SCOTLAND'S HEALTH RESEARCH AND INNOVATION CONFERENCE
50 years of advancing healthcare
TUESDAY 31 OCTOBER 2023
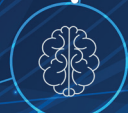
CHIEF SCIENTIST OFFICE

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CONFERENCE BROCHURE

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Professor Dame Anna Dominiczak
Chief Scientist (Health), Scottish Government

Thank you for joining us at **Scotland's Health Research and Innovation Conference.**

Today's conference celebrates 50 years of the Chief Scientist Office of Scottish Government – an important milestone and a wonderful opportunity to reflect on five decades of ground-breaking health research and innovation in Scotland; whilst anticipating what is truly possible across the next 50 years.

I'm delighted to welcome you - researchers, innovators, healthcare professionals, policymakers, industry, public involvement contributors and participants in health research – all united in our ambition to advance healthcare for the benefit of our patients, our NHS, and our economy.

This is my first conference as Chief Scientist (Health) and with the support of our Scientific Programme Committee, today's exciting programme reflects the strength and diversity of our research and innovation capabilities here in Scotland, whilst providing a platform for learning, discussion, and networking.

Our work is vitally important. Demand for healthcare continues to rise, and our NHS is under unprecedented pressure. Now more than ever, it is vital that we all work together to tackle healthcare challenges, embed research, development, and innovation (RDI) in the NHS, and maximise opportunities for improvement and growth.

So, today is about championing the great work coming out of a talented community here in Scotland, exploring opportunities, considering international viewpoints and what they can teach us, pushing boundaries, evolving, improving, collaborating.

I extend a special thank you to our chairs, speakers, poster authors and exhibitors for their important contribution to the day. We are also grateful to colleagues at the Queen Elizabeth Teaching and Learning Centre for hosting the conference, and to our conference sponsors for their valuable support.

I hope you have an enjoyable conference experience. Please contribute to the discussions throughout the day, network widely, and share your learning with colleagues and partners, in person or online using the hashtag #CSOat50.

Professor Dame Anna Dominiczak, Chief Scientist (Health), Scottish Government and Regius Chair of Medicine at the University of Glasgow

GETTING AROUND

The **Teaching and Learning Centre at the Queen Elizabeth University Hospital** provides a fantastic setting for the conference.

- **The Main Atrium** is the hub of the Centre. In this area and the large adjoining rooms you will find registration, catering, exhibition and poster area.
- **The Lecture Theatre** will host the Plenary Sessions and our largest parallel sessions.
- **Level 2** will host thematic sessions and is accessible by lift and stairs.

Your chosen thematic session plus room number and level are printed on your badge. Please attend the session allocated as all are at maximum capacity. Signage around the venue will also guide you to the correct locations and staff will be happy to help.

WiFi Access

You can connect to Eduroam with a university email address. If you do not have a university email address, you can connect to the free hospital WiFi service. To do this:

- Choose **Patient_WiFi** as your wireless network
- Enter the password **nhspatient**
- Open your internet browser and agree to the terms and conditions
- Click the **Connect** button

Cloakroom

A small cloakroom space is available to leave bags and jackets. Please note this room will be locked but is not a manned cloakroom and therefore all items are left at the owner's own risk.

Prayer, Meditation and Meeting Space

A number of additional private spaces are available for the duration of the conference. If you require a room for prayer, meditation or privacy, please contact the registration desk on the ground floor for access.

Filming and Photography

Please note photographs and video of the event will be captured and may be used at the event, on the website or in future promotional materials. Any delegate not wishing to be photographed or filmed please inform staff at registration if you have not already done so.

Please note, it is not permitted to consume food and drink inside of the lecture theatre or seminar rooms on Level 2.

