Improving academia-private sector interactions
Lessons learned from the COVID-19 pandemic

Panellists’ bios and useful information

Thursday, 16 September 2021, 12.30-15.45 CEST

Panel 1: Challenges and good practices in co-creation during the COVID-19 crisis

Frank von Delft

Frank von Delft is Professor for Structural Chemical Biology at the University of Oxford, and Principal Beamline Scientist of beamline I04-1/XChem at Diamond Light Source. As a structural biologist he is seeking to transform rational drug design by protein structure determination, by shrinking time and cost of developing small molecule inhibitors by two orders of magnitude by combining national facilities, artificial intelligence, robotics and cloud-based open access science. In Oxford at the Centre for Medicines Discovery (CMD), he manages the crystallography infrastructure serving hundreds of researchers. At Diamond Light Source, he runs both beamline I04-1, and the world-first XChem facility, that annually provides over 30 academic and industrial drug discovery experiments with high-quality drug discovery data. He co-founded the COVID Moonshot project, which seeks to develop a safe, oral antiviral for SARS-CoV-2.

Frank received his undergraduate degree from the University of the Free State (Bloemfontein, South Africa), and gained his PhD in protein crystallography under Tom Blundell at Cambridge (UK). He also worked as a postdoc in San Diego (academically at Scripps in the JCSG, industrially at Syrrx in its pre-Takeda days). He is a visiting professor at the Biochemistry Department of the University of Johannesburg.

Description of initiative:
As the pandemic was breaking, at the Diamond Light Source and the Weizmann Institute we performed a huge early drug discovery experiment, a crystallographic and electrophile fragment screen on Mpro, the main protease of SARS-CoV-2. We released the data into the public domain, and announced it on Twitter. This elicited an overwhelming international response, that seeded the COVID Moonshot: a spontaneous, fully open, crowd-sourcing effort to bring a safe, affordable, oral antiviral to patients globally. The ambition was to be fast enough to provide help in this pandemic, and address the vast clinical, logistical and political gap that vaccines can't cover. The project has moved from cold start to preclinical phase in just 18 months, despite a shoestring budget, thanks to a huge voluntary intellectual contribution from industrial drug hunters, coupled with leading edge technologies, the biopharma ecosystem and long-term funded facilities. We are now developing a funding and business strategy that achieves global equitable access to pills, through a wholly unconventional public-good approach that leverages open science and goodwill, rather than relying on IP-based return-on-investment. In this view, drug discovery and development is approached as a
Kathryn Funk
Kathryn Funk is the program manager for PubMed Central at the US National Library of Medicine. She coordinates PMC policy and involvement in special projects. In 2021, Kathryn was named a Library Journal Mover & Shaker for her work on increasing access to COVID-19 literature. Prior to coming to NLM, Katie worked in academic publishing. She received her master’s degree in library and information science from The Catholic University of America.

Initiative: “CORD-19", NIH
Relevant links:
https://www.ncbi.nlm.nih.gov/pmc/about/covid-19/
https://www.kaggle.com/allen-institute-for-ai/CORD-19-research-challenge

Kirsimarja Blomqvist
Kirsimarja Blomqvist is a Professor for Knowledge management at the School of Business and Management at LUT University. Her research interests relate to knowledge management, trust, new digital forms of organizing such as temporary expert teams, communities, and ecosystems. She has published over 180 research articles in academic journals, books, and peer-reviewed conferences. She serves in Academy of Finland Council for Culture and Social Sciences, and the Editorial boards for Journal of Trust Research, Industrial Marketing Management, Journal of Organization Design and Journal of Co-operative Organization and Management. She is also a founding member and board member of FINT network of currently over 770 trust researchers around the world. During Corona-19 pandemic in 2020 and 2021 she has been developing the Fast expert teams-model with communities of experts and temporary expert groups working on digital collaboration platforms.

