

Leadership Programme on Solving Global Challenges

GCRF COMPASS Cambridge Winter School
University of Cambridge
9-19 February 2020

COMPASS: Comprehensive Capacity-Building in the Eastern Neighbourhood and Central Asia: research integration, impact governance & sustainable communities (GCRF UKRI ES/P010849/1)



Leadership Programme on Solving Global Challenges

GCRF COMPASS Cambridge Winter School

9-19 February 2020

University of Cambridge

INTRODUCTION

The Leadership Programme on Global Challenges, held at Cambridge, is a unique opportunity for students and professionals over the age of 18, to understand challenges facing the global economy, environment, and public health sectors, and to design and implement path-breaking solutions. This Programme is organised by Comprehensive Capacity building in the Eastern Neighbourhood and Central Asia project under the Global Challenges Research Fund of the UK government, otherwise known as GCRF COMPASS project. Faculty and participants from GCRF COMPASS project teams at the University of Cambridge and University of Kent in the UK, and ADA University, Azerbaijan; Belarusian State University, Belarus; Tajik National University, Tajikistan and University of World Economic Diplomacy, Uzbekistan in partnership with BrainGain Academy in India will make this programme a truly unique experience. The Leadership Programme in Solving Global Challenges Training School is an intensive winter training school for emerging young leaders. A select group of local and international participants will engage with research cultures, interdisciplinary research, and methodologies of research while considering the most current concerns globally.

Ranging from the head of United Nations to children's movements around the globe are calling for decision makers to rely on science, to learn from science and gather more scientific evidence to deal with global challenges of Climate Change, Energy and Food Security, Migration and the New Industrial Revolution. Ironically, the prevalence of technology has created a sort of disengagement with the underlying principles of how nature and society interact and how our planet actually functions. This widening gulf is putting our prosperity, and even existence, at peril! If you want to be ahead of the game and be part of the solution, rather than a victim of these looming, seemingly insurmountable problems, regardless of your academic discipline, major, or career choice, come and attend the Global Challenges Programme this December in Cambridge, UK. World class scientists, experienced and young, will help you familiarise with the underlying and interconnected physical, sociological and economic processes behind upcoming technologies yet to be reported in newspapers and on internet blogs. An emphasis will be on understanding principal causes and possible solutions to address global challenges. We expect that you

will leave not only with new knowledge and skills, but also with a network of future leaders in industry, academia and politics. Your tutors will be Scientists, Economists, Archaeologists, Historians, Political and Social Scientists working at University of Cambridge and COMPASS partner Higher Educational Institutions.

The training school is designed to:

- provide a platform for researchers and students working on and in the region to exchange ideas and information on critical issues of global transformation processes;
- to engage key stakeholders throughout the world in the development of and participation throughout the programme, especially those most engaged in educational processes, research and renovation;
- to stimulate creative dialogue among scholars and students;
- to engage students in research world and show opportunities to improve their skills and knowledge (Capacity building)

The GCRF COMPASS project (ES/P010849/1, 2017-21) is an ambitious UK government capacity-building funding initiative, aiming to extend UK research globally, to address the challenges of growth and sustainability in the developing countries. Notably, the COMPASS project at the University of Kent, together with Cambridge University as research partner, seeks to establish '**the hubs of excellence**' at the top-level HEIs in Belarus, Azerbaijan, Uzbekistan and Tajikistan, to enable them to become the centres for knowledge sharing and transfer for **research integration, impact governance, and sustainable communities**.

PROGRAMME

9th February - Arrival and Introduction

12-4pm Arrival and Check in Moller Centre

4:45pm Pick up from Moller Centre to go to Westminster College

5pm Registration Venue: Senatus Room, Westminster College

Introduction: Dr. S. Saxena and P. Kalra

7pm Dinner, Dining Hall, Westminster College

10th February - Sustainability and Leadership: Governance and Innovation

Venue: Senatus Room, Westminster College

10-12pm Dr. S. Saxena, Cavendish Laboratory, Department of Physics, University of Cambridge; Co-I GCRF COMPASS, Centre of Development Studies, University of Cambridge

'Sustainability and Leadership: the role of Science'

12-1pm Discussion of Individual Projects for candidates

1-2pm Lunch

2-3:30pm Key note by Prof G. Lonzarich, Fellow of Royal Society, Cavendish Laboratory, Department of Physics, University of Cambridge
'Science Leading the Change in Sustainability'

3:30-4pm Discussion with Lord Waverley, House of Lords, United Kingdom

4-4:30pm Tea and Coffee

4:30-5:45pm Dr. S. Dutton, Cavendish Laboratory, University of Cambridge
'Materials for Energy Applications'

5:45-7pm Dr. L. Lombardozzi, COMPASS Cambridge and Open University
'Economic reforms and Developing countries; Gender; Case studies: Central Asia and S. America'

