

## Speaker biographies

UK Health Data Research Alliance Symposium,  
Tuesday 1 December 2020, 9:30-17:00 GMT

### Opening plenary session



**Caroline Cake**

*CEO, Health Data Research UK*

Caroline Cake is Chief Executive Officer of Health Data Research UK (HDR UK). She provides strategic direction and leadership for the organisation's delivery programmes.

Caroline is committed to supporting the HDR UK community in making the UK the most impactful place to do health data science. She sees HDR UK's inclusive, team-oriented culture, built on the values of transparency, optimism, respect, courage and humility, as being at the heart of how we build HDR UK as one of the world's leading health data science institutes.



**Ottoline Leyser**

*Chief Executive, UK Research & Innovation*

Ottoline Leyser is Professor of Plant Development and Director of the Sainsbury Laboratory at the University of Cambridge. Her research uses the control of shoot branching in Arabidopsis.

She has a long-term interest in inclusiveness and engagement in science. This includes ongoing work on understanding research culture, which started with a project she chaired for the Nuffield Council on Bioethics. She is actively engaged in science policy. For example, she currently chairs the Royal Society's Science Policy Expert Advisory Committee and serves on the Prime Minister's Council for Science and Technology.

In 2017 she was appointed Dame Commander of the Order of the British Empire for services to plant science, science in society and equality and diversity in science.



**Martin Levermore**

*Chair, External Advisory Board, PIONEER - The Health Data Research Hub for Acute Care*

Professor Martin Levermore, a child of the Windrush generation, is the CEO of Medical Devices Technology International, a member of the [PIONEER](#) team (the health data hub for acute care), and a serial entrepreneur.

He served in the army and has a degree in Political Economics. As well as being chair of the Birmingham Commonwealth Association Trade and Business group, he is Vice Chair and Treasurer for the Nehemiah United Churches Housing Association – the largest BAME housing association in the Midlands. He is also Chair of Medilink Midlands – a network of over 8000 contacts in over 1700 organisations from all parts of the life sciences sector, from public and private institutions, the NHS, universities, and multi-nationals to high-value start-up companies.



**Derek Stewart**

*Patient Representative, Health Data Research UK and PA Consulting*

Born too many years ago in Ayr, Scotland, Derek was treated successfully for throat cancer in 1995. A former teacher he became actively involved in numerous aspects of patient involvement and advocacy at a local and national level, being the founder Chair of the Consumer Liaison Group for the National Cancer Research Institute.

Derek was Associate Director for the National Institute for Health Research - Clinical Research Network (NIHR CRN) for nine years up until 2017. He is a Member of Cancer Research UK.

Currently, Derek is involved with the MRC/NIHR Trials Methodology Research Partnership and Evidence Synthesis Ireland.

In 2020 Derek was appointed Honorary Professor at National University of Ireland, Galway.



**Jill Hopkins**

*Global Head Personalized Health Care, Ophthalmology Personalised Care, Roche-Genentech*

Jill Hopkins, M.D., FRCSC is the Global Head of Personalized Healthcare in Ophthalmology at Roche-Genentech. This program works to harness the power of data, advanced analytics, and digital technologies to develop personalized solutions to preserve vision in patients with retinal disease.

Jill's career has spanned 3 decades in Ophthalmology. She spent over 15 years in clinical and academic practice, treating patients of all ages with retinal disease. She was an Assistant Professor of Ophthalmology at the Keck School of Medicine at the University of Southern California and also held appointments at Children's Hospital Los Angeles, and the University of Toronto Department of Ophthalmology and Visual Sciences.

Jill's research at Roche-Genentech has included treatments for age related macular degeneration and diabetic eye disease, and long acting delivery to the eye with the Port Delivery System. She is now dedicated to the clinical application of artificial intelligence and digital technologies to produce meaningful impact to patient care and outcomes.

Jill received her medical degree from McMaster University Medical School in Hamilton, Ontario, Canada and completed her internship and ophthalmology residency at the University of Toronto in Canada. Jill has fellowships in Medical Retina from Moorfields Hospital/University College London and Electrophysiology

from University of Toronto and University of Ottawa Canada. She currently lives in San Francisco, California with her husband, three children and her retriever CJ.



**John Danesh**

*Research Director, HDR UK Cambridge*

Professor John Danesh is Professor of Epidemiology and Medicine and Head of the Department of Public Health and Primary Care at the University of Cambridge. Alongside his role as Research Director, he is also Director of the British Heart Foundation's Cardiovascular Epidemiology Unit, Associate Faculty Member at the Wellcome Trust Sanger Institute, and Honorary Consultant at the Cambridge University Hospital NHS Foundation Trust.

Before receiving his MSc from the London School of Health and Tropical Medicine, he trained in medicine at the University of Otago in New Zealand and at the Royal Melbourne Hospital in Australia. His main research interests are discovery genomics and cardiovascular genetics, therapeutic target prioritisation, international vascular health, screening and risk prediction, systems genomics and blood donor health and biology.



**Amitava Banerjee**

*Associate Professor in Clinical Data Science and Honorary Consultant  
Cardiologist, University College London Hospitals NHS Trust*

Dr Banerjee is an Associate Professor in Clinical Data Science at University College London, and Honorary Consultant Cardiologist at University College London Hospitals and Barts Health NHS Trusts. To capitalise on the tremendous data science opportunities for research and clinical practice across health system silos, clinician scientists need knowledge and expertise in all three spheres of the "learning health system" (science, evidence and care) to navigate the path from science through to healthcare delivery. Dr Banerjee is a pragmatic researcher, a passionate educator and a practising clinician, with interests spanning health informatics, learning health systems, cardiovascular epidemiology, global health, training and evidence-based healthcare.

