empirical work has focused on two main sites with the lead of the local partners: Toco in Trinidad and Tobago, as well as Sitka in Alaska. The pandemic has also allowed for an additional research site in Northern Finland. The research continues across sites until the end of 2022.

Dr Jessica Field leads the India strand of the British Academy-funded ‘Rohingya Journeys’ project and her team’s research examines the protection context for Rohingya refugees in Mewat and Hyderabad in Haryana. Interviews and observations have identified growing marginalisation of the refugee community in these areas, as a result of direct and indirect discrimination (e.g. increased incidence of detention, and ongoing exclusion from basic identification systems). Jessica, and project partners Anubhav Dutt Tiwari, Minakshi Rajdev and Aishwarya Pandit, have been highlighting the different ways Rohingyas respond to these challenges and seek to make meaningful lives for themselves in refuge. Dr Field is also Communication and Dissemination lead for the UKRI-funded GRRIPP project, working on ways to highlight GRRIPP-related work, and expand membership to include new researchers.

Patrícia Nabuco Martuscelli’s work discusses micro narratives of Rohingya refugees to understand how they make sense of their forced displacement experiences. She addresses a number of research questions, including the resistance of genocide in Malaysia, Rohingya decision making around resettlement and how Rohingyas reflect on their perspectives of returning to Myanmar. This year she has collaborated on two papers with Dr with Bayes Ahmed and Professor Peter Sammonds; one on everyday resistance practices of Rohingyas during the genocide in Myanmar and another one on how Rohingyas living in Malaysia reflect on their resettlement possibilities.
**Dr Virginie Le Masson** is a Research Fellow, the Global M&E Coordinator for GRRIPP, the Co-Director of the Center for Gender and Disaster. She supports the UCL team to manage the GRRIPP project. Focusing on monitoring and evaluation, she draws on research experience in gender-responsive programming in Disaster Risk Reduction to co-produce a commissioning call that will fund scholars and practitioners to integrate gender and intersectionality in their work on resilience. Recent research contributions to impact include designing and delivering training on Gender and Resilience for the GREAT program based at Cornell University and Makerere University, April 2021, and contributing to informing the UK government ahead of COP26 in better understanding the differential effects of climate change and identifying opportunities for the transition to a net-zero economy to deliver job opportunities for women.

**Dr Laura Peter's** research asks how marginalised communities may be most effectively and appropriately supported to forge sustainable pathways to positive health, social-environmental sustainability, and durable peace, with the goal of reducing global disparities and inequities and reinforcing self-determination and agency. She is developing the concept of “resourcefulness” to explore how positive health can be approached as a relational and place-based process whereby communities strengthen their health assets, renegotiate power relationships, and cultivate local human-natural relationships that form the basis for future choices, opportunities, and potentialities. Recently she was invited by the Union of Concerned Scientists to speak on social justice framing to guide the relocation of refugees in a warming world.

**Dr Louisa Acciari** joined as a Research Fellow, the Co-Director Centre for Gender and Disaster and the GRRIPP Global Network Coordinator on the UKRI/ESRC GRRIPP project: Gender Responsive Resilience and Intersectionality in Policy and Practice, in August 2020. Her work centres on gender and labour, and how marginalised women workers organise to defend their rights in Brazil and Latin America. She has been studying the impacts of Covid-19 on the informal sector throughout 2020, as well as workers’ mobilisations and responses to the crisis. This year, her research has included the design and delivery of leadership training for domestic workers in Brazil, in partnership with the Brazilian Fund for Human Rights and the National Federation of Domestic Workers.
<table>
<thead>
<tr>
<th><strong>IRDR PhD Students</strong></th>
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<tr>
<td><strong>Aisha Aldosery:</strong> “Internet of Things (IoT) based Surveillance System for Predicting Areas that are High-risk of Mosquito Infestation” (Start: January 2020)</td>
</tr>
<tr>
<td>Funding: Government of Saudi Arabia</td>
</tr>
<tr>
<td>Synopsis: Exploring the use of Internet of Things (IoT) sensor devices to collect real-time data for developing and implementing a cloud-based early warning surveillance system to predict areas with high-risk of mosquito prevalence by integrating the IoT, Machine learning, and mobile application.</td>
</tr>
</tbody>
</table>