7pm Dinner

11th February - Eurasia: Concept, Practice and Institution

10-12 pm Eurasia Day

Dr. M. Radivojević, University College London & Cambridge Central Asia Forum
P. Kalra, GCRF COMPASS, Centre of Development Centre, University of Cambridge
Dr. D.T. Kudaibergenova, PDRA, GCRF COMPASS, Centre of Development Studies, University of Cambridge
‘Archaeology, History and Sociology to conquer global challenges’

12-1pm Capacity Building in the Eastern Neighbourhood

Prof E. Korosteleva, Principal Investigator (PI), GCRF COMPASS, School of Politics and International Relations, University of Kent

1-2pm Lunch**2-3:30pm Discussion and Analysis of the construct of Eurasia with GCRF COMPASS Teams**

Prof E. Korosteleva PI, GCRF COMPASS, University of Kent
Dr. I. Petrova, PDRA, University of Kent
Dr. S. Saxena, Co-I, GCRF COMPASS, University of Cambridge
Dr. D.T. Kudaibergenova, PDRA, University of Cambridge

3:30-4pm C. Berman Centre of Development Studies, GCRF COMPASS Affiliate, University of Cambridge
‘The Caviar Trade’**4-4:30pm Tea and Coffee****5:30-7pm Panel on European Defence policy**

Chair: Catherine Arnold OBE, Master of St Edmund’s College, University of Cambridge

Speakers: His Excellency D. Caramitsos-Tziras, Ambassador of Greece
His Excellency M. Zimmermann, Ambassador of the Republic of Austria
His Excellency I. Pokaz, Ambassador of Croatia
D. Patrikarakos (Author of “War in 140 Characters”)

Venue: Room SG1, Alison Richard Building, 7 West Road, Cambridge

7:30pm Dinner**12th February****10-12pm Keynote Lecture by Dr. A. Sartbaeva, Department of Chemistry, University of Bath**

‘From sand to saving lives: chemistry and applications of crystalline and amorphous silica-based framework materials’

Venue: JJ Thompson Seminar Room, Maxwell Centre

Host: Cheng Liu, Cavendish Laboratory, University of Cambridge

12-12:45pm Discussion**12:45-1:15pm Cavendish Laboratory Visit**

1:30-2:30pm Lunch

3-4pm Dr Saxena, Cavendish Laboratory, Department of Physics & Co-I GCRF COMPASS, Centre of Development Studies, University of Cambridge
'Science for Development: How Science and help build Capacity why capacity is important to science'

4-4:30pm Tea and Coffee Break

4:30-6pm Dr. T. Yunusov, Sainsbury Laboratory, University of Cambridge
'Climate Change and Food Security'
Venue: Auditorium, Sainsbury Laboratory

6-6:45pm Sainsbury Laboratory Visit

7pm Dinner

13th February - Big Data and The Developing World

10-12pm Dr. S. Fennell, Co-I TIGR3SS GCRF, Centre of Development Studies, University of Cambridge
'Sustainable Development Semi-Arid Regions of India'

12-1pm Discussion

1-2pm Lunch

2-4pm S. Mowlds, Cambridge Central Asia Forum, Jesus College
'Development Data and Complex Global Challenges'

4-4:30pm Tea and Coffee Break

4:30-5:30pm Discussion with S. Mowlds

5:30-6:30pm A. Khudaykulov Centre of Development Studies, GCRF COMPASS Affiliate, University of Cambridge
'Nexus of State Regulation and Economic Development in Transition Economies'

6:30-7pm Chair: P. Kalra, GCRF COMPASS, Centre of Development Studies, University of Cambridge
'Publish, publish, publish!'

7pm Dinner

14th February**10am-1pm Venue: B3, Seminar Room, Criminology****10-11am Keynote Lecture****Emeritus Fellow N. Ray, Jesus College****'Thinking Behind Planning'****11-12pm Dr. R. Bardhan, Department of Architecture, University of Cambridge****'Data-Driven Built-Environment Design'****12-12:45pm Discussion**

1-2pm Lunch

2-4pm Policy and Practice: How do we make laws to engage with sustainable development?**Dr Saxena****P. Kalra**

4-4:30pm Tea and Coffee Break

4:30-6pm Sustainability and Research**Dr. D. T. Kudaibergenova, PDRA, GCRF COMPASS, Centre of Development Studies, University of Cambridge****'Fabric and Art on the Silk Road'****P. Kalra, GCRF COMPASS, Centre of Development Studies, University of Cambridge**
Research writing workshop

6:30-7pm Break

7pm Dinner

15th February**10-12pm M. Honma, , European Bank for Research and Development (EBRD), Director for Central Asia during 2002-2016; & Director and Chief Representative of the Tokyo Office during 2016-2018****'International Financial Institutions (IFIs) and Central Asia'**

12-1pm Discussion

1-2pm Lunch

2-4pm M. Honma**'Enhancing SDGs by IFIs' finance'**

4-4:30pm Tea and Coffee

4:30-6pm Public Policy and Research: A summary of what has been discussed so far? Chairs: Dr Saxena and Dr Kudaibergenova
What have you learned?

