Speaker Sessions

Big Data
Miriah Meyer, University of Utah, United States
Wei Lee Woon, Khalifa University, United Arab Emirates

Humans, machines and data: Understanding challenges and opportunities
Enrico Bertini, New York University, United States

Towards a unifying theory of learning and information
Ibrahim Alabdulmohsin, Saudi Aramco, Saudi Arabia

Computational social science: Using big data as a societal microscope
Kinga Makovi, NYU Abu Dhabi, United Arab Emirates

Machine learning driven biomarker discovery in the era of big data
Bobbie-Jo Webb-Robertson, Pacific Northwest National Laboratory, United States

Water Systems
Hassan Arafat, Khalifa University, United Arab Emirates
Jeremy Guest, University of Illinois at Urbana-Champaign

Sustainable reuse options of wastewater in Oman
Mahad Baawain, Sultan Qaboos University, Oman

The who, where, and (somewhat) why of the drinking water microbiome
Ameet Pinto, Northeastern University, United States

A potential collaboration with Water Research Center of Kuwait Institute for Scientific Research on innovative desalination technologies
Mansour Ahmed, Kuwait Institute for Scientific Research, Kuwait

Sustainable bioinspired water purification
Manish Kumar, Pennsylvania State University, United States

The Microbiome

Hussain Mahdi Bahbahani, Kuwait University, Kuwait
Leonard Pease, Pacific Northwest National Laboratory, United States

Understanding the gut microbiome as an ecosystem in health and disease
Catherine Lozupone, University of Colorado, United States

Antimicrobial activity of lactic acid bacteria and antimicrobial peptides from camel milk
Rita Rahmeh, Kuwait Institute for Scientific Research, Kuwait

Functionality of the vaginal microbiome
Jennifer Fettweis, Virginia Commonwealth University, United States

Pharmacomicrobiomics: How our microbiome cloud affects precision therapeutics
Ramy Karam Aziz, Cairo University, Egypt

Air Quality

Christa Hasenkopf, Open AQ, United States
George Mitri, University of Balamand, Lebanon

Global air quality: Challenges and opportunities
Christine Wiedinmyer, University of Colorado, United States

Examining the challenges in mainstreaming climate change in development plans: Lessons learned from Lebanon
Lea Kai, Ministry of the Environment, Lebanon

New high-resolution global composition forecast
Emma Knowland, National Aeronautics and Space Administration, United States

Putting air quality data to work – Opportunities and challenges of fine-grained spatial and temporal air quality information
Karim Tarraf, Hawa Dawa and Cairo University, Egypt

Air quality data and awareness in Kuwait
Bader Albusairi, Kuwait University, Kuwait

Next Generation Buildings and Infrastructure
Laila Khodeir, British University in Egypt, Egypt
Hussam Mahmoud, Colorado State University, United States

Scalable architectural visions!
Raya Ani, American Institute of Architects-Middle East, United Arab Emirates

Controlling thermal radiation for large scale energy applications
Xiaobo Yin, University of Colorado, United States

Reimagining heritage and public space in Fez, Morocco
Aziza Chaouni, University of Toronto and Aziza Chaouini Projects (Fez), Morocco

Programmable skins: A hygromorphic approach for low-cost adaptive building façades
Sherif Abdelmohsen, American University of Cairo, Egypt

NASEM Programs

NASEM international activities
John Boright, National Academy of Sciences, Engineering, and Medicine, United States

Arab-American fellowships
Daniel Placht, National Academy of Sciences, Engineering, and Medicine, United States

KFAS and Regional Research & Funding Opportunities

KFAS as a catalyst of change
Ameenah Farhan, Kuwait Foundation for the Advancement of Sciences, Kuwait

Importance of international collaborations in research and innovation programs: Examples from Oman
Ali Al Shidhani, The Research Council, Oman