PROGRAMME

A range of plenary, thematic and panel discussion sessions will run throughout the day; combined with networking, poster and exhibition time. Please get involved in discussions and share your experiences on social media using **#CSOat50**

08:30 - 09:00	**Registration and Refreshments**

09:00 – 09:15 **Welcome**
Caroline Lamb, Chief Executive of NHS Scotland and Director-General Health and Social Care

09:15 – 09:30 **The Chief Scientist Office (CSO) at 50**
Professor Dame Anna Dominiczak, Chief Scientist (Health), Scottish Government and Regius Chair of Medicine at the University of Glasgow

09:30 – 10:25 **Scotland – an innovation nation**
Chaired by **former Chief Scientists (Health) Professor David Crossman and Professor Andrew Morris**, this session will explore Scotland's vibrant health and life science sector. It will evidence the value and impact of the CSO supported infrastructure in helping to deliver significant advances in healthcare, and support Scotland's vision of becoming *one of the most innovative small nations in the world.*

09:35 – 09:50 **EAVE II (Early Pandemic Evaluation and Enhanced Surveillance of COVID-19)**
Professor Sir Aziz Sheikh, Professor of Primary Care Research & Development; and Director of the Usher Institute, University of Edinburgh

09:50 – 10:05 **Generation Scotland**
Professor Heather Whalley, Chief Scientist, Generation Scotland; and Professor of Neuroscience and Mental Health, University of Edinburgh

10:05 – 10:20 **Lessons learnt from Scotland's first Industrial Centre for AI Research in Digital Diagnostics (iCAIRD)**
Dr Ken Sutherland, President, Canon Medical Research Europe; and
James Blackwood, AI Strategy and Portfolio Lead, NHS Greater Glasgow and Clyde

10:25 – 11:10   **An international perspective**

Chaired by **Professor Iain McInnes**, Vice-Principal and Head of College of Medical, Veterinary and Life Sciences at University of Glasgow and **Alison Culpan**, Director of ABPI Scotland, this session will offer international insights from members of the Chief Scientist Office (CSO) Strategic Advisory Board and consider opportunities to maximise the growth potential of Scotland's life science sector.

10:30 – 10:50   **Health and Biomedical science research and innovation in Singapore: Looking back, looking forward**

Professor Tan Chorh Chuan, Permanent Secretary (National Research & Development); Chairman, Agency for Science, Technology and Research; Chairman, MOH Office for Healthcare Transformation

10:50 – 11:10   **The Future of Health and Medicine**

Dr Victor Dzau, President of US National Academy of Medicine (NAM), Vice Chair of the National Research Council, Chancellor Emeritus of Duke University

11:10 – 11:50   **Embedding Research, Development and Innovation (RDI) in our healthcare**

Chaired by **Professor Sir Gregor Smith**, Chief Medical Officer for Scotland, this panel discussion will spotlight research and innovation as a positive enabler for recovery, reform and sustainability in health and social care. It will explore how we harness the significant potential of our NHS, embed RDI across our health and care services and continuously maximise opportunities for improvement and growth.

Caroline Lamb, Chief Executive of NHS Scotland and Director– General Health and Social Care

Professor Tan Chorh Chuan, Permanent Secretary (National Research & Development); Chairman, Agency for Science, Technology and Research; Chairman, MOH Office for Healthcare Transformation

Dr Victor Dzau, President of US National Academy of Medicine (NAM), Vice Chair of the National Research Council, Chancellor Emeritus of Duke University

Professor Andrew Morris, Director of Health Data Research UK, Vice-Principal of Data Science at the University of Edinburgh

11:50 – 12:15   **Refreshments, Networking and Attended Poster Sessions**

A: Precision Medicine

Described as the 'Silicon Valley' of Precision Medicine, this session will explore Scotland's growing precision medicine ecosystem, supported by the multi-disciplinary expertise and capabilities of our universities and NHS, working proactively with industry. The session will showcase specific programmes of work, supported by Precision Medicine Alliance Scotland (PMAS) funding, that are tackling health conditions of major importance in Scotland, and positioning Scotland as one of the best places in the world to develop and deliver precision medicine.