## Breakout groups: Trustworthy access to health data (COVID and beyond) - Stream 1: Priority datasets to answer priority questions



**Alison Pritchard**

*Deputy National Statistician and Director General for Data Capability, National Statistics (ONS)*

Alison is leading the transformation in data usage which will see ever more integrated data put to effective and safe use across the private and public sectors. She ensures ONS has the right technology and skills to meet its ambitious goals in data analytics and data science and champions safe and secure data sharing for the public good in ONS and beyond.

Most recently Alison was Director General of the Government Digital Service leading the organisation through a busy and critical period. And before that, she was Director of Transformation at the Department for the Environment, Food and Rural Affairs.

She began her Civil Service career in 1987. She has worked across a range of departments including the Ministry of Defence, HM Treasury, Cabinet Office, Home Office and the Department for Culture, Media and Sport.

Her career has seen her enjoy a varied and interesting range of roles, including: spending five years in Saudi Arabia with a UK defence programme; leading the independent review of Royal Family and ministerial air travel; and being responsible for gambling and the National Lottery.

Outside government, Alison has experience as Head of Operations for an IT engineering business and on secondment to the third sector as Director of Programmes for a multi-faith research body supporting counter-radicalisation.



**Laura Shallcross**

*Clinical Lecturer, UCL*

Dr Laura Shallcross studied medicine at Oxford University and Guy's, King's and St Thomas's Medical School. She subsequently combined training in Public Health Medicine with a 4 year MRC pre-doctoral fellowship from the MRC which funded her MSc in Epidemiology at the London School of Hygiene and Tropical Medicine and PhD at UCL, supervised by Professor Dame Anne Johnson and Professor

Andrew Hayward.

Following on from her PhD she was appointed as NIHR Academic Clinical Lecturer in Public Health and joined the Institute of Health Informatics in 2014. Laura was awarded a 5 year Clinician Scientist Fellowship in 2016 to undertake research to develop novel risk prediction strategies to reduce inappropriate antibiotic prescribing for urinary tract infection syndromes in hospital.

Laura leads a research group which uses electronic health records to investigate the diagnosis and management of infection and antimicrobial resistance, with the overarching goal to develop interventions to improve antibiotic use in healthcare settings.



**Rich Fry**

*Senior Lecturer, Biomedical Sciences, Swansea University*

Dr Rich Fry is a Senior Lecturer in GIS and Health Geographies and the Postgraduate Admissions Tutor for the Medical School. Rich graduated with a BSc (Hons) Physical Geography from Swansea before completing an MSc and PhD in GIS and computing at the University of South Wales following some time out in industry.

Following a post-doctoral position at the Wales Institute for Socio-Economic Research, Data and Methods (WISERD) he returned to Swansea, joining the Medical School as a Senior Research Officer specialising in GIS and privacy protecting spatial data linkage. Rich currently leads geography and health research for substantive sites including HDR UK Wales and Northern Ireland, ADR Wales and the National Centre for Population Health and Wellbeing.

Rich teaches on several courses including GIS (GEGM22), PM-344 Capstone and PMIM 102 Scientific Computing and Health Care. He is module lead for PMIM502 for Health Data Visualisation.



**Cathie Sudlow**

*Director, BHF Data Science Centre*

Professor Cathie Sudlow OBE is a clinical neurologist and epidemiologist. Her clinical work involves assessing and treating patients with suspected acute stroke (or 'brain attack') in the hospital emergency department. Her research interests have always been firmly embedded in the world of big data, with a focus on large scale, collaborative, open science efforts to understand the causes (in our genes, environment and lifestyle), detection, prevention and treatment of major diseases, especially those that affect people in middle and older age.

Cathie holds several key national roles in big data health research initiatives. She is Director of the BHF Data Science Centre for cardiovascular health. From 2011 until November 2019 she was Chief Scientist of UK Biobank, a major international research resource with data and samples of unparalleled breadth and depth from half a million UK adults. Cathie was awarded an OBE in the Queen's Birthday Honours 2020.

## Breakout groups: Trustworthy access to health data (COVID and beyond) - Stream 2: Trusted (and productive) Research Environments for safe research



**Susheel Varma**

*Director of Engineering, Health Data Research UK*

Dr Susheel Varma joins HDR UK as the Director of Engineering to provide technology leadership and delivery of all technology infrastructure projects in HDR UK. He also provides alignment to HDR UK's international strategy across HDR UK's portfolio of research hubs, (meta)data alliance, training and infrastructure projects.

He graduated from Pondicherry University with a degree in Information Technology and a Master's in Advanced Software Engineering and a doctorate in Computational Systems Biology from the University of Sheffield.

He subsequently pursued a post-doctorate career in healthcare informatics with a focus on Medical Physics and In-silico modelling. He has been part of numerous European Commission and Research Councils UK funded projects and was a core member of the VPH-Share project leading the development of scientific workflows in multiple clinical research domains. He was the lead architect of GIMIAS and the VPH-Dare@IT platform for Dementia research and Translational Technology Officer (CTO) of CISTIB. He is also a lifetime Fellow of the Software Sustainability Institute and a member of the Society of Research Software Engineers. He has published a number of research works and invited keynote speaker at academic and international conferences.

He was also the Human Genomics and Translational Data Platform Coordinator at ELIXIR, he leveraged his broad operating range to lead the development and operations of a portfolio of core infrastructure activities in EMBL-EBI to align with European Research Infrastructures – EMBL, ELIXIR & EOSC and international activities – GA4GH, where he continues co-lead three Cloud Computing standards in Genomics & Healthcare.