6-7pm Discussion of individual projects

7pm Dinner

16th February - FREE DAY

17th February

10-12pm Dr. R. Sidebottom, University of Cambridge) and Dr. J. Lichtenstein, University of Cambridge
'Sustainable development for whom? Rural communities and renewable energy: a participatory workshop'

12-1pm Discussion

1-2pm Lunch

2-2:30pm Mr. H. Singh, Braingain
'India and Global Challenges'

2:30-3:30pm Individual Presentations

2:30-3pm Polina Bishenden, Uni of Kent

3-3:30pm Pavan Bhasin, BrainGain

3:30-4pm S. Lam, Singapore

4-4:30pm Tea and Coffee

4:30-6pm Individual Presentations of participants

4:30-5pm A. Babayev, ADA University Azerbaijan

5-5:30pm M. Sallikhova, Tajik National University

5:30-6pm I. Berezianko, Belarus State University

6-7pm Discussion

7pm Dinner

18th February

10-1pm Individual Presentations

10-10:30am Introductory Session

10:30-11am M. Nurmedova, UWED, Uzbekistan

Break

12-12:30pm R. Garalov, Azerbaijan

12:30-1pm S. Amirova, ADA University, Azerbaijan

12:30-1pm Discussion

1-2pm Lunch

2:30-4pm Feedback Sessions

4-4:30pm Tea and Coffee

4:30-7pm Certificate Ceremony

7pm Dinner

19th February - Departure

Biographies (In Alphabetical Order)

Catherine Arnold OBE has had a distinguished international career in the diplomatic service. She joins St Edmund's from the Foreign and Commonwealth Office. As Ambassador to Mongolia until February 2018, Catherine championed stronger economic, political, cultural and educational links with the UK. She particularly enjoyed working with young adults and was regularly asked to speak to leadership and personal development programmes. Catherine was awarded an OBE for services to British foreign policy in the 2019 New Year Honours.

Gil Lonzarich, Department of Physics, FRS, Cavendish Labs, University of Cambridge
 Lonzarich received his BA degree from University of California, Berkeley as a Regent's Scholar (1967), his M.S. from the University of Minnesota as a Corporate Fellow (1970) and his Ph.D. degree from University of British Columbia as a Killam Fellow (1973). Starting as a postdoc in 1974 he rose through the system to become a full professor of Condensed Matter Physics in 1997 at the Cavendish Laboratory, University of Cambridge. He was elected a fellow of Trinity College, Cambridge and has taught there since 1978. Important aspects of the experiments of Lonzarich's group are crystal growth, ultra-low temperatures (mK temperatures), high-pressure experiments, and quantum oscillations. He has been honoured internationally, some key highlights are; Yamada Visiting Fellowship, 1986, Mott Lecture, Institute of Physics, 1987, Europhysics (Hewlett-Packard) Prize for Experimental Physics, European Physical Society, Nice, 1989, Election to the Royal Society of London, 1989, Election as Fellow, Institute of Physics, 1991, The Max Born Prize and Medal for 1991, The Guthrie Medal, Institute of Physics, 2007, The Rumford Medal, the Royal Society of London, 2010, Visiting Fellowship National Council for Scientific and Technological Development (CNPq), Brazil, 2013-2017, 2015 Kamerlingh Onnes Prize, The International Conference on the Materials and Mechanisms of Superconductivity (M2S)

Siddharth S Saxena (Montu) is Director of the Cambridge Central Asia Programme; Co-I of GCRF COMPASS Programme. He trained as an anthropologist, historian and a physicist and holds PhD degrees both in Experimental Physics and Social Anthropology. His research interests are in the areas of religion and identity, knowledge systems, social and political development and institutional history in Central Asia and the Middle East. He also works on technology entrepreneurship and technology education in Central Asia and Russia. Siddharth Saxena has been involved in field based research in Uzbekistan, Kazakhstan, Kyrgyzstan and Tajikistan with particular focus on Bukhara, Ferghana Valley, Almaty, Kashgar as well as Afghanistan and Azerbaijan. He has also spent extended periods in Iran and Egypt. He was awarded a medal for service to education in Kazakhstan and Presidential Medals by Kazakhstan and Uzbekistan and also received the Magnetism Medal of International Union of Pure and Applied Physics. He is Honorary Professor of Kazakh-Turkish University and Director of Tashkent Centre for High Technology.

Lord Waverley is an independent member of the House of Lords, entering the United Kingdom Parliament in 1993. He contributes regularly to Parliamentary proceedings on a wide range of topics (oral contributions, written parliamentary questions, addressing many challenging issues of the day. Lord Waverley has received State decorations from Colombia, Kazakhstan and Kyrgyzstan, been honoured with a Yoruba Chieftaincy in Nigeria and is the recipient of the CEO Club BURJ award as Ambassador for British Business. A prime objective had been to put into place working-relationship mechanisms between the

Parliaments of Central Asia and Mongolia in order to address a missing link to bilateral relationships, and to bring greater understanding of the strategic importance of Eurasia. He founded & chaired the All-Party Parliamentary Groups for Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) in addition to heading the regional Central Asian Group. He has observed national elections on behalf of the Commonwealth.