Session Welcome Dr Alan McNair, Senior Research Manager, Chief Scientist Office; Marian McNeil, Chief Executive Officer, Precision Medicine Scotland Innovation Centre and Dr Louise Campbell, Research Manager, Chief Scientist Office

12:20 - 12:25	**Precision Medicine Alliance Scotland** **Dr Louise Campbell**, Research Manager, Chief Scientist Office
12:25 - 12:35	**The iDiabetes Platform: Enhanced Phenotyping of patients with diabetes for Precision Diagnosis, Prognosis and Treatment** **Professor Ewan Pearson**, Professor of Diabetic Medicine at University of Dundee; and Honorary Consultant in Diabetes and Endocrinology, NHS Tayside
12:35 - 12:45	**Precision-MS: Integrating precision metrics of brain health into early treatment of multiple sclerosis** **Professor David Hunt**, Wellcome Trust Clinician Scientist at University of Edinburgh; and Honorary Consultant Neurologist NHS Lothian
12:45 - 12:55	**Centre for Precision Cell Therapy for the Liver** **Professor Stuart Forbes**, Director of the MRC Centre for Regenerative Medicine at University of Edinburgh
12:55 - 13:05	**Time critical precision medicine for acute critical illness using treatable trait principles: Data enabled adaptive platform trial with embedded biological characterisation [TRAITS programme]** **Professor Nazir Lone**, Professor of Critical Care and Epidemiology, University of Edinburgh, and Honorary Consultant, Critical Care, NHS Lothian
13:05 - 13:10	**Precision Medicine – Opportunities and Challenges** **Marian McNeil,** Chief Executive Officer, Precision Medicine Scotland Innovation Centre
13:10 - 13:25	**Glasgow Living Laboratory** **Professor Sandosh Padmanabhan**, Professor of Cardiovascular Genomics and Therapeutics at University of Glasgow

B: Clinical Trials Showcase

Clinical research is the single most important way in which we improve our healthcare – by identifying new means to prevent, diagnose and treat disease. Emerging from the COVID-19 pandemic, significant work has been undertaken across Scotland to remobilise our portfolio of research across all phases, treatment types and conditions. This session will showcase the strength and diversity of the portfolio, the deep scientific expertise, and dedicated research infrastructure – all helping share a more resilient system for the future.

Session Welcome Professor Rory McCrimmon, NRS Diabetes Clinical Lead and Dean of Medicine, University of Dundee; and Dr Anna Barnett, Network Manager, NRS Diabetes

12:25 - 12:40	**The Cardiac CARE Trial: An RCT of cardiac troponin guided cardioprotection therapy to prevent anthracycline cardiotoxicity** Dr Morag MacLean, Senior Trial Manager, Edinburgh Clinical Trials Unit, University of Edinburgh
12:40 - 12:55	**An update regarding the Meso-ORIGINS study: part of the PREDICT-Meso International Accelerator** Dr Mark Neilly, Clinical Research Fellow, University of Glasgow
12:55 - 13:10	**Treatment in Morning vs Evening (TIME) study** Dr Filippo Pigazzani, Clinical Research Fellow, School of Medicine, University of Dundee
13:10 - 13:25	**Genetic testing and targeted intervention to prevent development and progression of Paget's disease of bone** Professor Stuart Ralston, Versus Arthritis Professor of Rheumatology, Centre for Genomic and Experimental Medicine, University of Edinburgh

C: Powering healthcare through data and artificial intelligence (AI)

As we work to transform health experiences and outcomes, the need for rapid, real-time health information is essential and presents major opportunities to drive forward innovation and data-informed improvements in healthcare. Access to these enriched datasets, combined with an ability to apply AI and machine learning, can offer deeper patient insights, faster diagnosis and, ultimately, improved treatment. This session will outline work underway in Scotland to enhance our data and AI infrastructure, attract high-quality research and innovation projects and accelerate these evolving technologies into clinical service.