Initiative: Fast expert teams
Fast expert teams-initiative (FET) brings together different innovation policy actors for a digital dialogue on complex issues requiring multi-sectoral expertise. For the innovation system it provides a fast means for collective action to tackle issues that require cross-sectoral expertise and can be applied in a crisis like Covid-19 when “Fast expert teams against corona - let’s prevent Finland from paralysis” was conducted in March-April 2020. For this over 100 experts from ministries, universities, public and private organizations collaborated digitally in eight temporary teams for a month. Team tasks varied based on needs identified by the ministries and participant experts. For example, we jumpstarted a longitudinal empirical research on how Finland is adapting to remote work to collecting best practices for remote work, explored a new model for unemployed experts, brainstormed for faster innovation funding instruments, created a national 3D-printing research network and facilitated discussion between the 3D-printing experts and industry. Also, an invention from another field was studied and tested, logistics and training were designed and a pilot plant for cleaning used FF2/FF3 respirators for the need of hospitals was successfully created within six weeks. Findings were reported to Finnish Parliament Futures committee and ministries as well as shared in webinars, industry seminars and LinkedIn. Fast Expert Teams vs Corona report

Catalina Lopez-Correa
Presently, Dr. Lopez-Correa is the Chief Scientific Officer (CSO) at Genome Canada. As CSO, she is taking genomics to the next level in Canada, by advancing mission driven initiatives using genomics to solve the most pressing global challenges. Previously, she was Executive Director of the
Canadian COVID19 Genomics Network (CanCOGeN), a $40M initiative to advance the use of genomics to help us understand and control the COVID19 pandemic. She also held the position of COO at Ruta N Medellin, driving innovation ecosystems to advance social and economic development in Colombia and Latin America. Prior to that, Dr. Lopez-Correa was the CSO at Genome BC (2016-2019) and at Genome Quebec (2008-2015) where she was instrumental in developing competitive teams for national and provincial research and innovation initiatives raising the profile of Canadian genomics on the global stage. Dr. Lopez-Correa has also held leadership positions at deCODE Genetics, and Eli Lilly and has played advisory roles at the European Commission, Innovative Medicine Initiatives and other private and public sector entities working in the application and implementation of genomics technologies. As part of her commitment to international development, Dr. Lopez-Correa has led several initiatives aimed at demonstrating the impact of genomics and innovation in developing countries. She is also fully committed to advance equity, diversity and inclusion, with a particular interest in gender equity in science. Dr. Lopez-Correa has been recognized with several awards: in 2017 she received the Canadian Senate 150th Anniversary Medal, in 2013 she was recognized by National Order of Merit Award in the Rank of Officer from the Republic of Colombia.

Dr. Lopez-Correa holds an MD from the Universidad Pontificia Bolivariana in Colombia, an MSc in Human Genetics from Paris V University in France, a PhD in Medical Sciences from the KULeuven in Belgium, and a mini MBA from McGill University in Canada.

Initiative: Canadian COVID-19 Genomics Network (CanCOGeN)

The Canadian Virus Seq Data Portal. A collaboration between two universities, a research institute and a Canadian SME.

Genome Canada launched the Canadian VirusSeq Data Portal on February 2021 to track the evolving COVID-19 pandemic and Variants of Concern across Canada. The portal is a pillar in the national data infrastructure that bolsters Canada’s ability to manage the current pandemic—and any future ones—by sharing and resourcing viral genome sequences. This made-in-Canada data solution is one of the key deliverables of the $53 million Variants of Concern Strategy the Government of Canada announced on February 12, 2021 to detect and address COVID-19 variants of concern in Canada.

A critical addition to the Canadian COVID-19 Genomics Network’s (CanCOGeN) efforts, the national portal enables real-time data sharing and brings together SARS-CoV-2 genome sequences—used to detect, diagnose and anticipate the spread of new variants—and related metadata from the Public Health Agency of Canada’s National Microbiology Laboratory (NML) and public health labs across the country. It gives Canadian researchers and public health experts a single platform from which to download comprehensive, standardized viral genomics data and allows experts to interact and collaborate with those who generate the data.

The portal offers scientists, public health leaders and other experts involved in shaping Canada’s pandemic response a clear picture of the virus across the country, including detection, transmission, evolution and tracking variants of concern. It is the result of months of anticipatory work by human genetics professor Dr. Guillaume Bourque and his research team at McGill University in collaboration with CanCOGeN VirusSeq and world-leading genomics scientists specializing in data science and policy, including Drs. Fiona Brinkman (Simon Fraser University), William Hsiao (Simon Fraser University), Lincoln Stein (Ontario Institute for Cancer Research) and Yann Joly (McGill University).

