www.europeanhealthcaredesign.eu | 14-17 JUNE 2021

EUROPEAN HEALTHCARE DESIGN

RESEARCH • POLICY • PRACTICE

COVID-19 GLOBAL SUMMIT

VIRTUAL

Organised by

AfH

SALUS
GLOBAL KNOWLEDGE EXCHANGE

FINAL PROGRAMME

CREATIVE DESTRUCTION

DESIGN INNOVATION IN THE FACE OF EXISTENTIAL THREATS

Register at europeanhealthcaredesign2021.hubilo.com | info@europeanhealthcaredesign.eu

@EHD_2021   #EHD2021

Thought Leaders

HLM Architects

LLEWELYN DAVIES

Lead Awards Sponsor

IHP Integrated Health Projects by VINCI Sir Robert McAlpine

Knowledge Leaders

Archus
The healthcare infrastructure specialist

Art in Site

AECOM

Brandon Medical
BRILLIANT BY DESIGN

CALLISONRTKL

DUPONT Tedlar

HDR

M MOTT MACDONALD

mts health limited

Stantec

Ryder

Partners

Alder Hey Children's NHS
NHS Foundation Trust

Guy's and St Thomas' NHS
NHS Foundation Trust
essentia

NHS Great Ormond Street Hospital for Children
NHS Foundation Trust

Moorfields Eye Hospital NHS
NHS Foundation Trust

Oriel
Creating the centre for advancing eye health

North Bristol NHS
NHS Trust

West Hertfordshire Hospitals NHS
NHS Trust

AHDC

building blocks for clinicians

Design Council

Design in Mental Health Network

EuHPN European Health Property Network

Royal College of Art
THE HELEN HAMLYN CENTRE FOR DESIGN

SYKEHUSBYGG

HEALTH PLANNING ACADEMY

uia PUBLIC HEALTH GROUP

Cover Credits (clockwise from top left):
Zayed Centre for Research into Rare Disease in Children, designed by Stanton Williams
The Prince & Princess of Wales Hospice, designed by Ryder Architecture
National Centre for Infectious Diseases & Ng Teng Fong Centre for Healthcare Innovation, designed by CPG Consultants
Blacktown Hospital Acute Services Building, designed by Jacobs

Page 2-3 Credits (left to right)
Zayed Centre for Research into Rare Disease in Children, designed by Stanton Williams
The Ark, Noah's Ark Children's Hospice, designed by Squire & Partners
Blacktown Hospital Acute Services Building, designed by Jacobs

CREATIVE DESTRUCTION
DESIGN INNOVATION IN THE FACE OF EXISTENTIAL THREATS

In a tumultuous year when the resilience of healthcare globally has been tested to the limit by the pandemic, the pressure to adopt a climate-smart development path for designing, building, operating and investing in health systems and infrastructure has also increased significantly.

The history books will pronounce 2020 a watershed year – a year when health systems, already strained in dealing with chronic and lifestyle illnesses among ageing populations, were thrown into a prolonged, arduous battle against a new highly infectious disease.

While we are not, as yet, able to determine what a post-pandemic world will look like, we have had time to reflect and look beyond the design of field hospitals and the adaptation of existing facilities. Our response to Covid-19 is one of three major directions of travel over the past decade in the way we design the physical and social architecture of healthcare, alongside climate change mitigation and realising the disruptive value of digital technology and medicine.

The pandemic has brutally exposed the faultlines in our health and care systems, and tested the relationship between the state and citizens. In combination with the rapid advancement of digital and medical technology, how can our health and care systems and infrastructure be reshaped and reconstructed in a way that promotes, creates and protects health for all?

Indeed, Covid-19 is one of two interconnected existential threats to human health, of which the planetary health crisis presents a more fundamental challenge. The changing climate is leading to more frequent heatwaves and extreme weather events such as flooding, including the potential spread of infectious diseases.

Reconstruction offers real opportunity

But it's not enough for health systems to limit themselves to treating health problems caused by air pollution and climate change; they must rise to the challenge of tackling them at source. There are positive signs of progress, with the NHS committing to a multi-year blueprint to become the world's first carbon net-zero national health system, and new guidance from the World Health Organization aimed at supporting healthcare facilities to anticipate, respond to, recover from, and adapt to climate-related shocks and stresses, while minimising negative impacts on the environment.

Covid-19 has been a cruel stress test of our social and healthcare systems and facilities. There is now a real chance to re-evaluate these systems – public, acute and social – and repair, strengthen or restructure them wherever necessary.

Over the past few months, there has been a sudden acceleration in the opportunities that digital medicine offers for remote diagnosis, consultation, chronic disease management, and home working. The basic structure of ambulatory medicine has confirmed the need for flexible, multi-acuity single rooms in hospitals, as well as an increase in skilled staff and critical and high-dependency beds.

Sustainable buildings equal healthy buildings

Undoubtedly, the importance of movement systems in the design of the 'chassis' of our health facilities has been reinforced. Most importantly, it has demonstrated that much of the global healthcare estate is made up of 'unhealthy' buildings.

Over the next decade, there will be inevitable increases in capital investment in healthcare facilities. Against this delivery there must be a recognition that sustainable buildings are first and foremost healthy buildings, providing environments that support the wellbeing of patients, health workers and the wider community.

The past year has clearly demonstrated the need for better care structures and greater protection. The crisis has reminded us, too, of

what we have known for centuries – that poor housing, impoverishment and social disconnection damage health and widen health inequalities. And it has also highlighted the critical importance of joining up our health and care system with public health so we can focus on the wider determinants of health that define how a progressive and equitable society functions for all.

This year's congress is an opportunity to craft a blueprint for reconstruction, a creative assertion of the power of design. We should embrace the three directions of travel – responding to Covid-19, the growth of digital technology, and climate change mitigation – recognising their potential to catalyse change, creativity and innovation, and proposing ways in which they can help transform our health systems and architecture.

European Healthcare Design 2021 features four days of insightful, provocative and entertaining talks, workshops and panel discussions. Days one and two will open with keynote plenary sessions, before splitting into three streams (12 in total). A keynote plenary will also begin the two-day COVID-19 Global Summit (a conference within a conference), which runs on days three and four. And the final session of day four will be devoted to a virtual ceremony to present the EHD2021 Awards, supported by lead sponsor IHP.

The congress will also host a poster gallery of innovative research and design projects (p17), an Awards Poster + Video Gallery, and an Innovation Zone of design and technology solutions (p18) and seminars.

For details about online registration and sponsorship opportunities, please go to page 22. Please note that all times in the programme are British Summer Time (BST).

JOHN COOPER
EHD2021 Programme Chair
Architects for Health

MARC SANSOM
Director
SALUS Global Knowledge Exchange

Organised by:

KEYNOTE SPEAKERS

TONY CAPON
Director, Sustainable Development Institute, Monash University, Australia

LEO YEE SIN
Executive director, National Centre of Infectious Diseases, Singapore

LAYLA MCCAY
Director of policy, NHS Confederation, UK

ANDREW GODDARD
President, Royal College of Physicians, UK

NATALIE FORREST
Senior responsible officer, New Hospital Programme, NHS England, UK

NIGEL EDWARDS
Chief executive, Nuffield Trust, UK

CRAIG MCWILLIAM
Programme director, New Hospital Programme, NHS England, UK

SUNAND PRASAD
Principal, Penoyre & Prasad; Chair, UK Green Building Trust, UK

Pandemic preparedness

In direct response to the pandemic, we are excited to announce that the COVID-19 Global Healthcare Design Summit will return this year, with the core theme: *Pandemic preparedness: Designing in resilience to strengthen health systems, services and infrastructure*. This 'conference within a conference' is fully integrated into the 7th European Healthcare Design Congress and brings global knowledge and learning together from the pandemic response, preparedness and impact.