Session Welcome Professor Julie Brittenden, R&I Director, NHS Greater Glasgow and Clyde; and Professor Nicholas Mills, Chair of Cardiology and Consultant Cardiologist, University of Edinburgh

12:25 - 12:40	**Mapping Scottish Population Scale Health Data to Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM) standard to support FAIR Principles** **Erum Masood**, Data Engineer, Health Informatics Centre, University of Dundee; and **Gordon Milligan**, Deputy Director Alleviate Pain Data Hub, Health Informatics Centre, University of Dundee
12:40 - 12:55	**Implementation of a decision-support tool for the diagnosis of myocardial infarction in the Emergency Department** **Dr Dimitrios Doudesis**, Senior Data Scientist, Centre for Cardiovascular Science, University of Edinburgh
12:55 - 13:10	**Towards implementation of live AI-based prognostic risk-prediction scores in a COPD MDT** **Professor Chris Carlin**, Consultant Physician and Clinical Lead for Respiratory Medicine, South Sector NHS Greater Glasgow & Clyde; and Honorary Professor at the University of Glasgow
13:10 - 13:25	**Understanding privacy risk in electronic health records to improve access to unstructured data without compromising confidentiality** **Dr Arlene Casey**, Dunhill Medical Trust Fellow, University of Edinburgh; and Natural Language Processing (NLP) Lead, DataLoch

D: Enabling participation in research

Patients and participants are the foundation of clinical research - without them research can't happen, and healthcare can't improve. Yet we know more needs to be done to ensure patients, their families and their carers are empowered to directly and proactively explore research opportunities and make informed decisions about participating in research that is of relevance to them. This session will explore the use of new services, new technologies and virtual delivery models to improve the way clinical research is accessed and delivered.

	Session Welcome Professor Zosia Miedzybrodzka, Professor of Medical Genetics, University of Aberdeen, and Dr Tom Barlow, Senior Research Manager, Chief Scientist Office
12:25 - 12:40	**Who stands to benefit from the results of your trial?** **Dr Heidi Green**, Director of Health Research Equity, COUCH Health
12:40 - 12:55	**SHARE (Scottish Health Research Register & Biobank)** **Professor Brian McKinstry**, Professor of Primary Care eHealth at the University of Edinburgh and Director of SHARE
12:55 - 13:10	**ENabling Research In Care Homes – ENRICH (Scotland)** **Lesley Cousland**, Clinical Studies Officer, NHS Tayside
13:10 - 13:25	**Decentralised Trials- a Paediatric Perspective** **Dr Pamela Dicks**, NRS Paediatrics Network Manager

E: Strengthening patient and public involvement to shape research now and in the future

Excellent public involvement is an essential part of health and social care research and shown to improve its quality and impact. Insights from lived experience, different aspirations and views on health outcomes ensure studies can be designed and delivered in more effective, relevant ways. This session will explore public involvement developments and examples of best practice to learn and demonstrate how we can continue to build public involvement in line with the UK Standards for Public Involvement.

	Session Welcome Carol Porteous, CSO Patient and Public Involvement Lead; and Sarah Kennedy, Research Manager, NHS Research Scotland
12:25 - 12:40	**Enhancing recruitment and participation completion rates in the world's largest study of ME/CFS through patient and public involvement** **Diana Garcia**, DecodeME Project Manager, University of Edinburgh; and **Sian Leary**, member of the DecodeME Patient and Public Involvement Steering Group
12:40 - 12:55	**Meaningfully Involving Young People in Shaping Health Research** **Sarah Robertson**, Youth Engagement Lead, Generation Scotland, University of Edinburgh
12:55 - 13:10	**Sustainable PPI: Empowering the public in dental research, education, and NHS service** **Dr Niall McGoldrick**, Clinical Lecturer and Honorory Consultant in Dental Public Health, School of Dentistry, University of Dundee and NHS Tayside
13:10 - 13:25	**Patient and public perception of using artificial intelligence to guide diagnosis of acute cardiac conditions** **Amy Ferry,** Senior Research Nurse, Centre of Cardiovascular Science, University of Edinburgh

13:30 – 14:15   **Lunch, Networking and Attended Poster Sessions**

14:15 – 15:55   **To the next 50**
Chaired by **Christine McLaughlin**, Co-Director of Population Health, Scottish Government and **Jane Grant**, Chief Executive, NHS Greater Glasgow and Clyde, this session will explore how we work collaboratively to unlock and accelerate the full potential of Scotland, tackle major healthcare challenges, and identify the best treatments, technologies, and techniques for the benefit of our patients, our NHS, our economy and global profile.