Sian Dutton is a Reader in Physics and Solid State Chemistry at the Cavendish Laboratory, University of Cambridge. Her research is focused on exploring the properties of materials for energy applications including batteries and solid state magnetic cooling. Prior to taking up the fellowship in 2012, Dr Dutton was a postdoctoral research associate in Princeton University. Dr Dutton completed her DPhil at University of Oxford and her MSci in Natural Sciences at Jesus College, Cambridge, where she is also a fellow and director of studies now.

Lorena Lombardo is a Lecturer in Economics at the School of Social Sciences & Global Studies in the Faculty of Arts and Social Sciences (FASS) at the Open University. She completed her PhD thesis in Economics at SOAS, University of London (fully funded by SOAS Economics dept.) with a title 'A nexus between the role of the state, market transition and food consumption: The case of Uzbekistan'. Before returning to academia Lorena worked as a development economist in Latin America in 2014, in Uzbekistan for the regional office of UNODC in Central Asia from 2010 to 2012, and between 2007 and 2010 with the European Commission and the Italian Ministry of Foreign affairs in the field of development economics, trade and environmental policy.

Miljana Radivojević, Archaeology, Cambridge Central Asia Forum & University College London. Dr. Radivojević holds a Lectureship in Archaeometallurgy at the UCL Institute of Archaeology, where she acquired her PhD in Archaeometallurgy. During her previous research posts at the Universities of Belgrade, Cambridge and UCL she has developed a strong research profile in both fieldwork excavations and laboratory analysis of material culture, specifically technology of metal making. Her collaborations span across Europe and northern Eurasia, with emphasis set on research links across central and southeast Europe, Anatolia, northern Africa, Russian Federation, Kazakhstan and Uzbekistan. Dr Radivojević has published in high impact journals on the origins of metallurgy in the Balkans and southwest Asia, invention of tin bronze metallurgy, innovation and transmission of copper metallurgy across southeast Europe, use and circulations of Bronze Age metals in Europe, experimental archaeometallurgy and aesthetics of ancient metal objects, as well as co-developed a novel method of re-assessing archaeological phenomena using complex networks analysis of metal supply systems in the Balkans. Her current research focuses on the prehistory of Silk Roads, linking Central Asia, the Eurasian Steppe and most of Europe during the 4th – 1st millennium BC, and more broadly addressing the pre-modern globalisation of Eurasian continent by looking at the (technological) knowledge economy at the time.

Prajakti Kalra, Research Fellow, Cambridge Central Asia Forum & Centre of Development Studies, University of Cambridge & Events and Communications Officer GCRF COMPASS RCUK. She has trained as a historian, political scientist and a psychologist. Her interests are in the areas of Central Asian history and politics, modern and medieval history, immigration and identity, energy security, international relations, international organisations. Her latest work has been on the Eurasian region which she has treated with a specifically Asian and Kazakh perspective on the creation of the Eurasian Union. Her current projects

are centred on economic and political developments like the Customs Union between Kazakhstan, Russia and Belarus as well as Women and Entrepreneurship in Central Asia. She conducts research on international relations in post-Soviet Central Asia and political analysis of regional and international organisations like the Shanghai Cooperation Organisation, Gulf Cooperation Council and the OSCE (Organisation for Security and Cooperation in Europe). She has worked on issues of identity and immigration, specifically the history of Uzbeks in Saudi Arabia (since 1917) and future prospects of interaction between the Gulf Cooperation Council and the Central Asian region. Her work on the Shanghai Cooperation Organisation had focused on energy needs and security for China, Russia and India in Central Asia. She holds a MPhil from the University of Cambridge, UK where her thesis focused on Central Asian Mongols in India and Afghanistan. Her MA in International Relations from the University of Chicago engaged with border issues between post-Soviet Uzbekistan and Tajikistan.

Diana T. Kudaibergenova is a Research Associate on the GCRF COMPASS grant funded by Research Council UK in University of Cambridge. She is a cultural and political sociologist specializing on power, elites and nation-building in Eurasia. She is an author of articles on Eurasian integration in Central Asia, ideology and development in Kazakhstan, and problems of contemporary national processes in post-Soviet states. She received her PhD in 2015 from the Department of Sociology at the University of Cambridge. She is the author of *Rewriting the Nation in Modern Kazakh literature* (Lexington, 2017) and *Toward Nationalizing Regimes: Conceptualizing Power and Identity in the Post-Soviet Realm* (forthcoming with Pittsburgh University Press in June 2020). Dr. Kudaibergenova spent more than two years researching and teaching first sociology major students in Turkmenistan in English at the International University of the Humanities and Development in Ashgabat where she also helped to establish the first postgraduate program and Academic Writing classes. She has also held postdoctoral position at the Lund University Sociology of Law Department where she studied power, ideology and legality in Eurasia (primarily in Kazakhstan, Russia, Ukraine and Crimea).

