

Expo 2020 Dubai Programme for People and Planet

WORLD MAJLIS AGENDA

HEALTH AND WELLNESS WEEK

27 January – O2 February 2022



PATE Tuesday, 1st February 2022 TIME 4.00 to 6.00 PM VENVE Terra - The Sustainability Pavilion

THE TOPIC

AT THE SPEED OF LIFE:

The Future of Faster and Safer Medical Innovations

in collaboration with the USA

The COVID-19 pandemic has challenged healthcare systems around the world, pushing the medical industry to demonstrate its capacity to accelerate innovation.

To halt the COVID-19 pandemic, researchers have stunned the world by reducing a 10- or 15-years vaccine development timeframe to just about a year. The many factors - from technology to policy - that have successfully facilitated the vaccine race are often poorly understood by the general public, pointing to the fact that successful medical advances are also often accompanied by suspicion.

Across all areas of health, technologies from artificial intelligence to 3D printing, genomics and robotics are advancing exponentially, shaping the future of medicine. Everything in the medical industry is now changing, from how patients consult their doctors, to data and analytics-enabled continuous care, to how hospitals and doctors use tools and share information.

These unprecedented breakthroughs have given rise to great hope in health research, drug discovery, treatment innovation, personalised medicine, telemedicine, and optimal patient care. Perhaps the medical world will soon find solutions to the biggest health challenges we face, and evolve not just to treat disease, but increasingly, to prevent it.

- What have been some of the most disruptive medical innovations of recent times?
- What is driving the accelerated pace of medical innovations?
- How can we ensure that accelerated medical innovations remain safe, and that the public feels safe?
- How do you successfully communicate scientific and medical breakthroughs and maintain public trust?
- Are there any potential ethical issues linked to medical innovation and how can we anticipate them?

MODERATOR



Dr Federica Busa

Senior Vice President of Visitor Experience, Expo 2020 Dubai

Dr Federica Busa is the Senior Vice President of Visitor Experience overseeing the Expo 2020 public realm content and engagement. She has been part of Expo 2020 Dubai since the early days of the successful bid, first developing the theme of Expo and then bringing it to life through a variety of exhibitions, publications and thought leadership programmes such as the World Majlis. Prior to joining Expo 2020 Dubai in 2012, she served as the Advisor to the Secretary General of the Bureau International des Expositions, with the emphasis on enhancing the planning and collaboration between the BIE and Expos in the areas of management and communication.

Dr Federica held a variety of positions in both the private sector and academia. She was Director of Marketing for Publicis Technology in Paris. Between 1996 and 2002, she worked actively in natural language processing both as a university researcher and faculty, in the US and Italy, as well as Director of Product Development for a search engine company in Cambridge, MA.

PARTICIPANTS

Sergio Abrignani MD, PhD

Immunologist, University of Milan, Italy

Sergio Abrignani is Chief Scientific Officer of INGM, the Istituto Nazionale di Genetica Molecolare "Romeo ed Enrica Invernizzi", an Italian research institute based in Milan, with a strong focus on human immunology. He is also full professor of Immunology and Immunopathology at the University of Milan. He has 20 years of international experience in vaccine research in pharma and biotech environment and 15 years of academic research experience.

Sergio is MD from the University of Padova. From 1986 to 1993 he worked, as lab head, at the Ciba-Geigy in Basel (Switzerland). From 1993 to 1999 he was Director of the Immunology and Virology Research Unit at Chiron Vaccines in Siena (Italy). From 1999 to 2005 he was Vice President of R&D at Chiron Corporation in San Francisco (USA). Since 2006, he leads the INGM which stands out as one of the most challenging and remarkable research institute in Italy.

Sergio Abrignani's research activity has focused on immunology and on the interactions between viruses and human cells. He has published about 150 scientific papers with an h-index of 70 (GS), more than 19000 citations, and has about 30 granted international patents.

He is member of many Italian and international scientific societies and academies. Because of his studies on the hepatitis C virus, in 2004 he received the Public Health gold Medal of Merit from the President of the Italian Republic. In 2011 he was awarded an "Advanced Grant" of the European Research Council (ERC). In 2021, he has been nominated member of the Italian National Advisory Board (CTS) for the COVID pandemic.