14:20 – 14:40   **Changing the paradigm for health care systems**
Professor Sir John Bell, Regius Professor of Medicine University of Oxford

14:40 – 15.55   **The end-to-end pathway for RDI across health and social care in Scotland**
Building on a 50-year legacy of support, this session will explore unified efforts across Scotland to develop a highly collaborative, whole system approach to RDI, helping to deliver transformative changes in areas of national priority.

14:45 – 14:55   **CSO Regional Innovation Hubs**
Professor David Lowe, Clinical Director Health Innovation, Chief Scientist Office

14:55 – 15:05   **Reducing Drug Deaths Innovation Challenge**
Carrie Thomson, Programme Lead Innovation Collaboration, Chief Scientist Office

15:05 – 15:20   **Accelerated National Innovation Adoption Pathway (ANIA)**
Dr John Thomson, Associate Clinical Director, Centre for Sustainable Delivery; and **Jason White**, Head of Innovation at the NHS Centre for Sustainable Delivery

15:20 – 15:35   **Innovation Design Authority (IDA)**
Tom Steele, Chair of Scottish Ambulance Service; and
Professor Dame Anna Dominiczak, Chief Scientist (Health), Scottish Government and Regius Chair of Medicine at the University of Glasgow

15:35 – 15:55   **Discussion**

15:55 – 16:40 **Scotland's Triple Helix Approach**

Chaired by **Professor Jason Leitch**, National Clinical Director of the Scottish Government, this engaging panel discussion will reflect on the need for Government, academia, industry, the NHS, and the public to be aligned and working collaboratively to collectively tackle healthcare challenges, offer unique expertise and attract investment into Scotland.

Professor Tan Chorh Chuan, Permanent Secretary (National Research & Development); Chairman, Agency for Science, Technology and Research; Chairman, MOH Office for Healthcare Transformation

Dr Victor Dzau, President of US National Academy of Medicine (NAM), Vice Chair of the National Research Council, Chancellor Emeritus of Duke University

Professor Sir John Bell, Regius Professor of Medicine University of Oxford

Jane Grant, Chief Executive, NHS Greater Glasgow and Clyde

Mark Logan, Chief Entrepreneur, Scottish Government

Mark Cook, Chair of Life Sciences Industry Leadership Group

16:40 – 16:50 **Closing Reflections**

Professor Dame Anna Dominiczak, Chief Scientist (Health), Scottish Government and Regius Chair of Medicine at the University of Glasgow

16:50 – 18:00 **Networking, Refreshments and Award of oral and poster abstract prizes**

Join the conversation online using #CSOat50 and follow us @NHSResearchScot @CSO_Scotland

THANK YOU

The conference is only possible with the support, contribution and input of multiple individuals, teams, and organisations. We extend a special thank you to the venue team at the Teaching and Learning Centre, Queen Elizabeth University Hospital for hosting the conference and ensuring the smooth running of the day. We would also like to extend specific thanks to:

Our **chairs, speakers, and panel members**. From inspiring homegrown talent to international experts their knowledge, insight and support have enabled delivery of a fantastic programme of talks and panel discussions.

READ OUR SPEAKER BIOGRAPHIES

Our **Abstract authors** who have made it possible to showcase a range of projects which truly reflect the strength and diversity of health research and innovation across the country.

VIEW POSTER ABSTRACTS

Our **conference sponsors** who generously contributed to the cost of delivering the conference and enabled us to bring together so many individuals across our research and innovation community.

READ ABOUT OUR SPONSORS

Our **Scientific Programme Committee and Conference Working Group** for investing time in shaping and developing the conference content, reviewing abstracts and providing ongoing advice and guidance.

MEET THE GROUP

Finally to our delegates, for your attendance and contribution to the day. We hope you have found it an informative, inspiring and beneficial conference. We welcome you to complete a short evaluation on your conference experience. It will take just a few minutes and provide valuable feedback to shape future events and conferences.

PLEASE COMPLETE THE EVALUATION

STAY IN TOUCH:

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