**Angela Wood**

*Senior Lecturer in Biostatistics, University of Cambridge*

Dr Angela Wood is Reader (Associate Professor) of Health Data Science at the Department of Public Health and Primary Care, University of Cambridge, and an elected Turing Fellow of the Alan Turing Institute of Data Science and Artificial Intelligence. She has key leadership roles for major data-driven initiatives: she is Director of Biostatistics of the BHF Cardiovascular Epidemiology Unit; is appointed Theme co-Leader in the Population and Quantitative Science of the NIHR Cambridge Biomedical Research Centre; and serves as the co-Leader of Data-Analysis Work-packages in BigData@Heart and the BHF Data Science Centre CVD-COVID-UK Consortium. She is the principal statistical advisor for a number of international consortia based on individual participant data including the Emerging Risk Factors



Collaboration relating to cardiovascular disease and the EPIC- CVD European case-cohort study. She has led major new national training efforts in health data science and serves on the national training teams for Health Data Research UK and the Alan Turing Institute, as well as contributing to teaching and supervision of students across the Cambridge biomedical campus. She has co-authored 100+ publications, predominantly in methods and applications related to epidemiological studies. She is an expert in the statistical aspects of missing data, risk prediction, longitudinal data and joint modelling, measurement error, meta-analysis, and Mendelian randomisation. She has received methodological grants from the MRC, British Heart Foundation and Alan Turing Institute and has been a key biostatistical co-investigator in major grants awarded by the British Heart Foundation, MRC, NIHR and EU FP7.



**David Sibbald**

*CEO & Co-founder, Aridhia Informatics Ltd*

David Sibbald OBE FRSE is the CEO of Aridhia, which he founded with Professor Andrew Morris in 2008. He is also the Co-Founder and Board member of Sumerian, an IT analytics company he founded in 2002 and was previously the Co-Founder, Chairman and CEO of Atlantech Technologies, a communications software company which he founded in 1992 and sold to Cisco Systems in March

2000.

David is the Founder and Trustee of the Kate MacAskill Foundation, a charitable organisation providing education, care and micro-enterprise funding for children and young adults in the developing world and is Chairman of the Johari Foundation. He has been awarded honorary doctorates from Glasgow University, Glasgow Caledonian University, the University of Paisley and the University of Strathclyde for services to Scottish science and philanthropy. He is a Fellow of the Royal Society of Edinburgh, Scotland's National Academy of Science and Letters. In the 2010 New Year Honours List, David was awarded an OBE for charitable services in Scotland and overseas.



**James Zwiers**

*Senior Technical Architect, NHS Digital*

James is an experienced technologist working in a strategy & leadership role within the technical delivery portion of the Data Services Directorate of NHS Digital, with a key area of focus being the Cloud Enterprise Data Platform that we operate. James has worked as a technical architect for the last decade, with experience prior to that as a systems developer. He has worked in both public and private industries ranging from climate & environmental sciences, through to financial services.



**Matthew Howard**

*International Lead, Healthcare Data Sciences & AI, AWS*

Matthew is International Lead for Healthcare Data Science at AWS, focused on the delivery of machine learning, AI and cloud computing to improve patient outcomes and health system productivity. He has extensive experience of building advanced healthcare technologies, including AI-based triage and clinical decision support and has also worked with international governments on the application of AI and other emerging technologies for policy development and provision of public services. Matthew's background includes healthcare analytics, strategic consulting, pharmaceutical development and start-up. He holds a PhD in Biological Sciences from Imperial College, London.

## **Breakout groups: Trustworthy access to health data (COVID and beyond) - Stream 3: Streamlined access and authentication**



**David Ford**

*Professor of Health Informatics, Swansea University*

Professor David Ford is Professor of Informatics at Swansea University Medical School and is one of the two Directors of the Population Data Science Group.

His area of expertise lies in health informatics, eHealth, health services, population health, data protection and privacy protection, Big Data analytics, and administrative data.

His research interests focus on developing new ways of harnessing the potential of routinely-collected information from healthcare and other public sector organisations, including academia and government.

His team develops carefully designed socio-technical systems that can overcome the barriers to data sharing. These include a focus on automation and machine approaches to reduce workload, increase efficiency and reduce turnaround times; systems to automate probabilistic data linkage; and the creation of high-trust environments under full governance control, to reduce risk and increase transparency during data sharing activities.

He is Principal Investigator and Director of the Administrative Data Research Wales (ADR Wales), an Economic and Social Research Council (ESRC) investment as part of its £65 million UK Big Data initiative.

He is also Principal Investigator of the UK Multiple Sclerosis Register, Joint Principal Investigator of the Nuffield Family Justice Observatory (Nuffield FJO) data partnership; Principal Investigator and Director of the Secure Anonymised Information Linkage (SAIL) Databank; Co-Investigator of Health Data Research UK; Chief Data Officer for BREATH - Health Data Research Hub for Respiratory Health; and many more others. He has received research grants and consultancy contracts valuing over £65m in recent years.

Among his other senior roles, he is also a member of numerous committees and national bodies relating to health informatics and health-related research and is past Chairman and a current Director of



MediWales, representing the medical technology sector of Wales. He is a Fellow of the Royal Society for the Encouragement of the Arts, Manufactures and Commerce (FRSA). He is also a member of the Institute for Clinical Evaluative Sciences (ICES) Scientific Advisory Committee, Toronto.



**Alex Bailey**

*Programme Manager, Medical Research Council*

After an academic career in the UK and USA, Alex worked in Scotland and Sweden managing European Framework research projects. He then spent a decade leading the NHS Research Ethics Service in South East Scotland.

Alex currently works for the [Medical Research Regulatory Support Centre](#) in Edinburgh, Scotland. This role involves working with researchers, regulators, data custodians and approval bodies to gain an understanding of the UK health data research landscape and to facilitate access to health data for researchers.



**Sarah Henry**

*Director, Methods Data & Research, Office for National Statistics (ONS)*

Sarah joined the Office for National Statistics in 2017 from Manchester City Council and the Greater Manchester Combined Authority where she developed evidence and innovative analysis that informed many local decisions as well as the mayoral devolution deals. Championed innovations include a ward level population forecasting model to enable planning of crucial local services, pioneering linking datasets to inform safeguarding services and early interventions and prevention and a spatial forecasting model to predict 'urban flow' in partnership with Ordnance Survey. At ONS she is the Director of Methods, Data and Research and leads the office's strategy to bring in datasets, prepare them for the production of statistics and make them available for research inside and outside the office.

