

Precision Medicine: Promoting Knowledge Exchange and Collaboration between Kuwait and the United States – Second Workshop

Agenda

Workshop Day 1: Wednesday, October 15, 2025

Location: National Academy of Sciences Building, Washington, DC

All main workshop sessions will be held in the Lecture Room.

8:00–9:00 am **Breakfast and Registration (West Court)**

9:00–9:35 am **Welcome and Opening Remarks**

Dr. Fawaz Haj, Professor of Nutrition and Internal Medicine, University of California, Davis**

Dr. Salman Al-Sabah, President, Kuwait Authority for Medical Responsibility**

Dr. Vaughan Turekian, Executive Director, Office of International Networks, Cooperation, and Security, The National Academies of Sciences, Engineering, and Medicine

Dr. Abrar Almoosa, Director, Research Capacity Building, Research & Technology Directorate, Kuwait Foundation for the Advancement of Sciences

Sheikha Al-Zain Al-Sabah, Ambassador of the State of Kuwait to the United States

9:35–10:15 am **Fireside Chat: The Evolving Role of Genetic Counselors in Translational Precision Medicine**

This fireside-style session will emphasize the vital role of genetic counseling in Translating genomic discoveries into meaningful patient outcomes. The discussion will explore key areas such as genetic counselor education and training, culturally responsive care, and building sustainable global collaborations.

Ms. Sara Pirzadeh-Miller, President, National Society of Genetic Counselors; Director, Cancer Genetics Program, University of Texas Southwestern Medical Center

Dr. Ahmad Al-Serri, Associate Professor of Genetics and Behavioral Science at the Faculty of Medicine, Kuwait University

**Workshop Planning Committee

Fireside Chat Moderator:

Ms. Shenela Lakhani, Assistant Professor and Director, Master of Science in Genetic Counseling Program, Weill Cornell Medicine

10:15–10:45 am **Group Photo and Coffee Break (East Court)**

10:45 am–12:30 pm **Session 1: Shaping the Future of Global Healthcare through Genome and Exposome Integration**

This session will explore how emerging technologies and interdisciplinary research are bridging the gaps between genetics, lifestyle, diet, and environmental exposures to better understand disease susceptibility and health trajectories in different populations.

Environmental Exposures and Impact on Public Health in Kuwait

Dr. Barrak Alahmad, Director of Occupational Health and Climate Change Program, Harvard T.H. Chan School of Public Health; Physician at the Directorate of Public Health, Kuwait Ministry of Health

Systems Biology Approaches to Metabolic Health

Dr. Shankar Subramaniam, Distinguished Professor, and Joan and Irwin Jacobs Endowed Chair in Bioengineering and Systems Biology, University of California, San Diego

Leveraging Animal Model Populations for Precision Nutrition

Dr. Folami Ideraabdullah, Associate Professor of Genetics and Nutrition, University of North Carolina at Chapel Hill

Advancing Human Health through Translational Exposomics

Dr. Lida Chatzi, Professor of Population and Public Health Sciences, Director of Center on Translational Exposomics Research, University of Southern California

Session Moderators:

Dr. Susan Sumner (Committee Member), Professor at Nutrition Research Institute and Director of the Metabolomics and Exposome Laboratory, University of North Carolina at Chapel Hill**

Dr. Vasilis Vasiliou, Department Chair and Susan Dwight Bliss Professor of Epidemiology, Yale University

12:30–1:30 pm **Lunch (West Court)**

1:30–3:00 pm

Session 2: Navigating Policy and Regulatory Pathways to Advance Global Collaboration

This session will explore effective strategies to align regulatory frameworks and Policy approaches that promote responsible data sharing, cross-border research, and technology innovation. The discussions will focus on addressing shared challenges towards building a more coherent and collaborative global ecosystem for precision medicine research.

Legal and Ethical Foundations for Global Precision Medicine

Dr. Ellen Wright Clayton, Professor of Law, Health Policy, and Pediatrics, Vanderbilt University Medical Center

A Regulatory Perspective on Opportunities in Precision Medicine

Dr. Joshua Sharfstein, Distinguished Professor of the Practice in Health Policy and Management, Vice Dean for Public Health Practice and Community Engagement, Johns Hopkins Bloomberg School of Public Health

Enhancing Data Governance and Regulatory Frameworks for Precision Medicine in Kuwait

Dr. Hessa Al Kandari, Director of the Health Studies and Research Directorate, Ministry of Health, Kuwait; Head of the Population Health Department, Dasman Diabetes Institute

Navigating Precision Medicine Implementation in Qatar and the Region

Dr. Khalid Fakhro, Chief Research Officer and Director of Precision Medicine Program, Sidra Medicine, Qatar

Session Moderators:

Ms. Shaima Alasiri, Legal Affairs Manager, Kuwait Authority for Medical Responsibility

Dr. Mary Majumder, Professor of Medical Ethics and Health Policy, Baylor College of Medicine

3:00–3:15 pm

Coffee Break (East Court)

3:15–4:45 pm

Collaborative Roundtable Discussions

Attendees will be divided into two roundtable-style breakout rooms for focused conversations on advancing precision medicine research and global collaboration.