Dr. Bourque’s team works in close collaboration with Canadian SME DNAstack to integrate COVID Cloud, a cloud-based platform that helps researchers and decision makers derive insights about COVID-19 from genomics and other datasets. COVID Cloud shares data over open standards
developed by the **Global Alliance for Genomics & Health** and provides tools for researchers to find, visualize, and analyze datasets in the cloud.

This public-private collaboration has been key to help us advance data sharing in Canada and to use genomic data in order to inform COVID19 public health and policy decisions.

**Hande Alpaslan & Duygu Saraçoğlu**

Ms. Hande ALPASLAN:
Director of Science, Technology and Innovation Policy Department at TÜBİTAK (The Scientific and Technological Research Council of Turkey). Works at TÜBİTAK for 15 years providing cross-country and country-specific analysis and policy advice on a broad range of policy areas including technology prioritization and foresight, competency analysis of ecosystem actors for both universities and firms, fostering entrepreneurship, STI governance and public finances for research and technology. OECD CSTP Delegate for Turkey and National Delegate for ERAC.

Dr. Duygu SARAÇOĞLU (Presenter):
Senior STI Policy Expert at TÜBİTAK (The Scientific and Technological Research Council of Turkey) at the STI Policies Department, over 11 years. MSc and PhD of STI Policies. Responsible of coordinating the design and the planning of support mechanisms, developing national STI policies and measures, conducting cross-country and country specific analyses, foresight and technology roadmap studies. Sectoral focus and specialty are ICTs and converging technologies & industries. OECD CSTP and TIP Delegate for Turkey.

COVID-19 Turkey Platform:
Turkey has been actively mobilizing and developing programmes and integrated initiatives to help researchers in developing innovative and conventional therapeutics and vaccines specifically tailored to tackle COVID-19. These initiatives are based on a co-creation approach and span across all actors of the ecosystem, while also mobilizing existing capacity and competency. Such an approach includes:

- The COVID-19 Turkey Platform for vaccine and drug development, as a fast track option, under the coordination of TÜBİTAK Marmara Research Center (MAM) Genetic Engineering and Biotechnology Institute,
- The Intern Researcher Scholarship Programme (STAR) call for young researchers,
- Rapid calls and fast track supports for SMEs and entrepreneurs,
- Another rapid call for the contributions of the social sciences and humanities to address the wide ranging socio-economic impacts of the pandemic,
- Coronathon Turkey: A large local network and hackathon for entrepreneurs for creating social and logistic solution ideas tackling issues of COVID-19 pandemic.

COVID-19 Turkey Platform involves 7 immunity-oriented vaccine development and 10 treatment-oriented drug development projects for a total of 17 projects of a scientific coalition that brings together researchers from 32 universities, 9 public R&D units and 8 private sector organizations for a total of 49 different institutions; a total of 436 researchers, to battle COVID-19 pandemic with a co-creation based approach.
Panel 2: Policy tools and instruments