| **Alexander Thompson:** "Climate change and disaster science through the lens of healthcare" (Start: October 2020) |
| Funding: Self funded |
| Synopsis: This research aims to offer critical analysis of the development of, and relationship between, climate change and disasters through the lens of healthcare. It aims to identify how healthcare systems come together to prepare for and respond to such risks. |

| **Bernice Mufor Nkekeh:** “Community Emergency Preparedness and Response. A comparative analysis of the cases of Mount Cameroon and Mount Etna.” (Start: January 2020) |
| Funding: Self-funded |
| Synopsis: This project seeks to make a contribution to the scholarship on vulnerability reduction. The findings from this comparative study of the volcanic eruptions in Mount Cameroon in Cameroon and Mount Etna in Italy will add to the existing knowledge on disaster preparedness. |

| **Claudia Sgambato:** “Variations in Fault Parameters and Seismic Hazard in the Central and Southern Italian Apennines” (Start: September 2017) |
| Funding: London NERC DTP Studentship |
| Synopsis: Using detailed measurements across faults in the Italian Apennines, my research investigates the relationship between earthquake hazard and fault geometry, with a focus on the Italian seismicity, and analyses the effects of Coulomb stress transfer following earthquakes on these faults. |

<p>| <strong>Emmanuel C. Agbo:</strong> “Enhancing Rural Community Participation for Disaster Risk Reduction: With Case of Nigerian Flood Incidents” (Start: June 2015) |
| Funding: Government of Nigeria |
| Synopsis: This research focuses on strategic development of a structure that would comprise individuals, organisational, and network levels of social actions, which promotes effective and efficient localised disaster risk reduction interventions. |</p>
<table>
<thead>
<tr>
<th><strong>Jeremy Reynolds:</strong> “Investigating learning between organisational adaptive capacity and urban resilience in London” (Start: October 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding: London Fire Brigade</td>
</tr>
<tr>
<td>Synopsis: Aim to investigate if organisational practices in adaptive capacity are relevant for London’s urban resilience planning. Interviews with leaders and managers in public and private sector organisations will identify aspects to scrutinise the current methodology and priorities of urban resilience planning in London.</td>
</tr>
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<tr>
<th><strong>Justine Uyimleshi Usile:</strong> “Effectiveness of the Nigerian Emergency Management System: Building Collapses, Human Stampedes and Electrical Power Failures” (Start: April 2015)</th>
</tr>
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<tbody>
<tr>
<td>Funding: Petroleum technology development fund, Nigeria</td>
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<tr>
<td>Synopsis: Despite the need to have adequate resources, effective communication and a functional eoc in Nigeria, a lack of resources, sharing and accountability between federal, state and local government still hinders effective response and implementation of emergency response activities.</td>
</tr>
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<tr>
<th><strong>Khuloud Al Muffaraji:</strong> “What Enables Disaster Voluntarism to be a Significant Force in a Civil Protection System? Case Study from the Sultanate of Oman” (Start: October 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding: Government of Oman</td>
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<tr>
<td>Synopsis: Volunteers represent a valuable resource of support to the formal forces during disasters but they are still underrepresented in the institutionalised systems. This research focuses on why disaster voluntarism is not well incorporated within the EMS in Oman.</td>
</tr>
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<tr>
<th><strong>Kimon Pantelides:</strong> “Developing a Consistent Approach to Ensuring Community Resilience to Risk during times of Financial Crisis” (Start: September 2017)</th>
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<tr>
<td>Funding: Self-funded</td>
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<tr>