Elena Korosteleva is Professor of International Politics and Jean Monnet Chair in European Politics, which she received twice in recognition of her research and teaching excellence. Before joining the School in 2012, Elena was Senior Lecturer in International Politics and Director of the Centre for European Studies at Aberystwyth University. Drawing on this experience, in 2013 Elena successfully launched the Global Europe Centre (GEC) at Kent, in partnership with Professor Richard Whitman. Professor Korosteleva is currently Deputy Head of School, and Principal Investigator for the GCRF COMPASS project (ES/P010849/1, 2017-21, £4m), an ambitious GROW initiative, supported by the British government, to address the challenges of capacity-building in developing countries. Elena's research interests include the concepts of governance, resilience as self-governance, regional order-building, peoplehood and democracy promotion; EU Global Security Strategy and Foreign Policies (ENP/EaP) including relations with Russia, Eastern Europe, Central Asia and China. In 2011 Elena completed a large ESRC-funded project (RES-061-25-0001) titled 'Europeanising or securitising the outsiders: Assessing the EU's partnership-building with Eastern Europe' (2008-2011), which findings contributed towards revising EU policies in the eastern neighbourhood, with a particular focus on 'partnership'. Recently, she also acted as CoI to the H2020 UPTAKE (EU 691818) project 'Building Research Excellence in Russian and East European Studies', led by the University of Tartu in partnership with Uppsala, which scored the highest evaluation mark from the European Commission for exceeding our research development targets by over 500%.

Irina Petrova is a Post-Doctoral Research Associate at the GCRF COMPASS project, School of Politics and International Relations (University of Kent). She joined the School in 2019 after completing her doctoral dissertation at the University of Leuven. Irina's research interests focus on the interaction of external and internal actors in international relations, particularly, the development of the novel approach of resilience-based governance anchored in local preferences and perceptions. Geographically, research focuses on the European Union, Russia, Eastern Partnership and Central Asian states.

Callie Berman is a PhD student in the Centre for Development Studies in the University of Cambridge. Her research interests explore the notion of sustainability. She looks at how understandings of sustainability come to be embedded in institutional regimes. Interpretations of natural resources, alongside the knowledge systems that inform them, change over time and space, interact with institutional memory, and affect present day resource use and management. Her research simultaneously analyses changes and varieties of the human-environment relationship since moments of political change clarify and bring forth social features. Specifically, her work situates the human-environment question in Central Asia, a region that has undergone comprehensive systemic changes since 1991. In order to unpack the nature of the human-environment relationship, she uses caviar to examine how a resource is valued to then consider the dynamics of those values within and between the Caspian littoral states of Kazakhstan, Azerbaijan and Turkmenistan.

Dimitris Caramitsos-Tziras, Ambassador of Greece to the Court of St. James's entered the Greek Diplomatic Service in 1983 and as career diplomat he served at Diplomatic Missions to the International Civil Aviation Organization in Montreal (Alternate Representative, 1989-1991), in Cape Town (Consul, 1991-94), in Sofia (First Counselor, Political Affairs, 1994-98). In between, he was assigned to Departments of the Council of Europe, the United Nations and European Union (Internal Market and Eurozone) Departments of the Hellenic Foreign Ministry. In 2002 he joined the ATHENS 2004 Olympic Games Organizing Committee as General Manager. He was nominated Consul General in Los Angeles responsible for Western US States (2005-2009) and Deputy Permanent Representative of Greece to the United Nations in New York (2009-2013). In December 2013, Ambassador Caramitsos-Tziras was nominated Head of the Office of the 2014 Hellenic Presidency of the Council of the European Union, in charge of the organization of the Hellenic Presidency. From September 2014 until August 2016 he was the Director General of the Foreign Ministry in charge of EU Affairs. On 12 August 2016 he assumed his duties as Ambassador of Greece to the Court of St. James's.

Michael Zimmermann, Ambassador of the Republic of Austria to the United Kingdom of Great Britain & Northern Ireland studied law at the University of Vienna, where he received his doctorate in law. In 1981-83 he completed his studies at the Diplomatic Academy of Vienna and in 1983 joined the diplomatic service. From 1986 he was assigned to the Austrian Embassy in Tokyo. From 1990 to 1995 Ambassador Zimmermann was the Head of the Austrian Cultural Institute in Tehran. From 1995 to 1999 he was the Head of the Cabinet of State Secretary Benita Ferrero-Waldner followed by the appointment to be the Director of the Austrian Cultural Institute in London from 1999 to 2004. From 2004 to 2005 he was a Head of the Cabinet of the Foreign Ministers Benita Ferrero-Waldner and Ursula Plassnik, then, from 2005 to 2009 he was Head of real estate management at the Foreign Ministry. Then Ambassador Zimmermann was the ambassador to Hungary before becoming the Austrian Ambassador in London, United Kingdom.

Igor Pokaz is a Croatian diplomat that has served as ambassador to NATO and Russia. He is serving as Croatia's ambassador to the United Kingdom since September 1st, 2017. Pokaz has a Bachelor of Economics degree from the University of Zagreb and received his Master's degree in International Relations from the Global Master of Arts Program (GMAP) at The Fletcher School, Tufts University. He also attended Oxford University.

