### FIReS Webinar 2 Fostering innovative resilience in healthcare: support services and infrastructure

#### Overview

The COVID-19 pandemic stretched for the first time every modern healthcare system globally. Hospitals were forced to cancel elective operations, develop new work approaches, and redeploy staff to treat infected patients, limit infection rates whilst maintaining most urgent operations. Healthcare services are now in challenging but also potentially ground-breaking position to re-think the way they operate. This webinar brings together international hospital professionals and researchers to discuss, debate and provide facts to explain the reasons for hospital support which services and infrastructure are vulnerable and identify areas to enhance resilience.

This unique webinar is one of series of free events sponsored by the Royal Academy of Engineering to rethink healthcare resilience from a global perspective. The webinar is designed to represent the complexity of healthcare and will provide information for professionals, major emergency planners and policy makers. No matter what your background is, you'll have the opportunity to ask questions to our international speakers and gain knowledge from their experience to resolve your own problem.

#### Agenda

18:00 – 18:05 Welcome by Dr Nebil Achour

**18:05** – **18:20** "Response to the Covid-19 pandemic from an NHS Acute Hospital Estates perspective" by Chris Howlett.

**18:20 – 18:35** "Resilience Through Engineering" by Walt Vernon.

**18:35** – **18:50** "How to manage healthcare continuity during disasters" by Hasan Akcay.

**18:50** – **19:00** Question and answer session by Dr Nebil Achour and Hamdi Lamine.

**19:00 – 19:15** "Building community healthcare supply chain resilience during the Covid-19 pandemic" by Professor Ying Xie.

**19:15** – **19:30** "Building temporary and field hospitals at home: our response to cope with the surge of COVID-19 patients" by Daniela Sacchetto.

**19:30** – **19:40** Question and answer session by Dr Nebil Achour and Hamdi Lamine.

**19:40 – 20:00** "Discussion Panel" and closing notes facilitated by Dr Nebil Achour and Hamdi Lamine.

### Date: 17 March 2022 from 18:00 to 20:00 GMT.

For further information:

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**Booking information:** To book your place, please use the URL or scan the QR code. https://forms.office.com/r/4SxH8Fef5N

Places are limited.













## **Biographies**

#### **Professor Ying Xie**



Director of the Centre for Intelligent Supply Chain at Anglia Ruskin University. Expert in healthcare supply chain, international shipping, port management, and sustainable aviation supply chain. Worked with NHS to reduce

pharmaceutical waste and develop green pharmaceutical supply chain; she also involved with Essex County Council and lotic to develop digital twins enabled ecosystem for social care and healthcare. A board member in the Strategy Advisory Board for Digital Supply Chain Innovation Hub, Digital Catapult. The programme run by the Hub has drawn £10m award from UK Research and Innovation and drew another £10m investment from the private sector, to accelerate commercial integration of advanced and emerging digital technologies across manufacturing supply chains various sectors.

#### Walt Vernon PE, LEED AP, EDAC, FASHE



CEO Mazetti - 30 years of experience in the research, planning, and design of healthcare facilities. Founding member of the Built Environment Network, whose intent is to advance knowledge in the healthcare facilities network. Co-Coordinator for the Care, served on the board of

both Practice Greenhealth and Health Care Without Harm, and wrote the section on hospitals for CalGreen. Principal author for the World Health Organization's Health in the Green Economy, as well as AHA's Sustainability Roadmap for Hospitals – A Guide to Achieving Your Sustainability Goals. Very active on committees that have a large impact on the codes and standards involved in the design of healthcare facilities. Chair the Electrical Systems Technical Committee for NFPA 99 and co-chaired the ANSI/IEEE White Book: **Recommended Practice for Electric Systems in Health** Care Facilities. Chair the R&D Committee for the Healthcare Guidelines Revision Committee (HGRC), and, in that role in particular, I'm exploring the future of healthcare, and the relationship of buildings to the delivery of that care. Vice Chair for ASHRAE 189.3, and a member of The Center for Health Design's Research Coalition.

#### **Chris Howlett**



Senior Director of Estates and Facilities at the Mid and South Essex NHS Foundation Trust (MSE NHS FT). Chris has a Masters degree from the Medical Architecture Research Unit at London Southbank University but is an

engineer by background with more than 30 years' experience in the NHS with a career spanning many sectors including mental health, community, primary care, commissioning and acute services. Chris has worked at Director level since 2010, most recently at MSE NHS FT, where he is responsible for a large and complex estate portfolio comprising of three acute hospital sites together with a range of community premises. During the Covid-19 pandemic, a rapid response was required from NHS Estates and facilities teams to ensure that large numbers of patients presenting with respiratory illness could continue to receive safe and effective care. Chris will explain the "quick fixes" to the Estate which were required at the height of the pandemic and touch upon the longer term Estates implications for the NHS as the service strives to return to pre-pandemic activity levels.

#### **Daniela Sacchetto**



Biomedical Engineer of Disaster Medicine Service 118 of Regione Piemonte. Responsible for the logistics and technical aspects of Emergency Medical Team of Regione Piemonte Field Hospital; the design and the

implementation of the "OGR Temporary Hospital" (90 beds) and the "Valentino Field Hospital" (455 beds) in 2020. Daniela is a PhD researcher in Global Health, Humanitarian Aid and Disaster Medicine (jointly organised by CRIMEDIM and VUB), which allows her to combine her daily work on Disaster Medicine, her Research inclination and her passion to learn.

# Biographies

#### Hasan Akcay



Mechanical Engineering Coordinator at Istanbul Project Coordination Unit (IPKB), which governs the Istanbul Seismic Risk Mitigation and Emergency Preparedness Project (ISMEP). Hasan was involved in three major hospital projects, which

have been recently completed and now in service. Kartal Lütfi Kırdar City Hospital is one of these projects and has been awarded LEED Gold and EDGE certificates making the first building in the world awarded both certificates. Hasan work is focused on strengthening hospital lifelines and maintaining the electromechanical systems resilience.

#### Hamdi Lamine (Co-Organiser)



Research Associate at CRIMEDIM, Novara, Italy, and a PhD researcher at the Faculty of Medicine of Sousse, Tunisia. Hamdi is a Nurse Specialist in Resuscitation and Emergency. He holds MSc in Health Sciences (2017) from the Advanced

School of Health Science and Techniques of Sousse. Hamdi has experience in hospital preparedness to disasters and is involved in several international projects such as NIGHTINGALE and No-Fear and is investigating the level of preparedness of Tunisian hospitals to disasters using the WHO Hospital Safety Index

#### Dr Nebil Achour (Organiser)



Associate Professor in Disaster Mitigation with 20year experience in healthcare resilience to major hazards. Background is in Earthquake Disaster Mitigation Engineering. Awarded 3 international

prizes and published 50+ scientific articles covering issues related to the infrastructure, management and planning of healthcare resilience. WHO Advisor, member of the Global Expert Consultation on Revision of the Hospital Safety Index, member of post-disaster international investigation teams to Algeria, Iran, Japan and Turkey, and member of 3 international journal editorial boards.