Sarah is passionate about using data for public good and ensuring that the national data asset is utilized to describe and explain the society and the economy. Data has the power to save lives and fuel the economy but to do so reliably they must be used safely and responsibly, ensuring the analysis is based on sound methods and privacy is protected.



**Phil Booth**

*Coordinator, medConfidential*

Phil Booth co-ordinates medConfidential - campaigning for medical data privacy. medConfidential is an independent non-partisan organisation campaigning for confidentiality and consent in health and social care, which seeks to ensure that every flow of data into, across and out of the NHS and care system is consensual, safe, and transparent.

Founded in January 2013, medConfidential works with patients and medics, service users and care professionals; draws advice from a network of experts in the fields of health informatics, computer security, law/ethics and privacy; and believes there need be no conflict between good research, good ethics and good medical care.



**Garry Coleman**

*Associate Director of Data Access, NHS Digital*

Garry leads the NHS Digital's Data Access team, which is responsible for enabling access to NHS Digital's data about patients, maintaining the quality of demographic data relating to all patients in England, and developing new Clinical Trials services.

Initially having worked in the private sector, Garry has over 25 years senior level experience within information and IT in the NHS. He is a passionate believer in the benefits that can be gained from data, and works closely with researchers, NHS and Social Care organisations and commercial bodies to help achieve those benefits for all – whilst ensuring that data is kept and used appropriately and securely.

## Plenary session: Innovation Gateway demo and lightning talks



**Peggy Barthes-Streit**

*Technology Partnership Director, Health Data Research UK*

Peggy Barthes-Streit joined Health Data Research UK as Technology Partnership Director in January 2020. Peggy will lead and coordinate the design, delivery and continuous improvement of the Health Data Research Innovation Gateway with our technology partner. The Gateway will act as a common portal through which researchers and innovators in academia, industry and the NHS can search for and request access to the health data held by members of the Alliance and the Hubs in Trusted Research Environments.

Peggy brings over 20 years of technology and commercial experience, as well as a broad experience of data analytics ecosystem: tools and technology, data governance and GDPR, creation of user and business centric analytics solutions. She is a passionate believer in the power of data and new technologies to challenge the status quo and accelerate growth and innovation.

Peggy has an MEng in Aeronautics from Imperial College.



**Susheel Varma**

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**Liz Dobson**

*CEO, IBD Registry*

Liz has been the CEO of the IBD Registry since its launch as an independent not-for-profit company in early 2018. With a love of data and analytics, a background in business and technology and a passion to help improve the lives of people with IBD, Liz has taken the Registry onwards to increased clinical engagement plus new direct patient engagement, with over 70,000 patient records from over 90 participating sites and 34,000 records direct from people with IBD. Liz has led the Registry's establishment of a drug safety monitoring project for biosimilars - potentially life-transforming treatments, the remaking of our role in clinical quality improvement and above all, the transformation of our data analysis approach

whereby we turn the data that we collect into relevant and insightful information of keen interest to patients, clinical teams and industry partners alike.



**Zameel Calder**

*CSO, Human Centric Drug Discovery*

Zameel Cader is the Director of the Oxford Headache Centre and a Consultant Neurologist at the John Radcliffe Hospital. He is Associate Professor in Clinical Neurosciences at the Nuffield Department of Clinical Neuroscience and the Weatherall Institute of Molecular Medicine. His research programme is focused on understanding the disease process in headache and pain disorders using human stem cell disease models and preclinical models. He is also working on developing improved human blood-brain-barrier models and is the academic lead for the IM2PACT consortium. His group, Oxford Translational Molecular Neuroscience, collaborates with industry partners to bring more effective treatments arising from bench to bedside. He has founded two start-ups – Oxford StemTech, which uses novel technologies to provide human stem cell reprogramming at scale; and HumanCentric, which provides a platform for de-risked target identification for neurological disorders.



**Ron Burdis**

*Business Consultant, EBO*

Over 40 years experience working Internationally within sales, marketing and business development in the technology space. Industries include; healthcare, local and central government, infrastructure and communications industries. Geographical experience includes the UK and Europe, Middle East, Far East and North America. Twenty plus years experience within the healthcare sector primarily involved in business development within various IT application areas, Logistics Management (GS1 S4S) and more recently Artificial Intelligence (AI).



**Hakim Yadi**

*Co-Founder and CEO, Closed Loop Medicine Ltd*

Dr Hakim Yadi OBE is a Co-Founder and chief executive of Closed Loop Medicine. Closed Loop Medicine (CLM) is a new breed of therapeutics company focused on care pathways, outcomes and the provision of dynamic personalised regimens. The company combines proven drugs with digital therapeutics and, where relevant, devices and diagnostics, through a single prescription enabling the digitisation and data capture of an entire care continuum.

Hakim joined CLM from the Northern Health Science Alliance Ltd, the pan-Northern health partnership which brought together for the first time 20 research-based NHS hospitals, the North's

Academic Health Science Networks and Universities to collaborate on improving health outcomes across the North.

Hakim started his career at IMS Health before joining PA Consulting, where he co-managed the company's translational medicine team. During his time at PA, he was seconded to the UK Government where he worked as the Chief Operations Officer and was a founding member of the UK Department of International Trade (DIT) Life Sciences Organisation (LSO). In this role, he helped to oversee the DIT's global life science inward investment strategy.

He holds a PhD from the University of Cambridge and in 2017 he was awarded an OBE for services to Healthcare Technology and the Economy.

## Breakout groups: Scaling up - COVID and beyond - Stream 1: Scaling up computing for AI and data tools



**Indra Joshi**  
*Director of AI, NSHX*

Dr Indra Joshi is the Director of AI for NHSX, leading on the creation of the NHS AI Lab.

Her other responsibilities include overseeing digital health initiatives within the NHS with a focus on data, standards, evidence and AI Policy.

Indra has a unique portfolio with experience stretching across policy, digital health, national project strategy and implementation; whilst remaining true to her professional training as an emergency medic.