David Patrikarakos is a British journalist, author and TV producer, best known as the author of *War in 140 Characters: How Social Media Is Reshaping Conflict in the Twenty-First Century*. He is also a contributing editor at the Daily Beast and a contributing writer at Politico Europe. In 2014 he was appointed a Poynter Fellow at Yale University and is currently a Non-Resident Fellow in the School of Iranian Studies, at the University of St Andrews.

Asel Sartbaeva, University of Bath, UK is a Royal Society University Research Fellow in Chemistry at the University of Bath. She received my MSc degree at the Kyrgyz-Russian Slavic University in 1999, and MPhil and PhD degrees at the University of Cambridge in 2002 and 2005. She has worked as a Postdoctoral Researcher at the Department of Physics in ASU from 2005 till 2007. In 2007, she was awarded a Samuel and Violet Glasstone Fellowship, and moved to the Department of Chemistry in Oxford. She was awarded a Royal Society University Research Fellowship in 2010, which she took up in January 2011. In 2012, she moved to the University of Bath to start her own research group. She now has an active group with multiple PhD and masters students, and post-doctoral researchers working with her on projects related to functional materials. They focus on synthesis of functional porous materials, encapsulation of nanomaterials, thermal stability of biological substances and surface chemistry.

Temur Yunusov obtained his BSc from the National University of Uzbekistan in Tashkent, focusing on a specific biochemical adaptation mechanism of *Artemisia diffusa* to drought and high salinity stress environments. After graduation he went to work under Dr Kristina Toderich at the Institute of Regional Problems, where he monitored the quality of soil and water in the Zerafshan river basin to investigate the impact these abiotic environmental factors had on the flora of the region. Temur completed his PhD degree under Dr Matthias Landgraf, aiming to characterise a subset of interneurons involved in locomotion of *Drosophila melanogaster* larvae. Temur is currently working as a laboratory manager with Dr Schornack where he performs both administrative and research duties. His research focuses on studying cellular interfaces between plants and microbes during mutualistic (*R. irregularis*) and pathogenic (*P. palmivora*) interactions.

Shailaja Fennell, Co-I TIGR23SS (GCRF), University Senior Lecturer, University of Cambridge. She is Director of Research at Cambridge Central Asia Forum, a University Senior Lecturer in Development Studies, and a Fellow of Jesus College. She was awarded her degrees of BA, MA, and MPhil in Economics from the University of Delhi, and then went on to read for her MPhil and PhD at the Faculty of Economics and Politics, University of Cambridge. Her doctoral research was on long term agricultural trends in India and China. Shailaja was an international team leader on the project on public private partnerships in education within a research consortium on educational outcomes and rural and urban poverty (RECOUP) funded by the Department for International Development. She was a member of the team commissioned by the European Union to bring about the first European Report on Development, titled 'Overcoming Fragility in Africa: Forging a New Approach Forward' (2008-09).

Sinead Mowlds has been participating in and leading multidisciplinary research to support the evaluation, monitoring, and implementation of effective development policies for the past eleven years. During her time at the OECD, the Brookings Institution, and as consultant for the Bill & Melinda Gates Foundation, she led and contributed to innovative research tools to track and follow-up on the Sustainable Development Goals. She's developed monitoring and evaluation frameworks, managed the launch of an open-sourced knowledge-sharing online platform, and connected investors and entrepreneurs in developed and developing countries. In 2017, she was elected member of the Sustainability Impact Committee of Quadia Investments. The same year, based on her experience and research on food systems, she was nominated as Expert to the EU Economic and Social Committee's Rapporteur on climate justice. She was awarded a research grant from the University of Cambridge in 2016, she pursued research on the geopolitical and development identities of Central Asian countries. She served as co-convenor for the Central Asia Digital Dialogue 2018, and has been conducting research to identify tools, policies, and strategies to bolster environmental collective action across the Eurasian countries. She holds a BSc in International Development & Food Policy from the University College of Cork, and a MPhil in Development Studies from University of Cambridge.

Adham Khudaykulov is a PhD student working on Regulative regimes and their impact on development in Central Asia. His interests lie in models of development for developing countries like Uzbekistan. He worked in University of World Economy and Diplomacy (UWED) and Ministry of Education in Uzbekistan before coming to Cambridge. He studied in Nottingham, UK and Tokyo, Japan for his Masters degrees.