<td>Synopsis: While the financial crisis is an obvious causal factor influencing the ability of fire services to provide adequate services to the public, it is one that notionally has a simple resolution, however it is the more complex factors linked to culture, politics and corruption that are much harder to change.</td>
</tr>
</tbody>
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| **Lan Li:** "Addressing Vaccine Hesitancy: The Potential of Behaviour Change Theory-Based Social Media Interventions"  
(Start: September 2020)  
Funding: China Scholarship Council-UCL Joint Research |
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<tr>
<td>Synopsis: This research seeks to explore the possibility and evaluate the effectiveness of theory-based social media interventions to improve vaccine confidence and uptake. It will focus on the acceptance of influenza vaccination among people aged 60 years and over in China.</td>
</tr>
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| **Lucy Buck:** "Using Ground Penetrating Radar (GPR) to Investigate Tsunami Deposits"  
(Start: September 2017)  
Funding: London NERC DTP Studentship |
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<tr>
<td>Synopsis: This project aims to investigate and describe deposits left by the Stroegga Slide tsunamis in Scotland and the Shetland Islands, and the 2004 Indian Ocean tsunami in Aceh using GPR, a non-destructive method used to image the sub surface.</td>
</tr>
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| **Mark Shortt:** "A Multi-Scale Study on the Thermodynamics and Mechanics of Freeze-Bonding in Sea Ice"  
(Start: August 2016)  
Funding: IRDR/SAMCoT Impact Studentship |
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<tr>
<td>Synopsis: Consolidated sea ice features pose a considerable hazard to offshore structures in the Arctic. This research aims to determine the strength of consolidated saline ice on different scales. Experiments have been supplemented by thermodynamic and mechanical models of freeze-bonding.</td>
</tr>
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| **Mater Almehmadi:** "Investigating health risk awareness and perceptions in mass gathering among hajj pilgrimage’s"  
(Start: September 2018)  
Funding: Royal Embassy of Saudi Arabia Cultural Bureau |
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<tr>
<td>Synopsis: This study evaluates the risk perception of and source of health advice to pilgrims every year, when over two million people gather together to observe the Hajj pilgrimage in Mecca, Saudi Arabia.</td>
</tr>
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| **Melodie Vanderpuye:** "Investigating Spatio-Temporal Randomness of Large Earthquakes"  
(Start: April 2013)  
Part-time  
Funding: Aon Benfield and Qatar Re |
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<tr>
<td>Synopsis: Whether large earthquakes are random in space and time is disputed. Framing this as a pattern recognition problem, this study incorporates uncertainty within the instrumental catalogue and applies Machine Learning techniques to identify spatio-temporal clustering since 1904.</td>
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<tr>
<td>Student</td>
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<tr>
<td>Mohamed Alwahedi</td>
</tr>
<tr>
<td>Myles Harris</td>
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<tr>
<td>Olafiyyin Taiwo</td>
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<tr>
<td>Omar Velazquez</td>
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<tr>
<td>Patrizia Duda</td>
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</tbody>
</table>
| **Peter Dodd:** “Lessons learnt from CBRNe Events to support future Civil Contingency Planning” (Start: February 2020)  
Part-Time  
Funding: Self-funded  
Synopsis: This research is to support Contingency Planning for CBRN Disasters. Through a critique of historical responses, and current national mechanisms in place including the UK’s CCA 2004, United Nations Office for Disarmament Affairs guidelines. |
|---|
| **Rebekah Yore:** “Transitional phase(s) to disaster recovery.” (Start: July 2015) Part-time  
Funding: IRDR Impact Studentship with Rescue Global  