She is a Founding Member of One HealthTech – a network which campaigns for the need and importance of better inclusion of all backgrounds, skillsets and disciplines in health technology. Alongside she is a member of SAGE (Scientific Advisory group for Emergencies), an international speaker and consultant on digital health and most importantly a mum to two wonderful little munchkins.



**Jim Hendler**  
*Director and Head of Computer Science, Rensselaer Polytechnic Institute*

James Hendler is the Director of the Institute for Data Exploration and Applications and the Tetherless World Professor of Computer, Web and Cognitive Sciences at RPI. He also is acting director of the RPI-IBM Artificial Intelligence Research Collaboration and serves as a member of the Board of the UK's charitable Web Science Trust and is a member of the international advisory

board of the Health Data Research – UK project.

Hendler has authored over 400 books, technical papers and articles in the areas of Semantic Web, artificial intelligence, agent-based computing and high-performance processing. Hendler was the recipient of a 1995 Fulbright Foundation Fellowship, is a former member of the US Air Force Science Advisory Board, and is a

Fellow of the AAAI, BCS, the IEEE, the AAAS and the ACM. He is also the former Chief Scientist of the Information Systems Office at the US Defense Advanced Research Projects Agency (DARPA). He is the first computer scientist ever to have served on the Board of Reviewing editors for Science.

In 2010, Hendler was selected as an “Internet Web Expert” by the US government. In 2013, he was appointed as the Open Data Advisor to New York State and in 2015 appointed a member of the US Homeland Security Science and Technology Advisory Committee. In 2016, became a member of the National Academies Board on Research Data and Information, and in 2018 became chair of the ACM’s US technology policy committee and was elected a Fellow of the National Academy of Public Administration.



**Cian Hughes**

*Informatics Lead, Google Health Research*

Cían joined DeepMind in August 2015 starting DeepMind Health, becoming part of Google Health in 2018. He helped to design and build Streams, DeepMind Health’s clinician facing mobile application.

Prior to joining Alphabet he was an NIHR Academic Clinical Fellow in ENT at the University College London Ear Institute with research interests in artificial intelligence, health informatics and epidemiology.

He has a particular interest in the application of machine learning to the segmentation of 3D imaging, with recent publications in Ophthalmology as well as Head and Neck Cancer.

He is a founding fellow of the UK Faculty of Clinical Informatics, a founder of the INTEROPen Summit, and a strong supporter of open data and interoperability standards.



**Laura Robinson**

*Health & Life Sciences Lead, Microsoft*

Laura leads the UK Health & Life Sciences team to support the mission of empowering every person to live healthier lives and every organization to deliver better healthcare. Responsible for a team of Industry Solution Executives, Account Executives and Account Technical Specialist, they strive to help Healthcare customers digitally transform to deliver better patient outcomes, enable stronger care coordination while delivering clinical and operational efficiencies.



## Breakout groups: Scaling up - COVID and beyond - Stream 2: Scaling up data services to meet national and global challenges



**Ben Gordon**

*Executive Director - Hubs and Data Improvement, Health Data Research UK*

Ben Gordon joined HDR UK in January 2019 to lead the delivery on the Digital Innovation Hubs programme. He is responsible for creating a UK-wide infrastructure for health data research and innovation.

Prior to this, Ben was Deputy Head of Mental Health at NHS England, where he led the New Care Models programme for mental health, a national transformation programme redesigning mental health services to increase clinical input. Ben brings experience from across the public sector, having worked at the UK's leading public services management consultancy and on the frontline as a teacher.



**Blythe Adamson**

*Director, Quantitative Sciences, Flatiron Health*

Blythe Adamson, PhD MPH, is a health economist and epidemiologist. She serves as Director of Quantitative Sciences at Flatiron Health, a health tech start-up company based in New York City, and as an Affiliate Professor at the University of Washington in the Comparative Health Outcomes, Policy, and Economics (CHOICE) Institute. Dr. Adamson helped scale data curation and evidence generation from 2.2 million patients with cancer to identify valuable cancer treatments and effective healthcare policy to improve patient lives. Her work builds on prior research experience at the HIV Vaccine Trials Network, Fred Hutchinson Cancer Research Center, Institute for Disease Modeling, Intellectual Ventures, Boston Scientific, and as a leader in the International Society for Health Economics and Outcomes Research (ISPOR).



**Irina Bolychevsky**

*Director, Operability & Standards, NHSX*

Irina Bolychevsky (also known as Ira and shevski on the interwebs) leads standards and interoperability at NHSX. A digital native and expert on standards, open data, data platforms, privacy and decentralised technology she's interested in how we use technology for good. She co-founded Redecentralize, led the ckan open source data platform to international adoption (while delivering data.gov and data.gov.uk), served on Open Knowledge's senior management team and now as a board member and developed the personal data infrastructure programme within the UK's Government Digital Service. She's developed national and federal policy, regulatory, commercial and technical frameworks for city-wide information marketplaces and led the UK's first data trust pilot for the Open Data Institute.



**Adrian Jonas**

*Associate Director - Data and Analytics, NICE*

Adrian leads the central data and analytics team in the UK National Institute for Health and Care Excellence [NICE]. This provides central oversight, advice and support on all aspects of data and analytics; spearheading the transformation programme to enable more sophisticated collection, management, storage and exploitation of data across NICE to enable better evidence based decisions across all its business. Adrian joined NICE in 2018 following ten+ years working in a variety of data science roles in UK government including:

- Principal Analyst for Home and Foreign Affairs (Prime Minister's Implementation Unit) & Head of Profession for Operational Research within the Cabinet Office;
- Head of Analysis and Management Information within the Foreign and Commonwealth Office.

Adrian is also a keen amateur triathlete and father of two young daughters based in Manchester, England.

