

## Speaker Biographies

### Professor Stephen Toope, Vice-Chancellor, University of Cambridge



Stephen J. Toope OC, LL.D. is 346th Vice-Chancellor of the University of Cambridge, the first non-UK national to hold the post. He was Director of the Munk School of Global Affairs at the University of Toronto, and President, the University of British Columbia. A former Dean of Law, McGill University, Toope was also Chair of the United Nations Working Group on Enforced and Involuntary Disappearances.

Toope publishes in global journals on human rights, international dispute resolution, international environmental law, the use of force, and international legal theory, and has lectured at universities around the world

### Dr. Krishnaswamy VijayRaghavan FRS



Dr. Krishnaswamy VijayRaghavan FRS is an emeritus professor and former director of the National Centre for Biological Sciences in Bangalore. He has also been Secretary to the Department of Biotechnology, and in 2018 the Government of India appointed him as the Principal Scientific Advisor until earlier this year. In 2012, he was elected a Fellow of the Royal Society, in 2013 he was conferred upon the Padma Shri in 2013 by the Government of India, and in April 2014 he was elected as a foreign associate of the US National Academy of Sciences. His PhD was in developmental molecular biology and he was subsequently a senior research fellow at the CalTech.

### Professor Howard Griffiths, Dept of Plant Sciences, University of Cambridge



Howard Griffiths is Professor of Plant Ecology in the Department of Plant Sciences at the University of Cambridge, leading research into fundamental plant physiological mechanisms which regulate photosynthesis and plant water-use efficiency.

A Fellow of Clare College, he serves as Co-Chair of Cambridge Global Food Security Interdisciplinary Research Centre through which he promotes fundamental research principles and their delivery as capacity strengthening and equal opportunity actions, enhancing the food-nutrition-health-education nexus for rural communities across the global south. Professor Griffiths is the Principal Investigator of two consortium research programmes, TIGR<sup>2</sup>ESS and MillNETi

### Dr Gitanjali Yadav, NIPGR, New Delhi (Molecular Approaches to Crop Diversity)



Dr. Gita Yadav is a specialist in genomics and structural bioinformatics, with specific applications in food security and ecosystem conservation, based at the National Institute of Plant Genome Research New Delhi. Dr. Yadav held a lectureship in Genomics and Structural Biology at the University of Cambridge, on a joint appointment with the Govt of India, and is an elected member of the Governing Council at St. Edmund's College. Her research as a Co-investigator on the [TIGR2ESS](#) program, aimed to explore the connection between photosynthetic efficiency and epigenetic inheritance with relevance to crop resilience in drought conditions.

**Professor Cameron Petrie, Dept of Archaeology, University of Cambridge (Water Resource Management)**



Cameron Petrie is Professor in South Asian and Iranian Archaeology and a Fellow of Trinity College, University of Cambridge. Through his research he investigates human-environment relationships and the impact of climate change on the Indus Civilisation, and has lead a range of projects including the ERC-funded TwoRains project. Professor Petrie lead TIGR2ESS Flagship Project 4, which has explored water availability and management in a changing monsoon climate.

**Professor Shailaja Fennell, Dept of Land Economy, University of Cambridge (Crop Diversity and Farmer Choices)**



Shailaja Fennell is Professor of Regional Transformation and Economic Security in the Department of Land Economy at the University of Cambridge, where she is also a Fellow of Jesus College and Acting Director Centre of South Asian Studies. Professor Fennell is a Co-investigator on both the TIGR2ESS programme (Flagship Projects 1 & 6) and MillNeti, a sister research programme (2019-2021) to improve iron nutrition status in communities in Ethiopia and The Gambia through biofortified millet.

Professor Fennell has held a number of grants working with partners in UK and India, including an ASEAN funded project (2019-2021) to deliver the first ASEAN Development Outlook that guides policies to ensure inclusion and sustainability in South-East Asia.

**Dr. Jagjit Singh Srail, Institute for Manufacturing, University of Cambridge (Digital Platforms for Farmer Producer Organisations)**



Dr. Jagjit Singh Srail is a Director of Research, and Head of the Centre for International Manufacturing, Institute for Manufacturing, University of Cambridge. His research aligns closely with Industry, focusing on Supply Network analysis, design and operation of international production. Dr. Srail is a Co-Chair of Cambridge Global Food Security Interdisciplinary Research Centre and leads TIGR2ESS Flagship Project 5 to address interacting economic and social issues in water-use and management in farming and food systems.

Dr. Srail is a Chartered Engineer (CEng) and a Fellow of the Institute of Chemical Engineers (FIChemE).

**Professor Ramanjit Kaur Johal, Panjab University, Chandigarh (Rural Entrepreneurship and Female Empowerment)**



Ramanjit Kaur Johal is Professor of Public Administration at Panjab University, Chandigarh. Her research and teaching include policy studies in agri-environmental and social policy, food security and governance. A Nehru-Fulbright and Shastri (SICI) scholar, she has been a consultant with the UNDP Cell, Punjab Government and the Commonwealth Youth Programme Asia.

Professor Johal is a Co-investigator on TIGR<sup>2</sup>ESS (Flagship Project 6) where she brings expertise in developing nutrition, skill and entrepreneurship initiatives through participatory research with women and youth in rural communities.

**Dr. Rajesh Gokhale, Secretary, Dept of Biotechnology, Government of India**



Dr. Rajesh Gokhale was appointed secretary of the Department of Biotechnology (DBT), Government of India in November 2021. He has been director of the CSIR Institute of Genomics and of the Integrative Biology and the National Institute of Immunology (NII) and is a professor at the Indian Institute of Science Education and Research (IISER) Pune. Dr. Gokhale is recognized for work in the area of Chemical Biology and credited with the discovery of a family of Long-chain Fatty acyl-AMP ligases (FAAL) in Mycobacterium tuberculosis. He has also made important contributions towards understanding the interplay between metabolic reprogramming and immunity vis-à-vis the autoimmune skin disorder 'Vitiligo'.