Synopsis: A comparative case study approach to investigating the transitional phase(s) to disaster recovery through examining how preparedness, response and recovery are linked and interrelated, with a focus on warnings systems, temporary housing and microinsurance. |
| **Rhea Leung:** “Mitigation and disaster preparedness measures in remote mountainous areas affected by earthquake-triggered geohazards” (Start: October 2014) Part Time  
Funding: Self-funded  
Synopsis: The 2008 Wenchuan earthquake triggered numerous geohazard risks in Sichuan Province, China. This research investigates post-earthquake geohazard risks and evaluates the effectiveness of mitigation and disaster preparedness measures. |
| **Salma Al Zadjali:** “Decadal Variability of Precipitation in Oman and the Assessment of Cloud Seeding in the Al-Hajar Mountains.” (Start: October 2019)  
Funding: Government of Oman  
Synopsis: The recent rainfall enhancement project in Oman has been dogged by scepticism. This research aimed to analyse precipitation variability to evaluate the feasibility of seeding operations. Based on the outcome, the strategic plan to mitigate its risks will be created. |
| **Sangita Thebe Limbu:** "Gender, climate change and disaster " (Start: January 2021)  
Funding: UCL IRDR  
Synopsis: Mountains and melting glaciers have become iconic imaginaries in discussions around climate change. Based on borderland regions in the eastern Himalayas, my study aims to explore the socio-cultural and historical dimensions of glacial lake outburst floods. |
| **Saqar Al Zaabi:** | “Organizational learning from disasters: Oman’s emergency management system as a case study”  
(Start: October 2016) |
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<tbody>
<tr>
<td>Funding:</td>
<td>Government of Oman</td>
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<tr>
<td>Synopsis:</td>
<td>Following disasters, governments usually introduce several organizational and institutional changes to show that lessons are learned, and new DRR measures are put in place. This research concentrates on classifying those changes, identifying their forces and dynamics, and exploring their relationship with the experienced disasters.</td>
</tr>
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| **Shinta Michiko Puteri:** | “Measuring Vulnerability and Resilience to Disaster Impacts in the urban System: A Case Study of Three Medium-sized Cities in Indonesia”  
(Start: April 2017) |
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<tbody>
<tr>
<td>Funding:</td>
<td>Indonesia Endowment Fund for Education (LPDP)</td>
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<tr>
<td>Synopsis:</td>
<td>This is necessary to allow local stakeholders to define suitable programmes.</td>
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| **Xiao (Shaw) Han:** | “Disaster Risk, Vulnerability and Development”  
(Start: September 2019) |
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<tbody>
<tr>
<td>Funding:</td>
<td>Self-funded</td>
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<tr>
<td>Synopsis:</td>
<td>Disaster impact human society via natural hazards, environmental hazard and so on, but does the disaster really relate to the matter of hazard? This project focuses on re-thinking the understanding of disaster risk. It mainly involves the discussion of Disaster and Vulnerability, Livelihood Challenges, Philosophy, History, Sustainable Development and other disciplines.</td>
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| **Xuanrong Wang:** | How influential different strategies and initiatives can be in improving agricultural insurance penetration in China  
(Start: November 2019) |
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<tbody>
<tr>
<td>Funding:</td>
<td>CSC-UCL Joint Scholarship</td>
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<tr>
<td>Synopsis:</td>
<td>Xuanrong is creating a model to determine the relative influence of different factors contributing to local adoption rates of agricultural insurance in selected Chinese provinces. The model is being created through interviews and surveys of influencers within the sector and local farmers.</td>
</tr>
</tbody>
</table>