In less than a year, the emergence of a new human coronavirus has brought global society to a standstill, sent vibrant economies spiralling into freefall, overwhelmed and placed untold stress on health systems, and caused death, illness and despair to billions of people worldwide. As this existential shock and continuing threat to life and livelihoods reverberates through societies, international health systems are adapting and reshaping at speed. The direct and indirect impacts on physical and mental health will be felt for years to come.

While vaccines bring hope that the Covid-19 pandemic can soon be controlled, many health systems remain in crisis. And as the World Health Organization has been keen to stress, although the vaccination roll-out is well underway in many high-income countries, a global immunisation programme will take longer to take effect, while questions remain over how long immunity will last.

The programme for the COVID-19 Global Summit (see Stream 7, page 11 and Stream 11, page 15) will launch with keynote talks from two global health leaders who have been involved in work relating to the pandemic on a number of fronts:

LEO YEE SIN
Executive director,
National Centre of
Infectious Diseases,
Singapore

LAYLA MCCAY
Director of policy,
NHS Confederation,
UK

The first day of the Summit (16 June) will feature sessions looking at: learning the lessons across the care continuum; caring for older people in a pandemic; and rapid and adaptive pandemic response.

The second day of the Summit (17 June and final day of the virtual EHD2021 Congress) will include sessions looking at: pandemic resilience design strategies; infection control and airborne transmission; and managing healthcare capacity in a pandemic.

We are delighted to invite you to participate in the *COVID-19 Global Healthcare Design Summit: Pandemic preparedness: Designing in resilience to strengthen health systems, services and infrastructure* to learn from, share and contribute towards a truly global dialogue around the current and future impact of the pandemic on the way healthcare systems, services and infrastructure are planned and designed.

DAY 1, STREAM 1: CLIMATE-SMART HEALTHCARE
14 June 2021 Main stage (all times are British Summer Time; all sessions streamed exclusively online)

SESSION 1
Opening plenary
Chair: John Cooper, Architects for Health, UK

Supported by:
AECOM

08.45	**Chair's welcome** John Cooper, Programme chair, Architects for Health, UK
09.00	**Keynote address: Environmentally sustainable healthcare: now is the time for action** Tony Capon, Professor; Director, Sustainable Development Institute, Monash University, Australia
09.15	**Keynote address: The big challenges in healthcare as seen from the bedside and clinic** Andrew Goddard, Professor; President, Royal College of Physicians, UK
09.30	**Keynote address: The road to COP26: Regenerative architecture for healthcare** Sunand Prasad, principal, Penoyre & Prasad, UK
09.45– 10.15	**Panel discussion**

SESSION 2
Sustainable health systems and hospitals
Chair: John Cole, Queen's University Belfast; International client advisor, UK

11.00	**Joseph Bracops: an urban hospital based on the sustainable principles of the circular economy** Coen van den Wijngaart; Laurent Grisay; Joost Declercq, archipelago architects, Belgium
11.15	**Investing in sustainability as a lever for health systems change: a system-level analysis for the Netherlands** Menno Hinkema; Roberto Traversari; Norman Egter van Wissekerke, TNO, Netherlands
11.30	**Future generation of full zero-carbon hospital** Christian De Nacquard, Bouygues Batiment International, France
11.45	**Futureproofing healthcare buildings through biophilia and the WELL standard** Robert Hopkins; Gareth Banks, AHR, UK
12.00– 12.30	**Panel discussion**

SESSION 3
Healthy community design and infrastructure
Chair: Mohammed A Ayoub, HDR, USA

14.00	**ReGen Villages: future-proofing residential communities through integrated regenerative systems** James Ehrlich, ReGen Villages, Netherlands Chris Ford, Stanford University, USA
14.15	**Care, Commerce & Nature: developing a new model** Esther Wiskerke, Symbiosia, UK
14.30	**Reconstruction of healthcare facilities in Peru – with changes** Katie Wood, Arup, UK
14.45	**Bringing the outside in** Louis A Meilink, Jr; Christina Grimes, Ballinger, USA
15.00– 15.30	**Panel discussion**

SESSION 4
Hospitals in the city
Chair: Brenda Bush-Moline, Stantec, USA

16.00	**Oriel – a place for eye care, research and education** Sunand Prasad, Penoyre & Prasad, UK Kieran McDaid, Moorfields Eye Hospital NHS Foundation Trust, UK Zara Edwards, AECOM, UK
16.15	**Permeable boundaries: designing for interdisciplinarity and public engagement in the city** Ewan Graham, Hawkins\Brown, UK
16.30	**Implementing healthcare facilities in pre-existing buildings: Sancta Maggiore Hospital** Lara Kaiser, Perkins&Will, Brazil
16.45	**How does a large hospital act as a good neighbour?** Coen van den Wijngaart; Laurent Grisay; Stien Poncelet, archipelago architects, Belgium
17.00– 17.30	**Panel discussion**

DAY 1, STREAM 2: SCIENCE, TECHNOLOGY & INNOVATION
14 June 2021 Main stage (all times are British Summer Time; all sessions streamed exclusively online)

Supported by:

MOTT MACDONALD

SESSION 5
The digital hospital
Chair: Abhi Shekar, Mott MacDonald, UK

10.00	**How digitisation is changing the face of healthcare** Rachelle McDade, Currie & Brown, UK
10.15	**Interpreting digital transformation – the HIP challenge** Ruth Strickland, MTS Health, UK Jon Reeve, The Hillingdon Hospitals NHS Foundation Trust, UK
10.30	**Demystifying digital** Graham Cossons; Magnus Leask; Stephen Wreford, Hoare Lea, UK
10.45	**Flow: mobilising data for sustainable outcomes** Dale Sinclair; David Cheshire; Colin Page, AECOM, UK
11.00– 11.30	**Panel discussion**

SESSION 6
Transformation through telehealth
Chair: Richard Mann, AECOM, UK

13.30	**Telehealth libraries, building healthier communities and economies** Sara Benson, B+H, USA
13.45	**New models of care during Covid-19: inpatient telemedicine in the ICU, internal medicine unit, and the psychiatric unit** Nirit Pilosof, University of Cambridge, UK
14.00	**A hospital reimagined – the impact of e-health on hospital sizing and architectural programme** Hala El Khorazaty; Asif Din; Mark Rowe, Perkins&Will London, UK
14.15– 14.45	**Panel discussion**

SESSION 7
Sustainable adoption of new technology
Chair: Danny Gibson, MJ Medical, UK

15.15	**Artificial intelligence and augmented reality: technology overview and applications in healthcare** Richard McAuley; Adrian Hall, Brandon Medical, UK
15.30	**Command centres** Beau Herr, CallisonRTKL, USA Mario Sanchez, OneEQ, USA
15.45	**Sustainable use of technology** Caroline Finlay, MTS Health, UK Michael Lotarius, Norfolk and Norwich University Hospitals NHS Trust, UK
16.00– 16.30	**Panel discussion**

DAY 1, STREAM 3: INTERSECTION OF CLINICAL MEDICINE AND DESIGN
14 June 2021 **Main stage** (all times are British Summer Time; all sessions streamed exclusively online)

Supported by:

HDR

SESSION 8
Designing the clinician-patient interface
Chair: **Ganesh Suntharalingam,** Intensive Care Society, UK