## Breakout groups: Scaling up - COVID and beyond - Stream 3: Data through our lifetimes



**Neena Modi**

*Professor of Neonatal Medicine, Imperial College London*

Neena Modi is Professor of Neonatal Medicine at Imperial College London and Consultant in Neonatal Medicine at Chelsea and Westminster NHS Foundation Trust .

Neena is a Fellow of the Academy of Medical Sciences. She has a national and international profile as a medical leader and clinical scientist. She heads the Neonatal Medicine Research Group at Imperial, and the [Neonatal Data Analysis Unit](#). She has held by election, the three leading national children's research positions in the UK, President of the Neonatal Society (2012-15), President of the Academic Paediatrics Association of Great Britain and Ireland (2014-15), and Royal College of Paediatrics and Child Health Vice-President for Science and Research (2009-15). She chaired the British Medical Journal Ethics Committee from 2010-2015 and serves currently on a number of research committees and working groups.

Neena is the current president of the UK Medical Women's Federation (2020-2022), and the immediate past-president of the UK Royal College of Paediatrics and Child Health (2015-18). Her contributions in the latter role included supporting junior doctors during a major national dispute, national reports on children's biomedical research and child health in the UK, and campaigning in relation to UK health services, environmental issues and child refugees. She led the establishment of a Child Health Research Collaboration and Children's Research Fellowship Fund.

Neena is an advocate for child health and well-being, and campaigner for the retention of the National Health Service as a primarily publicly funded, publicly delivered healthcare system.



**Mike Inouye**

*Principal Research Associate, Systems Genomics & Population Health, University of Cambridge*

Mike grew up in the Seattle area before beginning undergraduate study in 1999 at the University of Washington, where he graduated with BSc's in biochemistry and economics. As a 19 year-old freshman, Mike began analyzing data from the draft Human Genome Project, spending several years doing research in gene finding and protein structure prediction.

He continued studying protein structure as a graduate student at UCLA, but returned to genomics in 2005 when he moved to the Wellcome Trust Sanger Institute (Cambridge, UK). While at Sanger, Mike completed his PhD with Prof Leena Peltonen and Prof Gert-Jan van Ommen and was heavily involved in the analytics for the first wave of genome-wide association studies as well as large-scale studies integrating multi-omic data. After a postdoc at the Walter and Eliza Hall Institute (Melbourne, AU), he was recruited to the faculty at the University of Melbourne in 2012 where he built a research program in systems genomics with a focus on clinical and public health applications.

In 2017, Mike was recruited to the Baker Institute and the University of Cambridge to set up a lab spanning Australia and the UK that focuses on core areas of systems genomics, including polygenic risk scores, integrated analysis of multi-omics data and development of analytic tools. He is the Munz Chair of Cardiovascular Prediction and Prevention at the Baker Institute, an investigator at Health Data Research UK (Cambridge Site), and a Turing Fellow at the Alan Turing Institute (London).



**Nic Timpson**

*Professor of Genetic Epidemiology, University of Bristol*

My research concerns the contribution of genetic factors to complex traits and the use of genetic data within frameworks of epidemiological analysis allowing causal inference. My early work on Mendelian randomization represented an important development in applied epidemiology. Following this, work at the Wellcome Trust Centre for Human Genetics at Oxford University (including work on type 2 diabetes and the fat mass and obesity related locus “FTO”) allowed me to develop in the field of genetic epidemiology. I have since been a part of the teams initiating the Early Growth Genetics (EGG) and EArly Genetics and Lifecourse Epidemiology (EAGLE) consortia (which have publications in Nature Genetics)

and have been responsible for the participation of the Avon Longitudinal Study of Parents and Children (ALSPAC) in other major international consortia.

I have also conceived of and established a new cohort (Anthropometry and Pigmentation in The Solomon Islands with findings published in Science 2012) the UK10K population based whole genome sequencing initiative. I am currently a programme track lead within the MRC Integrative Epidemiology Unit (IEU) at the University of Bristol and co-lead a work package within the CRUK funded Integrative Cancer Epidemiology Programme based around recall by genotype studies.



**Angus Patrick**

*PPIE Representative, INSIGHT*

Angus has worked in many aspects of IT over the course of a 30 year career (that isn't over yet!). His passion is connecting people with technology to help make their lives easier, and he is currently a Consultant at a small IT and business consultancy based in London. He has a rare genetic eye disease, similar to Stargardts, but is fortunate the rate of sight loss is quite slow and he is lucky to have some central vision intact. Through Moorfields, he has been involved in MyEyeSite, a site designed to connect patients and clinicians to their hospital scans and data and a member of the DataTAB for Insight, providing some governance around access to sight research data. It's not all work and eyes, he has 3 children, 24, 12, and 10 and has been with 'er indoors for over 15 years as well as being the proud owner of a cat-dog!



**Diana Kuh**

*Professor of Life Course Epidemiology, UCL*

Diana Kuh is Emeritus Professor of Life Course Epidemiology at UCL and is Honorary Professor at the Universities of Exeter and Bristol. Diana was the founding Director of the MRC Unit for Lifelong Health and Ageing at UCL and Director of the MRC National Survey of Health and Development (NSHD) from 2007-17. NSHD is the oldest of the British birth cohort studies that has followed up over 5000 individuals since their birth in March 1946, and has developed into an integrated and interdisciplinary life course study of health and ageing. In a broad range of more than 500 publications, Diana helped to create and advance the field of life course epidemiology which studies how biological, psychological and social factors at different stages of life, independently, cumulatively or interactively affect adult health, ageing and chronic disease risk.

## Plenary session: Federation and a look to the future



**Caroline Cake**

*CEO, Health Data Research UK*

Caroline Cake is Chief Executive Officer of Health Data Research UK (HDR UK). She provides strategic direction and leadership for the organisation's delivery programmes.

Caroline is committed to supporting the HDR UK community in making the UK the most impactful place to do health data science. She sees HDR UK's inclusive, team-oriented culture, built on the values of transparency, optimism, respect, courage and humility, as being at the heart of how we build HDR UK as one of the world's leading health data science institutes.