Mark W.J. Ferguson
Professor Mark W.J. Ferguson commenced as Director General of Science Foundation Ireland in January 2012 and as Chief Scientific Adviser to the Government of Ireland in October 2012. Professor Ferguson is Chair of the European Commission Pilot Advisory Board for the European Innovation Council, a member of the Governing Boards of the Global Research Council and of the European Commission Joint Research Centre and is a founding member of the Small Advanced Economies Initiative. He served on the EU High Level Group on the impact of H2020 and chaired international committees reviewing the Research and Innovation systems of Denmark, Hungary and Canada. Recently Mark has served in Ireland’s response to the COVID-19 pandemic, e.g., as a member of NPHET (the National Public Health Emergency Team). Previously, a Professor and Dean of Biological Sciences at The University of Manchester (since 1984), he was co-founder and CEO of Renovo Group Plc. (1998 – 2011). Professor Ferguson is the recipient of numerous international research prizes and awards, including the 2002 European Science Prize (jointly), author of 329 papers and book chapters, 61 patent families, author/editor of eight books, supervised 77 PhD students and has been awarded over £70 million in competitive research grants and approximately £100 million in start-up company equity funding. He has contributed to a number of scientific films, documentaries, TV and radio programmes and held offices in 16 international scientific societies, including President of the European Tissue Repair Society. He has wide ranging research interests in cellular and molecular mechanisms in scarring and wound healing, developmental mechanisms in normal and cleft palate formation, alligator and crocodile biology including temperature dependent sex determination. Professor Ferguson graduated from Queens University of Belfast with degrees in Dentistry (BDS 1st class honours), Anatomy and Embryology (BSc 1st class honours, PhD) and Medical Sciences (DMedSc), and holds Fellowships from the Royal Colleges of Surgeons in Ireland (FFD), and Edinburgh (FDS) and is a Founding Fellow of the UK Academy of Medical Sciences (FMedSci). He is a member or Fellow of a number of learned Societies and was made a “Commander of the British Empire” (CBE) by the Queen in 1999 for services to Health and Life Sciences. http://www.sfi.ie/about/organisation/sfi-directors/prof-mark-ferguson.html

Myong Hwa Lee
Myong Hwa Lee is a research fellow and the Chief Director of R&D Strategy Research Division at the Science and Technology Policy Institute (STEPI) in South Korea. She has held various positions, including being a former member of the Biomedical Committee of the Presidential Advisory Council on Science and Technology (PACST), a former member of the Biotechnology Special Committee of PACST, and a former member of the Healthcare Special Committee of the Presidential Committee on the Fourth Industrial Revolution. As a policy researcher, her research interests center around the regulation of biotechnology and the biomedical ecosystem, the national R&D system, and STI policy evaluation. She also holds a Ph.D. in Political Science from Northern Illinois University in the U.S.A.

Tateo Arimoto
Tateo Arimoto is a Visiting Professor and Deputy Director, Science, Technology and Innovation Policy Research Center at the National Graduate Institute for Policy Studies (GRIPS) and also Principal Fellow at Japan Science and Technology Agency (JST) and Chief Research Fellow, International Institute for Advanced Studies (IIAS). He served as Director General of Science & Technology Policy Bureau of the Ministry of Education and Science and held the position of Executive Research Fellow at the Economic and Social Research
Institute of the Cabinet office. He has played an active role in public policy making and implementation in the area of science, technology and innovation in Japan and is a major promoter of science of STI policy with multidisciplinary approach.

He has been a co-chair person of the OECD study projects on “Scientific advice”, “Research funding system” and “Transdisciplinary research”. He is a member of the program committee of the International Network for Government Science Advice (INGSA), the special committee of Science Diplomacy at the Ministry of Foreign Affairs of Japan, and United Nations STI Forum for Sustainable Development Goals.


Kazuhito Oyamada

Mr. OYAMADA is a Fellow of Center for Research and Development Strategy (CRDS) Japan Science and Technology Agency (JST). His specialty is science and technology studies (STS), and science, technology and innovation policy.

Mr. Oyamada is a member of OECD GSF’s “Mobilising Science in Times of Crises.” He has also been participating several OECD’s STI policy projects such as “Addressing Societal Challenges using Transdisciplinary Research,” “Effective Policies to Foster High-risk/High-reward Research,” and “The Design and Implementation of Mission-oriented Innovation Policies.”

Marnix Surgeon

I am currently Deputy Head of Unit of the European Commission’s DG RTD Unit G4 ‘Common Missions and Partnerships Service’, where I deal mainly with European Partnerships. I have been with the European Commission since 2006 and since then worked there in a number of domains, including the monitoring of national R&I policies, economic analysis, international cooperation and the development and implementation of the Framework Programme (FP7 and Horizon 2020). Before joining the European Commission, I worked for the Flemish administration and in a spin-off of KULeuven. I hold a PhD in materials engineering from KULeuven.