14.30	**Deconstructing the hospital to save it** William Hercules, WJH Health, USA Benjamin Bassin; Cemal Sozener, University of Michigan Health System, USA Diana Anderson, VA Boston Health System, USA
14.45	**Effective clinical engagement in the intersection of medicine and design** Kate Bradley, MJ Medical, UK Liz Whelan, Greenwich University, UK Emma Stockton, Great Ormond Street Hospital, UK Jennifer Whinnett, Guy's and St Thomas' NHS Foundation Trust, UK
15.00	**Implementing a 'kitchen table consulting' model in outpatients at Great Ormond Street Hospital** Crispin Walkling-Lea, Great Ormond Street Hospital for Children NHS Foundation Trust, UK Ellie Richardson, Guy's and St Thomas' NHS Foundation Trust, UK
15.15	**Harnessing the built environment for patients with autoimmune diseases** Avani Parikh, Avani Parikh Architecture, USA Sanat Phatak, KEM Hospital and Research Centre, India
15.30–16.00	**Panel discussion**

SESSION 9
Patient experience and preferences
Chair: **Goran Lindahl,** Chalmers University, Sweden

16.30	**Pioneering healthcare environment research: building upon the Fable Hospital with an innovative approach to connect patient outcomes to design** Francesqca Jimenez, HDR, USA Sheila DePaola, Parkland Health and Hospital System, USA Jeri Brittin, HDR, USA
16.45	**The healing module – reimagining the inpatient environment** Jamie Brewster, DB3 Architecture, UK
17.00	**A national experiment with outpatient experience: results from the 2020 United States Outpatient Experience Index** Nicholas Watkins; James Crispino, Gensler, USA
17.15	**Exploring the relationship between view quantity and quality and ratings of care in the hospital** Sahar Mihandoust, Center for Health Facilities Design and Testing, Clemson University Architecture + Health, USA Anjali Joseph, Center for Health Facilities Design and Testing, Clemson University, USA May Woo, View, USA
17.30	**Patient request: single- versus multi-patient room** Birgit Dietz, Bavarian Institute of Architecture for Elderly and Cognitively Impaired (BIfadA) / TU Munich, Germany
17.45–18.15	**Panel discussion**

DAY 2, STREAM 4: UK HEALTH INFRASTRUCTURE
15 June 2021 **Main stage** (all times are British Summer Time; all sessions streamed exclusively online)

Supported by:

Archus
The healthcare infrastructure specialist

SESSION 10
Keynote plenary: UK health infrastructure

Supported by:

AECOM

Chair: Richard Darch, Archus, UK

08.55	**Welcome and introduction**
09.00	**Keynote address: Delivering the New Hospital Programme** Natalie Forrest, Senior responsible officer and Craig McWilliam, Programme director, New Hospital Programme, NHS England, UK
09.30	**Keynote address: New models of care and the future hospital programme** Nigel Edwards, Chief executive, Nuffield Trust, UK
09.45– 10.15	**Panel discussion**

SESSION 11
Process of delivering an adaptable estates strategy for healthcare: FleXX Hospital

Organised by:

MM MOTT MACDONALD

11.00– 12.30	Healthcare procurement is a slow and lengthy process; it can take years to get from the outline business case to the completed building. Experience tells us that between bidding for and completing a hospital, certain departments will need to be changed, owing to advances in medical technology, changes in population disease profiles, and wider health system challenges. Outline business cases are written to unlock financing from central government. They capture a definitive point in time and therefore designs also respond to that frozen moment. This leads to buildings that are hard to adapt. This workshop will discuss FleXX Hospital, a cost-benefit analysis by HKS and Mott MacDonald that uses distinct functional and building layers to form an approach for developing the design principles for flexibility in healthcare buildings. Designing with flexible principles could enable change during the procurement, and even the construction process, with reduced cost implications as well as permitting easier adaptations during the lifetime of the building. We will discuss how unlocking the real estate potential of their estates will help NHS trusts achieve their long-term business strategies. The FleXX approach seeks to incorporate additional future revenue streams and create facilities that will be able to flex to accommodate not only evolving clinical functions but other, more diverse uses, too.

Panel: **David Sheard,** Mott MacDonald, UK

Rhydian Morgan, Mott MacDonald, UK
Alison Ryan, Mott MacDonald, UK
Dan Flower, HKS, UK
Martin Brook, Mott MacDonald, UK
Victoria Head, Archus, UK
Kate Renner, HKS, UK
Sophie Crocker, HKS, UK

SESSION 12
The hospital is dead. Long live the hospital

14.00– 15.30	Set against the spectre of a climate emergency, the pandemic has disrupted embedded service models and practices, and accelerated changes in models of care, ways of working and digital transformation by arguably a decade or more. As we enter the fourth industrial revolution, genomics and personalised medicine, surgery from the inside out, biological 3D-printing, wearable monitoring devices for diagnostics, and on-demand pharmaceuticals ordered at home are just a few of the technological changes that will finally create the hospital without walls, delivering healthcare in our homes, workplaces and communities, such that only the critically ill may require hospitalisation. As a post-Brexit UK reaches out globally, its commitment to build 40 new hospitals by 2030 is an opportunity to radically change the way healthcare is delivered and set a new standard in health system and infrastructure design for the world, but are we ready and willing to learn the lessons of the past and embrace the future? This roundtable brings in international and interdisciplinary perspectives on the future of health and healthcare to ask: are we designing the future hospital or should we be designing the future health system with a radical redrafting of how, when and where the patient and citizen journey starts and ends?

Panel: **Liz Paslawsky,** SALUS Global Knowledge Exchange, Australia

John Cooper, Architects for Health, UK

John Cole, QUB, UK

Cliff Harvey, Niagara Health, Canada

Nigel Edwards, Nuffield Trust, UK

Richard Darch, Archus, UK

SESSION 13
Putting into practice the principles of the New Hospital Programme

Organised by:

Ryder

16.00– 17.30	A successful response to the ambitions and challenges of the New Hospital Programme requires a commitment to collaborative project working and an holistic approach to delivering the principles of intelligent hospital design, net-zero carbon, digital innovation, and modern methods of construction. In this session, Ryder, in collaboration with WSP and Hoare Lea, will discuss how the team has developed a standard platform approach for Whipps Cross Hospital that can inform projects across the New Hospital Programme. In developing this approach, they have built on their experience in using modern methods of construction for healthcare, and digital technology applications; harnessing innovation in designing for optimum environmental performance; and delivering high-quality environments for patient and staff health and wellbeing.