Dr Yvonne Cagle

Physician, professor, retired Air Force Colonel, and former NASA Astronaut, USA

NASA Astronaut and retired Colonel Yvonne Cagle, M.D. Ph.D. served as the chief strategic manager and liaison for the Level II Program Office of NASA's Commercial Reusable Suborbital Research program, NASA's Google project partnerships and continues to facilitate innovations stemming from other Silicon Valley programmatic relationships. Dr. Yvonne Cagle also previously taught as a consulting professor for Stanford University's Department of Cardiovascular Medicine and its department of Electrical Engineering.

Dr. Cagle is one of the leading researchers mapping human spaceflight brain and body adaptive processes, as well as characterizing neurobehavioral perspectives for polar, lunar, and Mars habitats for long-duration space expedition missions.

Currently, Dr. Cagle serves as the lead technical monitor for the NASA-Chabot Space and Science Museum Space Act Agreement to enable reimagining and curating learning everywhere for galaxy explorers of all ages, communities, and cultures to experience accessible dynamic, immersive, and first-hand hands-on and virtual adventures in sustainable innovation and exploration of our planet earth and the aerospace universe.

Prof John Fraser

Founder/Director of the Critical Care Research Group (CCRG), The Prince Charles Hospital & University of Queensland; Director of ICU St Andrew's War Memorial Hospital; President Asia-Pac Extracorporeal Life Support Org; Founding member of the global clinical trials ECMOnet & CoChair Queensland Cardiovascular Research Network, Australia

Established 2004, CCRG is Australia's largest multi-disciplinary critical care research facility with more than eighty world leading clinicians, engineers, scientists, economists, and support staff from six continents. Under his leadership, CCRG has created seven purposebuilt biology, engineering, and bio-fabrication labs and the largest preclinical ICU in the southern hemisphere.

John has five professorships with major Australian universities, published >550 peer-reviewed publications, received AUD41+million in competitive grants, delivered over 200 national and international keynotes and lectures, and is the senior editor of the most comprehensive textbook on Mechanical Circulatory Support. He has been awarded many international research awards, including the 2018 Australian Society of Medical Research Award. His multi-disciplinary research extends from basic science, preclinical, international clinical bionic heart and lung, sepsis and respiratory support in resource-poor countries. He led Australia's first-ever intentional NHMRC Centre for Research Excellence in Artificial Heart & Lungs.

In Jan 2020, Fraser cofounded the COVID-19 Critical Care Consortium with A/Prof G LiBassi and Dr J Suen. The Consortium facilitated the collection of 35+million datapoints from ICU COVID-19 patients in 54 countries to aid intensivists decide treatment pathways for the



critically ill. With generous support from Bill and Melinda Gates Foundation and Minderoo, they developed dashboards with IBM. The Journal of the American Medical Association JAMA lauding the Consortium's innovative global efforts as a quantum change in data collection in medical research.

Driven by a desire to translate great research into better clinical outcomes, Fraser co-founded BiVACORTM with its inventor Dr Dan Timms in 2007; and De Motu Cordis an award-winning medtech startup to revolutionise emergency drug delivery. The company is chaired by John Eales, world-cup winning Australian Wallabies Captain 2000 Bledisloe Cup. The admission of his own father to ICU has encouraged him to now work on improving patient centred outcomes through the creation of "ICU of the Future" The future of intensive care.

Dr Mahender Nayak

Area Head, ICMEA & Senior Vice President, Takeda, Japan



Driven by innovation, Nayak has a strong track record in strategic functional leadership and general management which spans more than 11 years of in-country leadership, eight years of regional successes as well as four years global experience.

In his current capacity, Nayak is overseeing the development and growth of Takeda in the ICMEA region. His proven ability to lead, motivate and develop people across geographies and cultures is key to ensure the success of the company in accommodating pharmaceutical growth trends.

Prior to joining the ICMEA region, Nayak was in charge of portfolio management for the Growth and Emerging markets while in Singapore between the years 2018 and 2020. Nayak was also the General Manager of Takeda's operations in Korea. He was also the Marketing Director for Asia Pacific between July 2011 and May 2013.