**Douglas Gurr**

*Head, Amazon UK and Chair of the Board of Trustees, British Heart Foundation*

Doug was Country Manager of Amazon UK from 2016 to Nov 2020. He joined Amazon in December 2011 and was President of Amazon China from 2014 to 2016.

His previous roles included teaching mathematics and computing at the University of Aarhus in Denmark, followed by 3 years working for the UK Government, 6 years with consultancy firm McKinsey ending as partner, growing (as founder and CEO) an internet start-up from nothing to \$250m in 5 years leading it a successful IPO and eventual Trade Sale, and finally 5 years on the Board of Asda-Walmart.

Doug takes on a new role on 1st December 2020 as Director of the Natural History Museum.

Doug has two degrees in Mathematics from the University of Cambridge, and PhD in Computing from the University of Edinburgh.

Outside work, Doug is Chairman of the British Heart Foundation, a Trustee of the Landmark Trust, Member of the Digital Economy Council, Non-Executive Director for Land Registry, a Trustee of the National Gallery and sits on the Retail Sector Council. He is a former Scottish international triathlete and 12 times Ironman, a keen ski mountaineer with over 20 first ascents including the first winter ascent of Gunnbjornsfeld - the highest mountain north of the arctic circle, and an enthusiastic mountain runner, recently completing the Bob Graham 24hr Round, and the Ultra-Trail du Mont Blanc.

Doug was born in the UK but his parents were New Zealanders and he grew up mostly in Africa before returning to the UK to attend high school and college. He is married with two young children.

## Breakout groups: Federation - what's next? - Stream 1: Federated analytics



**David Robertson**

*Interim Director, Health Data Research UK Scotland*

David Robertson is Chair of Applied Logic, Vice Principal and Head of College of Science & Engineering at the University of Edinburgh. Prior to this he was Head of School of Informatics at Edinburgh, which is the largest UK computing science department in the UK in terms of research power. His computing research is on Artificial Intelligence, specialising in formal methods for coordination and knowledge sharing between (human/artificial) agents in distributed systems where a high degree of autonomy is expected in the components of the underlying system. This is one of the enablers for AI at large scale. Methods from his group have been applied to astronomy, simulation of consumer behaviour, emergency response and healthcare. He was a member of the Farr Institute for medical data sharing and was co-director of the Centre for Medical Informatics at the University of Edinburgh.

He is currently Director of the Scottish node of Health Data Research UK. He chaired the executive of the UK Computing Research Committee (the expert panel of the British Computer Society and the Institution of Engineering and Technology) and has served on strategic advisory groups for the UK's Engineering and Physical Sciences Research Council, the Medical Research Council and Innovate UK. He is a member of the governance board for the Scottish Innovation Centre in Data Science and he was on the supervisory board for EIT Digital (the European Union's network for digital innovation).



**Mandy Chessell**

*Distinguished Engineer, IBM*

Mandy Chessell CBE is a Distinguished Engineer, Master Inventor and Fellow of the Royal Academy of Engineering. Mandy is a trusted advisor to executives from large organizations, working with them to develop their strategy and architecture relating to the governance, integration and management of information. She is also driving IBM's strategic move to open metadata and governance through the ODPi Egeria open source project.

Mandy is the author of the Patterns of Information Management and Common Information Models for an Open, Analytical and Agile World books. In addition to her technical responsibilities, Mandy is involved in initiatives designed to enhance technical vitality with the IBM technical community. This includes mentoring, serving on technical career development and promotion boards along with Women in Technology initiatives.





**Emily Jefferson**

*Director, Health Informatics Centre (HIC), University of Dundee*

Emily has a degree in Biochemistry, a PhD in Bioinformatics and was employed as a post-doctoral researcher in Bioinformatics following her PhD. She then left academia to work in the finance sector. In industry she gained extensive experience of using “Big Data” and leading the delivery of large software and hardware projects. Emily then took a career break to solo cycle from New

Zealand to the UK over 1 year.

As a Professor of Health Data Science, Emily is involved with a range of projects in the fields of data science, clinical imaging, data linkage and machine learning. As the academic lead and Director of the Health Informatics Centre (HIC) at the University of Dundee for the past 8 years, Emily has led a team of ~50 providing services to over 700 different research projects providing expertise in health informatics, data science, data management, governance, and machine learning. She is responsible for an ISO27001 certified infrastructure and a Scottish Government accredited Safe Haven.



**Roger Noble**

*Founder & Chief Executive Officer, Zegami*

Roger Noble is an Entrepreneur, Software Developer and Data Visualisation expert who is passionate about building new and innovative technologies to help people see the world in a new way.

Graduated in 2002 with an Honours Degree in Computing and Multimedia, Roger worked at the University of South Australia designing and building bespoke teaching tools and data visualisations for academic staff.

From 2007 – 2010 Roger worked at Oconics as a Senior Analyst Programmer, leading a small team of developers building server based applications for the Australian Federal Government. Determined to get closer to customers and solve their everyday problems Roger joined LobsterPot solutions as a Business Intelligence consultant where he developed the HTML5 PivotViewer – an open source data visualisation tool and the precursor to Zegami.

Building upon the momentum of PivotViewer, Roger along with Stephen Taylor published a paper in the Journal of Bioinformatics. This led to a relationship with the University of Oxford and the formation of a spin-out company, Zegami in 2016, of which he is currently serving as CEO.

Roger is involved with local and international technical communities having presented on data visualisation at various conferences and meetups around the world.

## Breakout groups: Federation - what's next? - Stream 2: International open research and data sharing



**Georgina Humpreys**

*Clinical Data Sharing Manager, Wellcome Trust*

Georgie is committed to maximising the benefits from research data. She worked for many years on malaria and drug resistance both in UK academic institutions, and in East Africa. Georgie joined the [Open Research](#) team at Wellcome in December 2018 and leads on clinical trial transparency and data sharing.