Catarina Resende de Oliveira

Catarina Resende de Oliveira, MD PhD, is Full Professor (Jubilada), at the Faculty of Medicine, University of Coimbra. She is past President of the Center for Neuroscience and Cell Biology (CNC, Associate Laboratory), in the same university, and coordinator of the “Unidade para a Inovação e Desenvolvimento” (UID) at Coimbra University Hospital (CHUC). She was President of the Board of Directors of the Clinical Academic Center of Coimbra (CACC). Presently, she is the President of the portuguese "Agência para a Investigação Clínica e Inovação Biomédica" (AICIB). She is member of the Health Sciences Scientific Council of the Portuguese Foundation for Science and Technology
(FCT) and of the European DANA Alliance for the Brain (EDAB); she was sub-director of the Portugal/ Harvard Medical School Programme, as well as, member of the direction of Health Cluster Portugal (HCP). Catarina Oliveira was awarded with several prizes for her academic and research work, namely, “Estimulo à Excelência”, by FCT, “Grande Oficial da Ordem da Instrução Pública” by the President of the Portuguese Republic, and the Medal of Distinguished Service, gold category, by the Ministry of Health of Portugal.
Takeaways for GSF and TIP

Catherine Ewart
Dr. Catherine Ewart is Associate Director, International, at the Science and Technology Facilities Council (STFC), which is part of UK Research and Innovation (UKRI). She has considerable experience within the UK research system, particularly in strategic and corporate management roles including business planning, corporate communications, political stakeholder engagement, programme management and information management. For the last few years she has been responsible for STFC’s relations with European and global organisations with a specific focus on the strategic and policy aspects of international research infrastructures.

Currently, Catherine represents the UK as a research infrastructure (RI) expert on international forums such as the G7 Group of Senior Officials on Global Research Infrastructures (GSO). She sits on the Board of the UK Research Office (UKRO) in Brussels and is also a member of the Strategic Advisory Board for the School of Physics and Astronomy at the University of Nottingham in the UK.

Catherine obtained her undergraduate degree in Botany from The University of Manchester, her PhD from The University of Sheffield and her Masters Degree in Science Communication from The Open University.

Göran Marklund
Göran Marklund is Deputy Director General and Head of Operational Development at VINNOVA, which is the Swedish Innovation Agency. Dr. Marklund is also Swedish representative at and currently chairing the OECD TIP, Working Group on Innovation and Technology Policy. He has previously been Associate Professor in Economic History at Uppsala University with the focus on innovation and economic change. Dr. Marklund has also been Science and Technology Attaché at the Swedish Embassy in Washington DC and guest researcher at the Center for International Technology Policy (CISTP) at George Washington University. He often gives advice to the Swedish Government and to the EU on research, innovation and growth policy issues. As a researcher, Dr. Marklund has primarily specialized in innovation and economic change, globalization, and national competitiveness. In this function he has closely followed OECD and Eurostat indicator work and assisted at the meetings of OECD group of national experts of science and technology indicators, NESTI. Dr. Marklund is currently chairman of the Advisory Board for R&D and Innovation Statistics at Statistics Sweden.

Tiago Santos Pereira
Tiago Santos Pereira is Principal Researcher at the Centre for Social Studies of the University of Coimbra (CES), where he is Co-Director of the Doctoral Programme ‘Governance, Knowledge and Innovation’, and is also Coordinating Researcher at CoLABOR - Collaborative Laboratory on Work, Employment and Social Protection, where he leads the research line on Work, Employment and Technology.

With a DPhil in Science and Technology Policy Studies, from SPRU, University of Sussex, his research, drawing on Science and Technology Studies (STS) and Innovation Studies, has focused on the policies and governance of science and technology and the modes of articulation of knowledge between public sector research, business, public decision making and society. His most recent projects include ‘Work and Telework in the context of the Pandemic’, an FCT funded project,
in partnership between CES and CoLABOR, and 'Mapping Science and Technology in the Health Sciences in the Portuguese-speaking countries in Africa - MAPIS', funded by the Calouste Gulbenkian Foundation. He has published extensively on different topics in science, technology and innovation studies. He is Vice-Chair of the OECD Working Party on Technology and Innovation Policy (TIP), and is National Delegate to the OECD's Committee on Scientific and Technological Policy (CSTP). He also collaborated with the European Commission, UNESCO, CYTED and other international agencies in the governance and funding of science, technology and innovation. Between 2015 and 2018 he was Head of the Office for Studies and Strategy of FCT. He was Executive-Director of CES and Vice-President of the Scientific Council. He is an avid runner, having ran 10 marathons in different cities worldwide.