Nick Ray, Emeritus Fellow, ARIBA, Architecture, Jesus College, University of Cambridge. After qualification at Cambridge and University College, London, He worked in London for the Shankland Cox Partnership on housing and for Colin St John Wilson and Partners on the British Library. On returning to Cambridge in 1973 he practised within Hughes and Bicknell Architects, where he became an Associate and later Partner, before founding Nicholas Ray Associates in 1989, which morphed into NRAP in 2007. His most prominent buildings in Cambridge are the Quayside Development, on the banks of the river Cam opposite Magdalene College, and major additions to the Department of Chemistry. He has been responsible for new and refurbishment projects for numerous Colleges, as well as buildings and projects for the University and for private clients. His publications to date have concentrated on studies of 20th century architects (Alvar Aalto, 2005 and Rafael Moneo, 2015, both with Yale University Press), and more theoretical work (Architecture and its Ethical Dilemmas, 2005 and Philosophy of Architecture, 2014). He is currently an Honorary Visiting Professor in Architectural Theory at the University of Liverpool apart from his emeritus readership at Cambridge.

Ronita Bardhan is University Lecturer of Sustainable Built Environment at the Department of Architecture, University of Cambridge, UK and leads the Sustainable Design Group. She holds visiting position at Stanford University and Indian Institute of Technology Bombay. She works on the niche sector of habitat design, energy decisions and gender equality for low-income housing in Global South, especially in the slum rehabilitation housing of Mumbai. Her tractable research informs demand-side design solutions which positively affects energy security, gender equality and well-being while entailing fewer environmental risks. She believes that data-driven design of built environments can effectively address sustainability. Through her research, she seeks for the transdisciplinary collaboration where she soft-couples building design, engineering with social science. She is the recipient of The Building

Energy Efficiency Higher & Advanced Network (BHAVAN) Fellowship 2016-2017, USA and Charles Wallace India Trust Fellowship, UK in recognition of her work in building design and energy efficiency for low-income communities. Ronita has been awarded the Young Researcher Award 2012 and Exceptional Women of Excellence, 2019 by the Women Economic for her innovative contribution in the field of Sustainable Design and Urban Regeneration.

Masaru Honma joined the Japanese Ministry of Finance in 1976 where he was involved in economic policy, banking supervision, taxation and state property policy. In 1990 he took up the post of the Head of the Economic Section of the Japanese Embassy in Hungary, subsequently becoming the Adviser to the Minister of Finance of Poland and later the Head of the Outreach Unit of Financial Sector Reforms in the OECD. In the height of the Japanese banking crisis Mr Honma was appointed as the Director for the Financial Inspection Division as well as Chief Public Relations Officer of the Financial Services Agency. Mr Honma joined the EBRD in 2002 as the Director for Central Asia, based in London. He also was an active member of the CAREC (Central Asian Regional Economic Cooperation). He was assigned to Chief Representative of the Tokyo Office of the EBRD during 2016 and spring 2018. Since then he is active as Senior Visiting Research Fellow of the Policy Research Institute of the Japanese Ministry of Finance. Mr Honma published several books and numerous articles on banking supervision, economic history, international finance as well as on economic reforms in transition economies. The books include “Deposit Insurance and Bank Failure Resolution” (Toyo Keizai, 2002), “Financial Sector Reforms in Eastern Europe and Russia” (Toyo Keizai, 1998), and “Banking in Central Asia and Mongolia since 1875” (Cambridge Scientific Publishers).

Richard Sidebottom is a researcher at the Centre of Development Studies at Cambridge University. His research interests include the Political Economy of Development and Markets, Innovation in Agricultural Commodity chains and Sustainable Development solutions in the African Cotton sector. Richard holds an MPhil in Development Studies from the University of Cambridge, an MSc in Finance from London Business School and an MA & BA in History and Economics from the University of Oxford. He has over 20 years of experience in financial markets most of which as an Emerging Markets fund manager in London and Singapore.

Jane Lichtenstein did her PhD from the Centre of Development Studies, University of Cambridge. She was a Smuts research grant recipient. She works on Rwanda, financial and agricultural sector. She is the author of ‘What is the impact of ICT infrastructure and mobile phones in Rwanda on its aspirations to transform into a knowledge-based, middle-income economy? And what about the farmers?’ and ‘Financial Inclusion in Rwanda: Examining Policy Implementation and Impact on Community and Household Lives’.

Harjiv Singh, Entrepreneur with over 25 years of experience in building and scaling companies globally, Harjiv is the founder and CEO of BrainGain Global, a technology-enabled international higher education marketplace for content, tools and programs. Harjiv has founded companies like Gutenberg, a digital integrated marketing firm and MDOffices.com, a New York city mobile healthcare start-up. He has a keen interest in international higher education, experiential learning technology, international relations, economics, history, and the impact of globalization. He is an Executive Fellow at Cambridge University, Independent Director, Indag Rubber Ltd., on the Advisory Board of Knowledge@Wharton, Trustee of The Loomba Foundation and on the Advisory Council of

American India Foundation (AIF). Harjiv is currently part of Stanford Graduate Business School's SEED program. He received his Master's in International Affairs in Economic Policy from Columbia University and an MBA and a bachelor's degree in finance from New York Institute of Technology.

Polina Bishenden is a PhD student in the University of Kent. Her interests are gender, civil society organisations and the post-Soviet space. She completed her MPhil from the University of Kent on women's organisations in Kazakhstan. She is an affiliate GCRF COMPASS student and has travelled to Central Asia.