Chair: **Oliver Jones,** Ryder Architecture, UK

Panel: **Paul Bell,** Ryder Architecture, UK
Graham Cossons, Hoare Lea, UK
Natalie Firminger, Barts Health NHS Trust , UK
Matthew Palmer, WSP, UK
Graham Kelly, Bing Academy, UK

SESSION 14
Designing health-promoting environments
Chair: David Martin, Stantec, UK

08.00	**What we expect from our health facilities is changing for the better. A case study of the Herston Quarter and STARS Building, Brisbane, Australia** Kevin Lloyd, Hassell, Australia
08.15	**A methodological framework for transdisciplinary research on therapeutic landscapes and chronic pain** Nafsika Michail, Northumbria University, UK
08.30	**Emotions drive healing: how healthcare design could use emotion-based environments to support the healing process** Davide Ruzzon, Lombardini22, Italy
08.45–09.15	**Panel discussion**

SESSION 15
Collaboration in hospital arts
Chair: Lianne Knotts, Medical Architecture, UK

10.00	**Interdisciplinary approaches to hospital art and the senses: a case study from Great Ormond Street Hospital** Victoria Bates; Rebecka Fleetwood-Smith, University of Bristol, UK Vivienne Reiss, Great Ormond Street Hospital, UK
10.15	**A cross-sectoral perspective of the art programme at the New Hospital of Malmö, Sweden** Paula Block Philipsen, White Arkitekter, Sweden Nilsmagnus Sköld; Isabel Sanchez Gamez, Regionfastigheter / Region Skåne, Sweden
10.30	**Case study: A Danish approach to healing architecture** Stig Vesterager Gothelf, 3XN, Denmark Mikael Pontoppidan, Link Arkitektur, Denmark
10.45–11.15	**Panel discussion**

SESSION 16
Designing for child healthcare
Chair: Crispin Walkling-Lea, Great Ormond Street Hospital for Children, UK

14.30	**Designing with art in mind: lessons in selecting, procuring and curating art for the paediatric patient experience from three Canadian children's health centres** Alexandra Boissonneault, Montgomery Sisam Architects, Canada Terry Montgomery, Montgomery Sisam Architects, Canada
14.45	**Childbirth made personal** Sarah Joyce, Leeds Beckett University, UK
15.00	**The Alder Centre, a place like no other** Sue Brown, Alder Hey Children's NHS Foundation Trust, UK
15.15	**An observational study of circulating nurse's workflow in paediatric operating rooms pre- and post-optimisation** Anjali Joseph, Center for Health Facilities Design and Testing, Clemson University, USA Roxana Jafarifiroozabadi, Center for Health Facilities Design and Testing, Clemson University, USA
15.30–16.00	**Panel discussion**

SESSION 17
Custodial and mental health design
Chair: Alex Caruso, Design in Mental Health Network, UK

16.30	**Art and architecture as a deflector to existential threats: the Skejby Mental Health Hospital** Birgitte Gade Ernst, Arkitema, Denmark
16.45	**Creating a humane, healing environment: the New National Forensic Mental Health Hospital, Ireland** Ruairi Reeves, Medical Architecture, UK Professor Harry Kennedy, National Forensic Mental Health Service, UK
17.00	**The public health crisis of correctional health** David Redemske, HDR, USA
17.15–17.45	

DAY 2, STREAM 6: INTERSECTION OF CLINICAL MEDICINE AND DESIGN
15 June 2021 Main stage (all times are British Summer Time; all sessions streamed exclusively online)

Supported by:

HDR

SESSION 18
The art and science of infection control
Chair: Coen van den Wijngaart, Archipelago, Belgium

10.30	**Lessons from cancer care design in an age of pandemics** Catherine Zeliotis, Stantec, UK
10.45	**Design and materials choices in the fight against multidrug resistance** Lucie Garreau-iles, DuPont, Switzerland
11.00	**The forgotten art of healthcare lighting: a mission-driven approach to creating better human outcomes with light** Jonathan Rush; Ruth Kelly Waskett, Hoare Lea, UK
11.15	**Making the invisible, visible – airborne particle monitoring and control systems integration with ventilation canopies for improved infection control and higher patient and staff safety** Scott Pickering; Adrian Hall, Brandon Medical, UK
11.30–12.00	**Panel discussion**

SESSION 19
Designing for emergency, trauma and critical care
Chair: Bill Hercules, WJH Health, USA

13.30	**Neuroarchitecture applied to emergency facilities** Clara Rius, Estudi PSP Arquitectura, Spain
13.45	**Exploring healthcare workers' perception on the role of the physical environment in causing disruptions and interruption in trauma rooms** Sara Bayramzadeh; Md Mazharul Islam; Leong Yin Chiu; Kent State University, USA
14.00	**New design innovation for intensive care units that support healing** Bjoern Werner, HT Group, Germany
14.20–14.50	**Panel discussion**

SESSION 20
Environments for modern ward rounds for multidisciplinary inpatient review

15.30–16.45 The Royal College of Physicians and Royal College of Nursing, together with the Royal Pharmaceutical Society, Chartered Society of Physiotherapy and NHS Improvement, have developed updated guidance on 'Modern ward rounds for multidisciplinary care in hospital wards'. Key elements include: space for multi-professional confidential discussion about and with patients; reducing noise levels to improve cognition; minimising interruptions; interactions with technology to improve information sharing and records; reducing hierarchy to improve communication; and decision-making. This workshop will explore opportunities and challenges in hospital wards to creating the best environment for high-quality multidisciplinary care.

Chair: **John Dean,** Royal College of Physicians, UK

Panel: **Andrew Rochford,** NHS England & NHS Improvement, UK;
Nicky Ashby, Royal College of Nursing, UK;
Jennifer Flatman, Royal College of Physicians; Clinical pharmacist, UK;
Kate Bradley, MJ Medical, UK;
Emma Stockton, Great Ormond Street Hospital for Children, UK;
Liz Whelan, University of Greenwich, UK;
Diana Anderson, Jacobs, USA;
Benjamin Bassin, University of Michigan Medical School, USA;
Cemal B Sozener, University of Michigan Medical School, USA;
Bill Hercules, WJH Health, USA
Lynne Quinney, Patient representative, UK

Organised by:

CLINICIANS for DESIGN

SESSION 21
The future hospital: clinicians' perspectives

17.15–19.00 Bringing into focus the clinician's journey, our panel of medical doctors and subject experts will explore how their work informs what the hospital of the future could become. The hospital redefined can become an integrated part of an effective care healthcare infrastructure, a centre of learning, and a body of people serving a multidisciplinary distributed network for care. We will discuss how facilities may be planned and designed using new concepts from frontline experts, and consider how place impacts the health, wellbeing and performance of clinical teams, healthcare organisations, and their patients, families and communities. The transformational opportunity arising from technological innovations, data analytics, and real-time access to remote expertise fundamentally changes the clinical team's workflow, collaboration, education, and thus the physical spaces required.

Panel: **Eve Edelstein,** Clinicians for Design, USA

Anita Honkanen, Stanford University School of Medicine, USA

Ruth Fanning, Stanford University School of Medicine, USA

DAY 3, STREAM 7: COVID-19 GLOBAL SUMMIT
16 June 2021 Main stage (all times are BST; all sessions streamed exclusively online)

Supported by:

SESSION 22
Keynote plenary: COVID-19 Global Summit
Chair: John Cooper, Architects for Health, UK

Supported by:

AECOM

08.55	**Chair's welcome** John Cooper, Programme chair, Architects for Health, UK
09.00	**Keynote address: The NHS and Covid: reset, recovery, and the summer of opportunity** Layla McCay, Director of policy, NHS Confederation, UK
09.20	**Keynote address: A global pandemic: the role of the National Centre for Infectious Diseases in Singapore** Leo Yee Sin, Professor; Executive director, National Centre for Infectious Diseases, Singapore
09.40–10.00	**Panel discussion**

SESSION 23
Learning the lessons across the care continuum
Chair: Marte Lauvsnes, Sykehusbygg, Norway

11.00	**Relocate, repurpose and reorganise: the hospital response to the pandemic challenge** Cristiana Caira, White Arkitekter, Sweden Jonathan Erskine, European Health Property Network, UK
11.15	**Transformation: lessons learned from a Danish Covid-19 hospital** Birgitte Gade Ernst, Arkitema Architects, Denmark
11.30	**Beyond Covid-19 – recovery, reset and reframe healthcare** Greg Mare, AECOM, USA
11.45–12.15	**Panel discussion**

SESSION 24
Caring for older people in a pandemic
Chair: Sylvia Wyatt, Health and care strategic advisor and consultant, UK