Alexander, D. (2020). Failing to plan, planning to fail [Digital scholarly resource].


Publications 2020-21


Vogel, B. and Field, J. (2020) ‘(Re)constructing borders through the governance of tourism and trade in Ladakh, India’, Political Geography, 82.


**Calendar 2021-22**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Convenor</th>
<th>Email</th>
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<tbody>
<tr>
<td><strong>12 October 2021</strong></td>
<td>Special Seminar</td>
<td>Prof Peter Sammonds</td>
<td><a href="mailto:p.sammonds@ucl.ac.uk">p.sammonds@ucl.ac.uk</a></td>
</tr>
<tr>
<td><strong>3 November 2021</strong></td>
<td>IRDR Centre for Digital Public Health in Emergencies Anniversary Event</td>
<td>Dr Patty Kostkova</td>
<td><a href="mailto:p.kostkova@ucl.ac.uk">p.kostkova@ucl.ac.uk</a></td>
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<tr>
<td><strong>23 November 2021</strong></td>
<td>IRDR Alumni &amp; Network Roundtable Dinner</td>
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<td>For our graduates, members and students. Roundtable discussion and student awards</td>
<td><a href="mailto:irdr-enquiries@ucl.ac.uk">irdr-enquiries@ucl.ac.uk</a></td>
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</tr>
<tr>
<td><strong>19 January 2022</strong></td>
<td>IRDR PhD Student Forum and Reception</td>
<td>Dr Ilan Kelman</td>
<td><a href="mailto:i.kelman@ucl.ac.uk">i.kelman@ucl.ac.uk</a></td>
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<tr>
<td><strong>23 February 2022</strong></td>
<td>IRDR Careers and Opportunities Fair</td>
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<td></td>
<td>To register as exhibitor/ delegate, email: <a href="mailto:irdr-enquiries@ucl.ac.uk">irdr-enquiries@ucl.ac.uk</a></td>
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<tr>
<td><strong>8 March 2022</strong></td>
<td>IRDR Centre for Gender and Disaster Public Discussion Meeting</td>
<td>Dr Punam Yadav</td>
<td><a href="mailto:p.yadav@ucl.ac.uk">p.yadav@ucl.ac.uk</a></td>
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<tr>
<td><strong>24 March 2022</strong></td>
<td>IRDR Alumni Mixer Reception</td>
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<tr>
<td><strong>25-26 April 2022</strong></td>
<td>IRDR Spring Academy for IRDR research staff and students</td>
<td>Dr Ilan Kelman</td>
<td><a href="mailto:p.sammonds@ucl.ac.uk">p.sammonds@ucl.ac.uk</a></td>
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<tr>
<td><strong>14 June 2022</strong></td>
<td>Humanitarian Institute Masterclass</td>
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<td><a href="mailto:humanitarian-info@ucl.ac.uk">humanitarian-info@ucl.ac.uk</a></td>
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<tr>
<td><strong>15 June 2022</strong></td>
<td>UCL Humanitarian Summit</td>
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<td><a href="mailto:humanitarian-info@ucl.ac.uk">humanitarian-info@ucl.ac.uk</a></td>
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<tr>
<td><strong>16 June 2022</strong></td>
<td>IRDR 12th Annual Conference (UCL)</td>
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<td>Monthly IRDR Invited Seminar Series</td>
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<td>Monthly Humanitarian Institute Seminar Series</td>
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<td>Convenor: Prof Peter Sammonds</td>
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<td></td>
<td>IRDR Discussion Forum Series</td>
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<td>Informal - weekly to fortnightly</td>
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<td></td>
<td>Convenor: Dr Punam Yadav</td>
<td><a href="mailto:p.yadav@ucl.ac.uk">p.yadav@ucl.ac.uk</a></td>
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**If you wish to get involved in an IRDR event**

We have the following opportunities:

**IRDR Forums** with partners and funders to foster cross-disciplinary collaboration. The format is 3 lead presentations, brief talks by researchers, then open discussion followed by a reception.

**Humanitarian Institute Evening Conference series on the UN Sustainable Development Goals** which are open to the UCL community, general public and media, are organised around a UN SDG theme, with engagement from developing countries. Contact humanitarian-info@ucl.ac.uk if you would like to lead one of these events and propose a theme.

**Humanitarian Institute Masterclass series** with expertise shared by researchers and practitioners from developing countries and UCL. For students, researchers and practitioners. Contact humanitarian-info@ucl.ac.uk if you would like to lead a masterclass.

**IRDR Annual Conference** sessions on a research theme. The format may be presentations, panel discussion, keynote lecture or “in conversation” interview.

**IRDR Sponsorship** of launch events, conferences, seminars or workshops at UCL.

For further information, please contact the IRDR Deputy Director.
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