[List of attendees for each room is available at the end of the agenda packet]

1. **Unlocking the Future of Precision Medicine Through Data Sharing:** (Board Room)

Discussion on persistent challenges and barriers in data sharing across institutions and borders; actionable opportunities to strengthen domestic and international collaborations.

Moderator: Dr. Ahmad Nabeel, Founder and CEO, Gulf Medical Technologies; Distinguished Researcher and Physician, St Mary's Hospital – Imperial College London**

2. Translating Genome–Exposome Research into Clinical Impact:
(Conference Room 125)

Discuss collaborative strategies to accelerate the translation of genome–exposome research into clinical outcomes, both domestically and globally.

Moderator: Dr. Jamaji Nwanaji-Enwerem, Health Equity Presidential Assistant Professor of Emergency Medicine, University of Pennsylvania

4:45–5:30 pm **Networking Reception** (Great Hall)

5:30–7:00 pm **Dinner** (West Court)

END OF WORKSHOP DAY 1

Workshop Day 2: Thursday, October 16, 2025

8:15–9:00 am **Breakfast** (West Court)

9:00–9:10 am **Debrief from Day One and Overview of Day Two**
Dr. Hutan Ashrafian, Professor and Lead for Applied AI and Big Data, Imperial College London; Chief Scientific Officer of Preemptive Health, Flagship Pioneering**

9:10–9:50 am **Keynote Session: Translating Precision Medicine into Global Impact**
Dr. Bruce Korf, Distinguished Professor Emeritus, Department of Genetics, The University of Alabama at Birmingham

Session Moderator:

Dr. Fawaz Haj, Professor of Nutrition and Internal Medicine, University of California, Davis**

9:50–10:00 am **Short Break**

10:00–11:00 am **Session 3: Catalyzing the Integration of Precision Medicine Technologies into Clinical Settings**
This three-part session will explore how precision medicine technologies are being integrated into clinical care. Discussions will focus on the technological infrastructure needed to enable adoption, the translation of scientific discoveries into patient applications, and the incorporation of these innovations into clinical workflows to deliver meaningful impact for patients.

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Part I. Building Technology Infrastructure for Precision Medicine in Clinical Settings

From cloud-based data platforms to AI-driven bioinformatics, speakers will discuss the critical infrastructure, as well as challenges and opportunities involved in transforming healthcare delivery through technology.

Unifying Data to Accelerate Discovery in Precision Medicine

Mr. Michael Zager, Chief Executive Officer, Cirro Bio

Operationalizing AI and Cloud to Translate Research to Care

Dr. Naqi Khan, Chief Medical Information Officer, Global Healthcare Solutions, Amazon Web Services

Moderator:

Dr. Dari Alhuwail, Associate Professor of Information Sciences, Kuwait University

11:00–11:15 am **Coffee Break (East Court)**

11:15 am–12:45 pm **Session 3 Continued:**

Part II. Translating Scientific Breakthroughs into Clinical Care

Speakers will highlight how cutting-edge discoveries in genomics, surgical innovation, and other precision medicine advances are being translated into real world patient applications across different healthcare settings.

Applying Genomic Insights to Advance Chronic Kidney Disease Care

Dr. Hamad Ali, Associate Professor of Genomic Medicine, Kuwait University and Dasman Diabetes Institute, Kuwait

Innovations in Surgical Practice and Precision Medicine

Dr. Sulaiman Almazeedi, Chief of Surgery, Jaber Al-Ahmad Hospital, Kuwait; Program Director, Kuwaiti Board of General Surgery

Translating Surgical Research into Clinical Excellence

Dr. Waddah Al-Refaie, Arnold W. Lempka Endowed Chair and Professor in Surgery, Creighton University and CHI Health

Moderators:

Dr. Lucas Berenbrok, Associate Professor and Vice Chair of Education for Pharmacy & Therapeutics, University of Pittsburgh

Dr. Anna Maria Pappa, Assistant Professor of Biomedical Engineering, Khalifa University, UAE

12:45–1:45 pm **Lunch (West Court)**

1:45–3:15 pm

Session 3 Continued:

Part III. Implementing Precision Medicine Technologies into Clinical Workflows

Speakers will highlight strategies for integrating precision medicine tools into clinical workflows while equipping healthcare teams with the training and skills needed to use these innovations effectively and sustainably.

Digital and Precision Approaches to Patient Care

Dr. Raed Dweik, Chief of the Integrated Hospital Care Institute, Cleveland Clinic; President, American Thoracic Society

Insights from the Genome Project and Cancer Care Advancements in Oman

Dr. Abeer Al Saegh, Head of Cancer Genomics, University Medical City Comprehensive Cancer Care and Research Centre, Oman

Integrating clinical and organizational strategies for diabetes care in Kuwait

Dr. Ebaa Al Ozairi, Chief Medical Officer, Dasman Diabetes Institute, Kuwait

Session Moderators:

Dr. Aly Azeem Khan, Assistant Professor of Family Medicine and Pathology University of Chicago; Head of AI and Machine Learning, Chan Zuckerberg Biohub Chicago

Dr. Zaid Almarzooq, Interventional Cardiologist and Director of Structural Heart Program, Boston Veteran Affairs Healthcare System

3:15–3:45 pm

Reflections and Closing Perspectives from Workshop Planning Committee

END OF FORMAL WORKSHOP PROGRAM

3:45–4:30 pm

NAS Building Tour (optional)