13.45	**Nursing home design and Covid-19: balancing infection control, quality of life, and resilience** Thomas Grey, Trinity College Dublin, Ireland Diana C Anderson, VA Boston Health System, USA
14.00	**Post pandemic: a new conceptual model for ageing in place** Eva Henrich; Tatiana Epimakhova, TEEH, Germany
14.15	**Use of digital healthcare services by elderly population** Noemi Bitterman, Technion, Israel
14.30	**Virtual reality for dementia** Linda Jones, Eldergarten, New Zealand; Rosa Baños, University of Valencia, Spain
14.45–15.15	**Panel discussion**

SESSION 25
Rapid and adaptive pandemic response
Chair: Cliff Harvey, Niagara Health, Canada

15.45	**Covid-19's impact on the emergency department (A/E): rethinking flow, architecture, engineering, communications and technology in future ED design for the safety of patients, families and staff** Jon Huddy, David White, Huddy HealthCare Solutions, USA
16.00	**Pandemical healthcare architecture and social responsibility – Covid-19 and beyond** Stephen Verderber, University of Toronto, Canada
16.15	**Modular complex project** Louis Boissonneault; Kevin Cassidy, WSP, Canada
16.30	**Resilience through surge induced adaptive re-use: hotel to hospital and back again** Beau Herr; Jim Henry; Clay Markham, CallisonRTKL, USA
16.45–17.15	**Panel discussion**

Supported by:

Ryder

SESSION 26
Health and housing
Chair: **Liz Paslawsky**, SALUS Global Knowledge Exchange, Australia

08.00	**Health versus high density: can we have both?** Sarah Lewandowski, ClarkeHopkinsClarke Architects, Australia Andrew Curnow, Carr Design, Australia
08.15	**The case for creating homes for key workers above existing buildings** Arthur Kaye, Skyroom, UK
08.30	**Emerging domains for facilitating healthcare via home environments for non-communicable diseases and multimorbidity management** Eva Hernandez-Garcia; Dr Evangelia Chrysikou, University College London, UK
08.45	**Using data science analysis in the design, delivery and management of social housing to enhance resident health and wellbeing outcomes** Adam Hinds, LifeProven Technologies, UK
09.00–09.30	**Panel discussion**

SESSION 27
Integrated care and community health
Chair: **Chetna Bhatia**, SAA Architects, Singapore

10.00	**Building in resilience to improve primary-community care facilities** Jonathan Wilson, GB Partnerships, UK Marc Levinson, Murphy Philipps Associates, UK
10.15	**The future of community healthcare** Helen Revitt; Alison Evans, AHR, UK
10.30	**Forget me not. Community paediatrics within integrated care systems** Jack Goodall, ETL, UK
10.45–11.15	**Panel discussion**

SESSION 28
The hospital at home
Chair: **Beau Herr**, CRTKL, USA

14.15	**Supporting safe transitions home after surgery: perspectives from older adults undergoing joint replacement surgery** Rutali Joshi; Sahar Mihandoust; Anjali Joseph, Center for Health Facilities Design and Testing, Clemson University, USA
14.30	**The hospital as a home for a virtual-reality care service centre (VR4Service)** Merlijn Smits, Harry van Goor, Radboudumc, Netherlands
14.45	**Hospital@home essential armoury in the response to the Covid pandemic** Rebekah Schiff; Paul McEnhill; Matthew Quinn; Maria Oyston; Sharmila Walters, Guy's and St Thomas' NHS Foundation Trust, UK
15.00–15.30	**Panel discussion**

SESSION 29
Health in the city: campuses, precincts and communities
Chair: **Jim Chapman**, Manchester School of Architecture, UK

16.00	**Evolution in academic health: the planning and potential of world-class academic health precincts** Mike Apple; Rob Blue; Jon Crane; Jeri Brittin, HDR, USA
16.15	**Creating a multi-faceted health campus** Louise Shepherd CBE; David Powell, Alder Hey Children's NHS Foundation Trust, UK
16.30	**Health on the high street – the logic, the challenges and the opportunities** Karen Smith; Paul Styler; Kelsey Price, ETL, UK
16.45–17.15	**Panel discussion**

SESSION 30
Health system planning and investment
Chair: Chris Shaw, Architects for Health, UK

10.00	**Mind the gap: effective capital investment for hospitals after 2020** Rhonda Kerr, University of Western Australia, Australia
10.15	**The pandemic has become a catalyst to health system and design evolution** Conor Ellis, Archus, UK
10.30	**What's in a name? How politics and buildings can distort healthcare priorities** John Kelly; Kelsey Price, ETL, UK
10.45–11.15	**Panel discussion**

SESSION 31
The future of healthcare planning

Organised by:
HEALTH PLANNING ACADEMY

11.45–13.15	In this session, members of the newly formed Health Planning Academy will be debating the role of planning as a discipline in informing the future design, configuration and delivery of healthcare to citizens. The debate will address the growing trend of the creation of population-based integrated health systems as the preferred model for organising and delivering healthcare, and whether markets and competition will be replaced by planning to deliver efficiency in these systems. As part of this debate, there will be a discussion on what skills and disciplines will be required of healthcare planners of the future.

Panel: **Richard Darch,** Archus, UK   **Tina Nolan,** ETL, UK   **Danny Gibson,** MJ Medical, UK

SESSION 32
User and stakeholder engagement
Chair: Stephanie Williamson, Guy's and St Thomas' NHS Foundation Trust, UK

14.45	**Taking a holistic approach to architecture: lessons from occupational therapy** Esther Cheng; Gavin McLachlan, Montgomery Sisam Architects, Canada
15.00	**User meetings: lessons learnt from virtual versus face-to-face engagement** Francesca Simoni, Stantec, UK
15.15	**Added value of early stakeholder engagement in reaching resilient design solutions** Liesbeth van Heel, Erasmus MC, Netherlands Clarine van Oel, TU Delft, Netherlands
15.30	**The rules of virtual engagement** Meischa Wade; Pollie Boyle, ETL, UK
15.45–16.15	**Panel discussion**

SESSION 33
Planning, modelling and delivery
Chair: John Kelly, ETL, UK

16.45	**Integrated project delivery: the relationship between individual projects and the wider delivery system** Anne Symons, University College London, UK
17.00	**Reimagining healthcare planning and design** Felicia Cleper-Borkovi, Arup, USA
17.15	**Leveraging predictive models to stress-test hospital-wide medical planning solutions for future high performance** Jon Huddy; David White, Huddy HealthCare Solutions, USA
17.30	**A process approach in the NHS – facilitating infrastructure design that better suits patient flow and work activities** Thomas Rose, University of Birmingham, UK
17.45–18.15	**Panel discussion**

DAY 4, STREAM 10: ART AND ARCHITECTURE
17 June 2021 Main stage (all times are British Summer Time; all sessions streamed exclusively online)

Supported by:

Medical Architecture

SESSION 34
Workforce and workplace design in healthcare
Chair: Jeremy Myerson, Royal College of Art, UK

09.00	**Optimising moral resilience and workspaces for residential aged care nurses** Lucio Naccarella, University of Melbourne, Australia Karrie Long, Royal Melbourne Hospital, Australia
09.15	**Why offices matter in healthcare. Empowering staff to care for patients** Lizette Engelen, Engelen2, Netherlands Monika Codourey, Offconsult, Netherlands
09.30	**The next-generation workforce** Mark Horwood-James; Sue Jauncey, Appellon, UK
09.45–10.15	**Panel discussion**

SESSION 35
Arts and health: creative partnerships to build better healing environments

Organised by:

Art in Site

10.45–12.30	This collaboration between Art in Site (AiS) and NHS National Performance Advisory Group on Arts, Heritage and Design (NPAG) will focus on the role of creative partnerships in helping to build better healing environments for the future. Touching on key international case studies, and exploring themes of identity, integration and engagement, we aim to reimagine and improve working relationships between artists, designers, policy makers, healthcare workers and clinicians to create inspiring and effective healing environments, and to pool and develop new models of working. This workshop will feature a mixture of presentations, discussion and interactive exercise. Participants are encouraged to bring paper and something to write with. No prior knowledge of arts in health schemes is neccessary. This workshop follows three daily sessions in the Innovation Zone seminar rooms, titled Arts and Health hour from 12pm BST on days 1-3 of the congress. These activities represent the beginning of a longer term events programme from AiS and NPAG in collaboration with SALUS Global Knowledge Exchange, which aim to build better practice knowledge on the role of the arts in creating a healing environment.