Sherry Lam graduated from the University of Sydney in 2006 and has been working since then as a selective high school teacher in Sydney, Australia. She is a mathematics teacher at Normanhurst Boys High School in Sydney. Along with teaching high school students she assists and consults at LAM Consulting Engineering Pty Ltd. Sherry is also a small business owner and has opened Japanese bakeries across Sydney and plans to expand it more. Sherry has also participated in various prestigious mathematics challenges and education training workshops. Learning about the global economy has always been her interest and she wants to learn more about how to respond to global challenges with intelligence, strategy, and expertise.

Abbas Babayev is a final-year graduate student of Public Administration at ADA University. Apart from studies, he works for the Country Office of the United Nations Development Programme in the Republic of Azerbaijan as a Project Assistant in the "Support to the Development of Red Bridge Border Crossing Point between Azerbaijan and Georgia" project, which aims to strengthen institutional capacities of customs agencies of Azerbaijan and Georgia. His professional responsibilities include providing administrative support on the implementation of the project, undertaking project-related researches, supporting project's visibility activities and other relevant duties.

Matlyuba Salikhova is a GCRF COMPASS WP4 officer in Tajik National University. She conducted focus groups across Tajikistan with Dr Kudaibergenova in 2019 and has in depth knowledge of Tajikistan. Matlyuba is the head of the Peshraft community engagement NGO that deals with a range of training activities and developmental projects in Tajikistan. Her interests are in civil society development and Central Asia related issues.

Ivan Berezianko, Belarus State University. He is a 3rd year PhD student at Chair of Macromolecular Chemistry in the Chemistry Department of Belarusian State University. His PhD thesis is in applying ionic liquids for the synthesis of highly reactive polyisobutylene, an important class of polyisobutylene based materials. His interests lie in waste recycling, energetic problem, global warming, ecological and sustainable development problems.

Mavluda Nurmetova is a University teacher at the University of World Economy and Diplomacy, Tashkent (Uzbekistan). She did her Bachelor's degree in World Politics, University of World Economy and Diplomacy, Tashkent (Uzbekistan) and her Master's degree in International Relations and Foreign Politics from the University of World Economy and Diplomacy, Tashkent (Uzbekistan). Her interests are in understanding good governance and local institutions.

Sabina Amirova is the Executive Assistant to Rector of ADA University, Ambassador Hafiz Pashayev. In this position, she is responsible for communicating with local and mostly with

foreign Government Officials, Ministries and diplomatic corps of foreign countries, business sector representatives and for assisting Rector of ADA University in all related requests. As Executive Assistant, she acts as organizer and main point of contact for international and governmental events, bilateral and multilateral meetings, conferences and events according to official protocol regulations.

Pavan Bhasin, Senior Vice President, Salwan Media Private Limited / BrainGain Global. He did his Bachelor of Commerce (Honours Degree) from Delhi University in 1991 and a Real Estate Salesperson Course, The Open Polytechnic from Wellington, New Zealand in 2003. He was nominated for the “Most Promising New-Comer Award 2003” in the Real Estate Institute of New Zealand Awards. He is the founder of Red Wok – A Unit of Red Platter Hospitality LLP. He was the Vice President of Axis Cogent Global Ltd (Formerly Trinet Solutions Private Limited).

David Jarvis is a PhD student in the Department of Physics in the University of Cambridge. He completed an MSci Physics degree at University College London in 2016. He is funded jointly by EPSRC and a scholarship through Jesus College. He is particularly particularly interested in the behaviour of quantum critical points in systems having more than one coupled order parameter such as multiferroic materials.

Shiyu Deng is a PhD student in the Department of Physics in the University of Cambridge. She is working under the supervision of Dr Saxena.

Anna Berg currently is an MPhil student in Development Studies at the University of Cambridge. Her interest lies in Climate Change Mitigation and Adaptation in the context of Development Cooperation with a particular focus is on Water Policy and Natural Resources Management in Central Asia and the Middle East. She has a background in Political Science from studying at Freie Universität Berlin and the American University of Beirut for her undergraduate degree. In addition, she has working experience in the development sector with national ministries and implementing agencies in Germany, an NGO in Palestine as well as in Public Relations.

Pavel Bilek is currently studying for an MPhil in Development Studies at the University of Cambridge. His research interests lie in the political economy and development of Central Asian states, as well as natural resource diversification strategies. He holds a BSc in International Relations and History from the London School of Economics, where he focused on the political economy of trade and the Middle East. Pavel has experience across both the private and public sectors and has worked throughout Europe and the Middle East.

Jay Sullivan is currently an MPhil student in Development Studies at the University of Cambridge focused on climate change, development, and American foreign policy. Prior to Cambridge, he led business development and research at a startup innovation and technology company that worked in the field of environmental conservation in Washington DC, completed a State Department Fulbright Grant in Malaysian Borneo teaching at a low-performing secondary school, and interned at the White House in the Obama administration. He studied Public Policy and Environmental Science at Duke University in the United States graduating in 2016.