**Dr. Subhra Chakraborty, Director, National Institute for plant Genome Research, New Delhi**



Dr. Subhra Chakraborty is the Director of the National Institute for Plant Genome Research, India. She was instrumental in establishing plant proteomics and translational genomics research in India, and is currently President of PSI (Proteomics Society, India). Her research interests lie in nutritional genomics, plant immunity and stress genomics.

**Ms Juthika Patankar, Additional Secretary, Ministry of Skill Development & Entrepreneurship, Indian Administrative Service, TIGR<sup>2</sup>ESS Policy Fellow**



Juthika Patankar is currently Additional Secretary in the Ministry of Skill Development & Entrepreneurship in the Indian Government. She first joined the Indian Administrative Service in 1988 and was allotted to the Uttar Pradesh cadre. She has served: in various departments of the Government of India and the state government of Uttar Pradesh including Atomic Energy, Tribal Affairs, Culture, Rural Development, Animal Husbandry and Health. During the course of her government service, she acquired a Diploma in Public Administration from the Ecole Nationale d'Administration, Strasbourg, France.

**Mr. Anirudh Tewari, Additional Chief Secretary, Government of Punjab, India**



Mr. Anirudh Tewari is currently the Chief Secretary to the Government of Punjab, India. He has wide policy experience at the state and national level, with more than 30 years in the Indian Administrative Service (IAS). Within the State Government of Punjab, Mr. Tewari's most recent roles have included Additional Chief Secretary in the Department of Agriculture & Farmers Welfare, Principal Secretary in the Department of Finance, Principal Secretary in the Department of Industries & Commerce and CEO of Punjab Bureau of Investment Promotion. At the national level, Mr. Tewari has served as Director of Fund Bank and Director of Foreign Trade in the Department of Economic Affairs. Mr. Tewari holds a Bachelor's Degree in Engineering and two Master's Degrees in Economics and International Development Policy.

**Professor Alison Smith, Head of Department, Dept of Plant Sciences, University of Cambridge**



Alison Smith is Professor of Plant Biochemistry in the Department of Plant Sciences at the University of Cambridge, where she is currently Head of Department. Her research interests are focused on the metabolism of plants, algae and bacteria, in particular of vitamins and cofactors, and more recently for compounds of commercial interest such as high-value pigments and plant natural products. She has pioneered the use of synthetic biology in algal biotechnology, including the use of modular cloning of standardised parts and workflows, and has used these to generate artificial regulatory circuits to control transgene expression. She is Director of the Algal Innovation Centre in Cambridge, a facility that allows pilot-scale testing of algal-based solutions to improve sustainability such as the use of algal cultivation for production of plant natural products, for vitamin-rich food ingredients and for waste valorisation. She is Board member of NIAB in Cambridge and a Council member of the Marine Biological Association of the UK.

**Lord Karan Bilimoria, Chair, TIGR<sup>2</sup>ESS International Advisory Board**



Karan Bilimoria is the founder of Cobra Beer and Chairman of the Cobra Beer Partnership Limited, a Joint Venture with Molson Coors. Lord Bilimoria is the Founding Chairman of the UK India Business Council and a Deputy Lieutenant of Greater London. He is currently Chancellor of the University of Birmingham, a Russell Group University. He has been a crossbench Peer in the House of Lords for over 15 years. Lord Bilimoria is President of the Confederation of British Industry, completing his two year term at the end of June, and continues for another year in his role as Vice President of the CBI. He also has fellowships at Sidney Sussex College (his alma mater), Said Business School, University of Oxford and Kellogg College Oxford and is an Honorary Ambassador of Cambridge Judge Business School, previously Chair of the Judge Business School Advisory Board, University of Cambridge.

**Prof Anne Ferguson-Smith, Pro-Vice-Chancellor for Research and International Partnerships, University of Cambridge**



Professor Anne Ferguson-Smith FRS FMedSci is the Pro-Vice-Chancellor for Research and International Partnerships and Arthur Balfour Professor of Genetics at the University of Cambridge. The current President of the Genetics Society and member of the UKRI BBSRC Council. She is a mammalian developmental geneticist and epigeneticist and expert on genomic imprinting.

**Dr. Arabinda Mitra, Emeritus Fellow, Principal Scientific Advisor's Office, Government of India**



In 1988 Dr. Mitra was awarded the Cambridge Nehru Fellowship to pursue PhD in Earth Sciences at University of Cambridge, UK, working on the geochemistry of mid-ocean ridge hydrothermal systems. After a research career during which he played a seminal role in formulating the long-term science strategy of the Indian Antarctic mission, he joined the Department of Science and Technology (DST). In 2011, he took over the responsibilities of Adviser & Head of International Bilateral Cooperation Division of the DST. In 2018, Dr. Mitra was appointed as the Scientific Secretary in the Office of the Principal Scientific Adviser to the Government of India. He has also served as a member of the TIGR2ESS International Advisory Board.

**Dr. Luke Williams, Senior Portfolio Manager, Sustainable Agriculture and Food, Biotechnology and Biological Sciences Research Council, UKRI**



Luke Williams is a Senior Portfolio Manager at UKRI-BBSRC, managing the Soils and Agrisystems portfolios. Within the Research Strategy and Programmes Domain, he seeks to ensure that UKRI-BBSRC funds world class research, manages strategic research calls, and advocates for his portfolios both internally and externally.