Chair:		Panel:	**Martin Jones,** Art in Site, UK	**Liz O'Sullivan,** Guy's & St Thomas' NHS Foundation Trust, UK	**Aaron Bell,** Evelina London Children's Hospital, UK
Peter Shenai, Art in Site, UK			**Cristiana Caira,** White Arkittektur, Sweden	**Rebecka Fleetwood-Smith,** Bristol University, UK	**Eleonora Fors Szuba,** Region Västra Götaland, Sweden

SESSION 36
Designing for dementia and late-life brain health
Chair: Marc Levinson, Murphy Philipps, UK

13.00	**Design-dignity-dementia – challenges, principles, groundbreakers** John Zeisel, The I'm Still Here Foundation and The Hearthstone Institute, USA; Richard Fleming, University of Wollongong, Australia; Kirsty Bennett, Swinburne University, Australia
13.15	**The use of colour in clinical environments for dementia** Helena Howard, Hawkins\Brown, UK
13.30	**Cultural significance in guided museums of visits for persons with dementia** Linda Jones, Eldergarten, New Zealand Ernestina Etchemendy, University of Valencia, International University of Valencia, Spain
13.45	**Late-life brain health architecture: leveraging convergence science principles** Fiona Walsh, Greg Walsh, Global Brain Heath Institute, Trinity College, Dublin, UCSF, San Francisco; DDS Architects, UK
14.00–14.30	**Panel discussion**

SESSION 37
Transformation of hospital wayfinding
Chair: Christine Chadwick, CannonDesign, Canada

15.00	**Wayfinding +: the art of better orientation** Peter Shenai; Martin Jones; Louisa Williams, Art in Site, UK
15.15	**How can optimising hospital environments minimise the need for signage and instructions?** Peter Donner; Louise Havskov Kristiansen; Steinar Valade-Amland, Triagonal Information Design, Denmark
15.30	**How Covid-19 is setting a new standard for wayfinding design in healthcare** Ralph Michels, Eyedog – wayfinding as a service for healthcare, Netherlands
15.45–16.15	**Panel discussion**

SESSION 38
EHD2021 Awards
Chair: Chris Shaw, Architects for Health, UK

Sponsored by:

IHP Integrated Health Projects by VINCI / Sir Robert McALPINE

16.45–17.30	**European Healthcare Design Awards 2021**

COVID-19 GLOBAL SUMMIT

DAY 4, STREAM 11: COVID-19 GLOBAL SUMMIT
17 June 2021 Main stage (all times are BST; all sessions streamed exclusively online)

Supported by:
CALLISONRTKL

SESSION 39
Pandemic resilience: design strategies and responses
Chair: Paul Bell, Ryder Architecture, UK

08.00	**How will Covid-19 change healthcare design?** Matthew Holmes, Jacobs, Australia Diana C Anderson, VA Boston Healthcare System, USA; Jacobs, Australia
08.15	**Redesigning hospitals for the telehealth revolution we just had** Michaela Sheahan, Hassell, Australia Emma Thomas, University of Queensland, Australia
08.30	**Pandemic preparedness through design** Tania Wee; Choon Mei Toh, DP Architects, Singapore
08.45	**Together we build to fight the virus – the construction of the first MiC Hospital in Hong Kong** Lily Chiu, China State Construction Engineering (Hong Kong), Hong Kong Allen Leung, Architectural Services Department, Government of Hong Kong, Hong Kong
09.00–09.30	**Panel discussion**

SESSION 40
Infection control and airborne transmission
Chair: Jonathan Erskine, European Health Property Network, UK

10.30	**We are what we breathe – the historical burden of shared air and the future of indoor air quality** Patrick Chambers, Stantec, Australia
10.45	**How to increase the safety of medical personnel in a hospital – protective airflow solution** Ismo Grönvall, Halton, Finland
11.00	**Fighting airborne transmission: the use of ultraviolet germicidal irradiance (UVGI) in the battle against hospital-acquired infections and Covid-19** Dan Lister, Arup, UK Paul Lynch, Arup, UK
11.15	**Providing a safe environment for operating on non-infectious and infectious patients** Richard Knight, Richard Knight Consultancy, UK John Thatcher, Eastwood Park Training Centre, UK Richard Brown, Halton, UK
11.30–12.00	**Panel discussion**

SESSION 41
Managing capacity in a pandemic
Chair: Jonathan Wilson, GB Partnerships, UK

14.00	**Helping the NHS address capacity challenges and improve resilience** Alan Dunlop; Tony Nichol; Christel Hengeveld; Andrew Rolf, Arup, UK
14.15	**ICU in a box: a small change that made a big difference to pandemic preparedness** Amanda Maunders; Gary Thomson; Stephanie Hawthorne, Guy's & St Thomas' NHS Foundation Trust, UK
14.30	**Pandemic resiliency: lessons learned from US military health system** Nolan Rome, WSP, USA Deborah Wingler; Brent Willson, HKS, USA
14.45–15.15	**Panel discussion**

SESSION 42
Sustainable development – modern methods of construction

Chair: Sam Shooter, Hoare Lea, UK

09.30	**The Grange University Hospital – how 3D design and offsite construction delivered a flexible facility ahead of schedule** Stuart Renshaw, WSP, UK; David Leverton, Laing O'Rourke, UK
09.45	**Accelerating capabilities and advancing business models for modern operating theatre manufacture** Grant Mills; Anne Symons, University College London, UK
10.00	**Designing St George's: a hospital fit for today and an unknowable future** Martina Cardi; Paul O'Neill, Bryden Wood, UK
10.15	**Standard platform for healthcare buildings** Alan Kondys, Vinci Construction UK and IHP, UK; Clive Guyer, Murphy Philipps, UK; Steve McSorley, Perega, UK; Naddy Parperi, TB+A, UK
10.30– 11.00	**Panel discussion**

Organised by:

Brandon
MEDICAL
BRILLIANT BY DESIGN

SESSION 43
Smart technologies in the modern operating room

12.00– 13.00	**De-risking deployment in a MMC build, supporting net-zero and digital medicine** This workshop aims to demonstrate the modular build philosophy of the smart technology systems and how standards-based adaptable solutions provide flexibility in design. We present an overview of a range of innovations that provide an adaptable solution to the deployment of technologies in the modern operating room environment. We will show how adaptable systems can be specified early in the project and still meet user requirements at the point of delivery. Technologies covered will include: intelligent theatre control panels; communication via any industry protocol and integration with building management systems to provide fault monitoring, usage reporting and run-time statistics; networked audio and video distribution systems; operating theatre lighting systems and intelligent emergency back-up power units; and pendants and monitor carriers, equipped with multi-channel fibre optic connectivity supporting video resolutions up to 8K.