**Phaik Yeong Cheah**

*Associate Professor, University of Oxford*

Dr Phaik Yeong Cheah, an Associate Professor of Oxford University is based in Bangkok at the Wellcome Programme. She is currently the head of a new department, called the Department of Bioethics and Engagement. The department works on ethical issues arising from conducting research and working with vulnerable populations such as children, pregnant women, migrants as well as other disadvantaged and hard-to-reach populations. In addition, the department's remit also includes developing and managing the programme's community and public engagement work either programme-wide (e.g. the artist-in-residence programme), location-specific (e.g. supporting the long running Tak Province Community Ethics Advisory Board) or study specific. She is particularly interested in ethical issues in community engagement and paediatric research.



**Gary Saunders**

*Human Data Coordinator, ELIXIR*

Gary Saunders is the ELIXIR Human Data Coordinator. He leads the implementation of the ELIXIR-wide strategy to enable responsible sharing of human data consented for reuse in scientific research. A major focus of this role is in working with the three ELIXIR Human Data Communities (Federated Human Data, Rare Diseases, and human Copy Number Variation) in order to ensure that all data generated is compliant with the FAIR data principles, and to coordinate these efforts with the Global Alliance for Genomics and Health (GA4GH).

Gary joined ELIXIR from EMBL-EBI where he was the data manager for the European Variation Archive (EVA), and the Database of Genomics Variants Archive (DGVa). Gary has a PhD in Bioinformatics from the University of Glasgow, UK, and has a background in comparative genomics.



**Tim Smith**

*Head of Collaboration, CERN*

Head of Collaboration, Devices and Applications Group at [CERN](#), the European Particle Physics Laboratory.

Tim is an Open Science advocate leading initiatives at CERN and in the wider science community. He drove the launch of [CERN's Open Data Portal](#) to share [Large Hadron Collider](#) big data with the world, as well as the [Higgs Boson](#) webcast which shared its discovery live around the globe. He also instigated and nurtures [Zenodo](#) within the European Commission's [OpenAIRE project](#) as an open data service for world-wide science.

Tim came to CERN at the end of the 80s, obtained a PhD in Particle Physics and performed research at the [Large Electron-Positron accelerator](#) for 10 years. He then joined the CERN IT Department to lead teams innovating in computing farm management and physics data management



**Rachel Plachcinski**

*HDR UK Public Advisory Board Member*

Rachel Plachcinski is a member of the Cochrane Consumer Executive and Cochrane Council, working with fellow consumers, clinicians, researchers and Cochrane staff around the world to ensure the consumer voice and experience, from a variety of backgrounds and health systems, is embedded in Cochrane's work. This year the Consumer Executive has for the first time developed a Vision, Mission and Objectives (<https://consumers.cochrane.org/whos-who>) and introduced a programme of 'Meet the Consumer Executive' online meetings, in order to focus its efforts and widen knowledge of consumer perspective, input and initiatives.

## Closing plenary session



**Caroline Cake**

*CEO, Health Data Research UK*

Caroline Cake is Chief Executive Officer of Health Data Research UK (HDR UK). She provides strategic direction and leadership for the organisation's delivery programmes.

Caroline is committed to supporting the HDR UK community in making the UK the most impactful place to do health data science. She sees HDR UK's inclusive, team-oriented culture,

built on the values of transparency, optimism, respect, courage and humility, as being at the heart of how we build HDR UK as one of the world's leading health data science institutes.



**Ewan Birney**

*Director, European Bioinformatics Institute*

Ewan Birney is Deputy Director General of EMBL. He is also Director of EMBL-EBI with Dr Rolf Apweiler, and runs a small research group.

Ewan completed his PhD at the Wellcome Sanger Institute with Richard Durbin.

In 2000, he became Head of Nucleotide data at EMBL-EBI and in 2012 he took on the role of Associate Director at the institute. He became Director of EMBL-EBI in 2015. In 2020, Ewan became the Deputy Director General of EMBL. In this role, he assists the EMBL Director General in relation to engagement with EMBL Member States and external representation.

Ewan led the analysis of the Human Genome gene set, mouse and chicken genomes and the ENCODE project, focusing on non-coding elements of the human genome. Ewan's main areas of research include functional genomics, DNA algorithms, statistical methods to analyse genomic information (in particular information associated with individual differences in humans and Medaka fish) and use of images for chromatin structure.

Ewan is a non-executive Director of Genomics England, and a consultant and advisor to a number of companies, including Oxford Nanopore Technologies, Dovetail Genomics and GSK. Ewan was elected an EMBO member in 2012, a Fellow of the Royal Society in 2014 and a Fellow of the Academy of Medical Sciences in 2015. In 2019, Ewan became a Board Member of the Biotechnology and Biological Sciences Research Council (BBSRC).

He has received a number of awards including the 2003 Francis Crick Award from the Royal Society, the 2005 Overton Prize from the International Society for Computational Biology and the 2005 Benjamin Franklin Award for contributions in Open Source Bioinformatics.



**Andrew Morris**

*Director, Health Data Research UK*

Professor Andrew Morris became the inaugural Director of Health Data Research UK in August 2017. He is seconded from his position as Professor of Medicine, and Vice Principal of Data Science at the University of Edinburgh, having taken up the position in August 2014. Prior to this Andrew was Dean of Medicine at the University of Dundee. Andrew was Chief Scientist at the Scottish Government Health Directorate (2012-2017) and has served and chaired numerous national and international grant committees and Governmental bodies.

His research interests span informatics and chronic diseases. He has published over 330 original papers, attracted over £50 million in grant funding and was the principal investigator of several programme grants including the Wellcome Trust United Kingdom Case Control Collection for Type 2 Diabetes, Generation Scotland, a study of the genetic health in 50,000 Scots, the Wellcome Trust funded Scottish Health Informatics Programme (SHIP), and the Farr Institute in Scotland.

In 2007 he co-founded Aridhia Informatics, which uses high performance computing and analytics in health care.