Mahender Nayak joined Takeda Pharmaceuticals in 2011, since then, grew within the company to hold various senior roles and responsibilities in different markets. His expertise in bringing innovation to patients coupled with his understanding of the healthcare sector's dynamics and ability to lead teams to achieve robust business results reflects his strategic insight and overall passion.





Dr Walid Al Zaher

Chief Research Officer, G42 Healthcare, UAE

Dr. Walid Zaher is the Chief Research Officer at G42 Healthcare. He has been the Vaccine projects Lead including Phase-III clinical trials of the Sinopharm inactivated vaccine against COVID-19.

Before joining G42 Healthcare, Dr. Walid was Corporate Group Clinical Research & Innovation Director at Abu Dhabi Health Services Company [SEHA]. He is also an adjunct Associate Professor at the college of medicine at UAE University and Khalifa University.

Before his UAE stint, Dr. Walid was the Director of the College of Medicine Research Centers and an assistant professor of regenerative medicine and stem cells at King Saud University in Riyadh. He has been a consultant for Saudi 2020 National Biotechnology and Infectious Disease plan at KASCT.

He graduated with a Bachelor of Medicine and Surgery and Master's in Medical Education, Anatomy and Embryology, and Bioscience Technology from Saudi Arabia. He completed his Ph.D. in Regenerative Medicine from Denmark, and laser-medicine applications training at Harvard-MGH, Boston.

VIRTUAL PARTICIPANTS



Professor Dr Raghib Ali

Director & Principal Investigator of the Public Health Research Center & Associate Research Professor, New York University, Abu Dhabi, UAE

Professor Raghib Ali is the Director and Principal Investigator of the Public Health Research Center and Associate Research Professor at New York University, Abu Dhabi and Adjunct Associate Professor in Population Health at New York University School of Medicine.

He is also an Honorary Consultant in Acute Medicine at the Oxford University Hospitals NHS Trust and an Associate Fellow at Green-Templeton College at the University of Oxford.

Additionally, he is a Senior Clinical Research Associate at the MRC Epidemiology Unit at the University of Cambridge and Honorary Consultant at Public Health England.

He is a graduate of the Universities of Cambridge, Oxford and London and a Fellow of the Royal College of Physicians. He was a faculty at the University of Oxford for 10 years before moving to NYU Abu Dhabi in 2014 to set up the UAE Healthy Future Study, the first prospective cohort study in the country, which aims to understand the causes of obesity, diabetes and cardiovascular disease.

He has published over 120 papers with over 60,000 citations and is one of the most highly cited medical researchers in the region.

He has been involved in both the NYU Abu Dhabi and Abu Dhabi Department of Health response throughout the Covid pandemic and was also appointed as an Independent Expert Adviser on Covid to the UK government as well as serving on the frontline.



Dr. G. Anton Decker MBBCh, MHA, MRCP (UK)

President, Mayo Clinic International, USA

G. Anton Decker is president of International at Mayo Clinic. With a workforce of more than 71,000, Mayo Clinic earns \$14 billion in annual revenue while caring for more than 1.3 million patients each year from all 50 states and more than 130 countries.

Dr. Decker is a global leader taking Mayo Clinic to the world. He uses his experience in health care operations, international partnerships, and health economics to develop new commercial opportunities and strategies to cure, connect and transform care for people worldwide. Having trained and worked within the medical systems of four countries, Dr. Decker understands the cultural and operational nuances of global health care. He works to create access and solutions for international organizations and providers to partner with Mayo Clinic specialists in the treatment of serious and complex conditions.

Prior to returning to Mayo Clinic in 2019, Dr. Decker was president of Health Innovation for Bon Secours Mercy Health, an international health system. He also served as chief clinical officer for Mercy Health, president of Mercy Health Physicians, chief medical officer and board chair for Banner Medical Group, and board chair for Banner Health Network.

Born in South Africa, Dr. Decker completed medical school at the University of the Witwatersrand, Johannesburg, and trained at Mayo Clinic College of Medicine and Science as a resident and fellow. He has published numerous articles in peer-reviewed journals on issues in gastroenterology and in health administration.