Jerry Sheehan
Jerry Sheehan is Assistant Director for Scientific Integrity & Data Access at the White House Office of Science and Technology. He leads US Government-wide initiatives to advance open science and protect against undue interference in the conduct, communication, and use of Federal science. Sheehan joined OSTP from the National Institutes of Health, where he served as Deputy Director of the National Library of Medicine (NLM) since 2017. In that role he shares responsibility with the Director for leading NLM’s 1,500 staff in developing advanced biomedical information services, conducting and funding research and research training in biomedical informatics, promulgating health data standards, and performing health information outreach across the nation. He leads national efforts to enhance public access to the results of Federally funded research, including scholarly publications, preprints, and research data. From 2015-2017, Mr. Sheehan served as Assistant Director for Scientific Data and Information at the White House Office of Science and Technology Policy where he led government-wide efforts to advance open science, management of scientific collections, scientific integrity, and medical imaging. Previously he led work on international science and innovation policy at the Organization for Economic Cooperation and Development and on computing and Internet policy at the National Academy of Sciences. Mr. Sheehan is co-chair of the National Science and Technology Council Subcommittee on Open Science and its Fast-Track Action Committee on Scientific Integrity; vice-chair of the OECD Working Party on Innovation and Technology Policy, Executive Board Member of the International Council for Scientific and Technical Information, and U.S. delegate to the G7 Open Science Working Group. He holds an S.M. degree in Technology & Policy and an S.B. degree in Electrical Engineering from MIT.

Kimikazu Iwase
Mr. Iwase is Principal Fellow, Center for Research and Development Strategy (CRDS). Mr. Iwase was born in Japan in 1956. He studied chemistry at the University of Tokyo, receiving a BS in 1979 and MS in 1981, and studied business administration at Dartmouth College, U.S.A., receiving an MBA in 1988. He joined government service in 1981, and has served in a wide range of functions at Japanese government agencies and government-affiliated institutions, mainly focusing on science and technology. He was Deputy Director-General of Science and Technology Policy Bureau at Ministry of Education, Culture, Sports, Science and Technology, 2007-2009, and Deputy Director-General for Science, Technology and Innovation Policy at Cabinet Office, 2009-2011. He has also managed research institutions as Executive Vice President of National Institute for Materials Science, 2011-2012, and of Tohoku University, 2012-2014. Mr Iwase has worked on international affairs in various capacities, which include serving as First Secretary for Science at the Japanese Embassy in Washington DC, 1992-1995. He has also directed R&D programs in diverse fields from space development to super computers.
Kai Husso

Mr. Husso completed his Master degree in 1990 and Licentiate degree in 1997 at the University of Helsinki. In 1989–2001, he acted in various positions at the VTT Technical Research Centre of Finland, Statistics Finland and the Academy of Finland.

In 2004–2016, after working for the European Commission (DG Research), he was appointed as Chief Planning Officer of the Finnish Research and Innovation Policy Council. The Council was chaired by Prime Minister and included up to 10 ministers, and 10 expert members representing key stakeholders of the national innovation system. The Council gave advice to the Government in major STI policy questions.

In April 2016, he joined the ranks of the Finnish Ministry of Economic Affairs and Employment. More recently, Mr. Husso was appointed as Chief Specialist and Head of Analyses and Schemes Unit within the Ministry.

Mr. Husso has published over 80 papers on themes such as STI and enterprise policy, statistics, evaluation, and knowledge-based regional development. Most recently, he produced a paper together with his VTT colleagues that analysed the turbulent development of the Finnish innovation policy in the past two decades. The study was published last June in the OECD STI Working Papers series.

He’s intensively participated in the OECD work (TIP, CSTP and Nesti) and acted as an expert in the EU related policy initiatives and evaluations for the past two decades.