Panel: **Adrian Hall,** Brandon Medical, UK

Richard McAuley, Brandon Medical, UK

Scott Pickering, Brandon Medical, UK

SESSION 44
Research makes a difference – detailed approaches and broad impacts

14.30– 16.00	Research is strictly focused and framed by theory, method and approach. To succeed in academia our research addresses minuscule parts of the world we live in. It is a way of adding bits of knowledge to the canvas of knowledge. At the same time, healthcare and the design of its environments are complex and challenged by ever-changing approaches and processes, clinical as well as physical. With a growing research field addressing aspects of healthcare and design-related issues, the question arises of evidence, impact and contribution to health. As our environments are complex, an understanding of the design for use and the actual use of the buildings is important to study. Also, the different actors and needs must be understood. A key question is: what is the relationship between design and effects on health? So, how do our research and approaches make a difference? How do we contribute with design research studies of various types to the practice of building for healthcare as well as, most importantly, for health in itself? The seminar will address this transfer and discuss challenges researchers face, the impact of research outcomes, and what difference healthcare design research makes. The seminar is organised jointly with the research conference ARCH22.

Panel:

Goran Lindahl, Chalmers University, Sweden

John Zeisel, The I'm Still Here Foundation; The Hearthstone Institute, USA

Clarine van Oel, TU Delft, Netherlands

David Allison, Clemson University, USA

POSTER + VIDEO GALLERY

The poster + video gallery is a dedicated zone within the virtual platform open to delegates throughout the congress. Here, you will be able to explore innovative research and project presentations in a highly visual, stimulating and dynamic environment, along with the ability to make contact and network with the authors and presenters.

P01 **Design considerations for the modern operating theatre: supporting the implementation of medical video, audio and communication systems**
Richard McAuley, Adrian Hall, Brandon Medical, UK

P02 **'Lightworks': combining artwork with lighting to combat the clinical dark age**
Peter Shenai, Martin Jones, Louise Williams, Art in Site, UK

P03 **The bigger picture for healthcare design: using evidence-based design and co-creation to develop more effective concepts for the healthcare system**
Jonas Rehn-Groenendijk, Darmstadt University of Applied Sciences, Germany

P04 **Designing for patient empowerment in the face of SARS-Covid-19 challenges: Noctura 400 case study**
Stuart English, Rafiq Elmansy, Northumbria University, UK

P05 **Improving adherence in self-administered treatment technology through design**
Rafiq Elmansy, Stuart English, Northumbria University, UK

P06 **Envision wellness – understanding trauma and youth experience in mental health**
Alison Huynh, Daniel Calvetti, Michelle Lee, Ian Gibson, NBRS Architecture, Australia

P07 **Building temporary quarantine camps to fight against Covid-19 – the Hong Kong experience**
Paul Chun-kau Lee, Lawrence Hin-man Ko, Christina Hoi-ling Poon, Hong Kong Architectural Services Department, Government of Hong Kong, Hong Kong

P08 **Principles of design for ergonomic pendant solutions for minimally invasive surgery and shorter recovery times in intensive care units**
Scott Pickering, Adrian Hall, Brandon Medical, UK

P09 **Modern methods of construction and standardisation – what does it mean and how are we really going to achieve this?**
Andrew Rolf, Arup, UK

P10 **Digitalisation – navigating with care**
Louise H Kristiansen, Peter Donner, Steinar Valade-Amland, Ralph Michels, Triagonal Information Design, Denmark

P11 **Are waiting areas in hospitals perceived as therapeutic spaces?**
Eleni Tsiantou, UCL, Greece; Evangelia Chrysikou, Hina Lad, UCL, UK

P12 **Innovation at the core**
Graham Cossons, Sam Shooter, Ben Baker, Hoare Lea, UK

P13 **Architecture as a catalyst for healing**
John Latto, Xi'an Jiaotong, Liverpool University, China

P14 **Modern standards for medical video systems: infrastructure required for 4K UHD and beyond in the operating room**
Richard McAuley, Adrian Hall, Brandon Medical, UK

P15 **Web-based standards made simple**
Regina Kennedy, Tina Nolan, ETL, UK; Gavin Thompson, BuroHappold Engineering, UK; Sean Madden, Hamad Medical Corporation, Qatar

P16 **Designing wayfinding systems for (neuro)diversity**
Louise H Kristiansen, Peter Donner, Steinar Valade-Amland, Triagonal Information Design, Denmark

P17 **Everyday objects as therapeutic elements in psychiatric wards – co-design workshop for reducing institutionalisation in mental health facilities**
Jonas Rehn-Groenendijk, Helena Müller, Darmstadt University of Applied Sciences, Germany; Evangelia Chrysikou, Bartlett Real Estate Institute UCL, University College London, UK

P18 **Introducing 'eudaemonic design': an approach to curating health at home to avoid time in hospital**
Jenna Mikus, Queensland University Of Technology, Australia

P19 **Ecourbanism – a whole-system approach to post-Covid healthcare**
Luke Engleback, Studio Engleback, UK

P20 **Resilience planning in an emergency**
Ruth Strickland, MTS Health, UK

NETWORKING AND INNOVATION ZONE

Supporting a unique professional development programme at EHD2021 are a range of event features, including an Innovation Zone, the Awards Poster + Video Gallery, and networking opportunities for 1-2-1 and group video meets.

With over 200 speakers, keynotes, panel discussions, workshops, posters, videos and more besides, European Healthcare Design 2021 is the world's leading forum for exchange of research findings, best practice and policy thinking on the design of health systems, services and infrastructure. And the event also offers delegates a diverse range of other opportunities to network and develop their knowledge of the healthcare design field.

Networking
A variety of options are available to participants to connect and meet with industry colleagues and make new contacts. Participants will be able to view all attendees at the event and connect to them to arrange a meeting time over a video call, or to chat by text using the live messaging service. Each participant can create their own dedicated profile, specifying their areas of interest and job role. Participants can chat with their contact right away or request a 1-2-1 video chat meeting. If you want to video chat with more than one attendee at the same time, head over to the Networking Lounge and grab a table to talk.

Networking Lounges enable two or more participants to interact via video call, by simply entering the lounge and taking a free seat at any of the tables. A variety of tables for between two and 20 people will be available for 1-2-1 and group meetings. Exhibitors in the Innovation lounge will also be able to create their own meeting tables.

Working with our partners and sponsors, we also plan to organise attendee competitions throughout the event to reward more active participants, create networking opportunities, and maximise interaction between attendees, event partners and event sponsors.

- Leverage attendee networking
- Lounges for small group discussions
- Access to the attendee list
- 1-2-1 video meetings
- 1-2-1 chats
- Competitions

Awards Poster + Video Gallery
The European Healthcare Design 2021 Awards celebrate and recognise professional and research excellence in the design of healthcare environments both in Europe and around the world. In each of the nine categories, this year's shortlisted awards entrants will feature a poster and video of their project or innovation on a dedicated page within the Awards Gallery for participants to learn about this year's potential prize winners, before the awards ceremony in the final session on Thursday 17 June. Videos of the live judging webinars, which are taking place on 18, 19 and 20 May, will also be made available.

THE INNOVATION ZONE

All participants will have access to the Innovation Zone, an area of the event dedicated to learning about the latest design solutions, technological innovations and creative projects from our event partners and sponsors. Participants will be able browse profiles, connect with team members, view projects and project images and videos, and download literature, including white papers, project case studies and product information.

Innovation Zone – Seminar Rooms

Linked to the Innovation Zone, this year's virtual congress will feature a series of themed seminar rooms, where different sessions, focused on a diverse range of topics and themes, will be organised at different times during the congress. Topics will cover educational and professional development sessions, and themes such as the arts, technology and innovation, in a variety of formats, including: technical presentations; product demos and launches; development roadmaps; Q&As; case studies; showcases; and roundtable seminars. The full seminar programme will be launched at the beginning of May.

Innovation Zone Seminar Rooms

Visit our seminar rooms to join and participate in a series of special seminars developed in collaboration with our Innovation Zone partners. As well as a daily Arts and health hour, seminars will cover case studies, technical showcases and innovation talks on topics ranging from modular construction, operating theatres, infection control, project management, smart hospitals, and patient mobility.

ARTS & HEALTH HOUR:
Creative partnerships: Identity

Organised by

Art in Site

12.00–13.00
The first of three daily sessions focusing on the role of creative partnerships to build better healing environments for the future. Examples will be shared of artwork and art schemes that act as a narrative voice for a healthcare environment, speaking to its community and identity. Participants will discuss how early engagement of artists and partnerships with stakeholders can result in site-responsive artworks and provide a compelling vision for healthcare settings.

Panel:

Vivienne Reiss
Great Ormond Street Hospital for Children NHS Trust, UK

Lisa Harty, Art for Life
Ester Rolinson, Artist
Kalpesh Intwala, Stanton Williams
Sam Curtis, Bethlem Gallery
Sarah Carpenter, Bethlem Gallery
Mary Yates, South London and Maudsley NHS Trust

Intelligent Healthcare Modular Library

Organised by

greenprefab

13.00–13.30
Green Prefab and Kreo Software are presenting a new approach in Healthcare Design. This approach is based on a brand new digital library developed at The Modular Taskforce which includes standardized module types for operative spaces in usual healthcare buildings. The digital Healthcare Modular Library is integrated with a dedicated generative design tool, using the power of Artificial Intelligence to validate costs, delivery time, and architecture solutions on the fly. Altogether this is a very helpful and rapid decision tool for the preliminary design of healthcare buildings using Modern Method of Construction. Finally, Axis Construction will introduce some recent realization of permanent hospitals using modular construction.

Panel:

Franco Vietti
Green Prefab, Italy

Maksim Markevich
Kreo Software, UK

John Buongiorno
Axis Construction Corp, USA

Modular operating theatres: Tackling waiting times and increasing clinical capacity

Organised by

Q-bital
Healthcare Solutions

12.30–13.00
Most health service organisations will find themselves in need of a temporary infrastructure solution at some point, either because of a planned event, such as the refurbishment of an existing facility, or an unexpected event – the Covid-19 outbreak being a recent example. But while modular facilities often provide the answer to a temporary issue that requires a quick resolution, that doesn't mean the solution has to be short-term.

Waiting times have remained a hot topic throughout the pandemic. Modular operating theatres, including laminar flow and hybrid theatres, provide hospitals with the clinical capacity they need to tackle their waiting times. Rob Van Liefland showcases how we support hospitals, including how we are currently supporting Lancashire Teaching Hospitals NHS Foundation Trust, UK to deliver essential interventional radiology procedures during a period of refurbishment. While the Trust's own interventional radiology theatre at Royal Preston Hospital undergoes an upgrade in a six-month project, we provided a replacement theatre for these important procedures to continue to be carried out while out of commission.

To meet the hospital's needs, we created a bespoke modular solution at the hospital, which features a truly state-of-the-art theatre with the latest radiology equipment installed. It operates seven days a week and is available 24 hours a day, including for emergency procedures.

Panel:

Rob Van Liefland
Q-bital Healthcare Solutions, Netherlands

ARTS & HEALTH HOUR:
Creative partnerships: Engagement

Organised by

Art in Site

12.00–13.00

The second of three daily sessions will showcase examples of integrated art projects where engagement with staff, patients and the service community has helped open up meaningful expression, creativity and dialogue. Participants will investigate how artistic approaches in engagement take people out of the ordinary, allowing them to open up and envision longer-term connections between needs, healthcare spaces and human interactions.

Panel:

Ruth Charity
Oxford University Hospitals
NHS Foundation Trust, UK

Guy Noble, UCLH Arts and Heritage
Simon Tolhurst, Artist
Dryden Goodwin, Artist
Marie-France Kittler, UCLH Arts and Heritage
Sheefali Asija, Artist
Sarah Bexley, Guy's and St Thomas' NHS FT

Creating safe spaces for every patient

Organised by

KWICK SCREEN
MAKING SPACES

12.45–13.15

Hospitals today are filled with state-of-the-art MRI scanners, monitors and other equipment. But next to patients' beds, there is almost invariably a torn piece of fabric that is either too long or too short. We're stuck in the 1960s. But the outdated visual aspect of curtains isn't the real problem – it's the fact that they've been proven to be a hotbed of contamination and virus-resistant bacteria. There are direct links to hospital-acquired infections (HAIs) and hospital curtains. Curtains are a problem because their soft surfaces are porous, and they're not cleanable by simply wiping. HAIs are a really serious problem. In the US, for example, there are an estimated 687,000 HAIs each year, resulting in 72,000 deaths and costing an estimated US$11 billion. HAIs kill more people each year in the United States than car accidents, breast cancer, or pneumonia. At KwickScreen, our partition screens help to reduce the spread of HAIs. They're easy to clean, easy to use, and offer a more flexible solution to the issue of patient privacy. In this presentation we will explore the next generation of privacy and social distancing partitions in hospitals and what it means for the built hospital environment of the future.

Panel:

Mark Bickerstaffe
KwickScreen,
UK

Requirements management
for healthcare projects

Organised by

BRIEFBUILDER

12.30–13.00

BriefBuilder's Juriaan van Meel and Carolien Euser will present their latest insights on the topic of briefing and requirements management for healthcare projects.

Questions that will be addressed in this presentation: What is requirements management? How does it relate to the practice of briefing (aka architectural programming)? Why is it relevant for healthcare projects? How can you avoid design defects and scope creep by systematically managing requirements? And how can healthcare organisations make better use of each other's experience and knowledge in relation to briefing?

Juriaan and Carolien will answer these questions on the basis of their extensive experience with the use of BriefBuilder in hospitals projects in the Netherlands, Belgium and Denmark. Furthermore, they will make use of the ideas and concepts that are part of the book 'Briefing for Buildings', which was co-authored by Juriaan van Meel.

Panel:

Juriaan van Meel
BriefBuilder,
Netherlands

Carolien Euser
BriefBuilder,
Netherlands

Smart hospitals: Creating
more time to care

Organised by

STATIC SYSTEMS GROUP

13.00–13.30

Static Systems Group (SSG) is a recognised leader in the provision of critical alarm notification and patient-to-staff communication solutions. During this workshop SSG will provide an insight into how it is helping healthcare teams to integrate the latest technology into their communication systems in order to ensure the most appropriate member of staff is in the right place at the right time – leading to improved safety, a reduction in risk, and ultimately creating more time to care.

Panel:

Matthew Wakelam
Static Systems Group,
UK

Jennifer Terry,
Static Systems Group,
UK

Modular facilities: Keeping up with increasing demand for endoscopy

Organised by
Q-bital
Healthcare Solutions

08.00–08.30

Modular facilities often provide the answer to hospitals in need of temporary infrastructure. The need to maintain high standards of patient care, compliance and safety throughout a refurbishment or service reconfiguration project, or after an unforeseen event, is another common reason for requiring an external healthcare facility. A temporary facility can offer a way to reduce the time that patient services are suspended following an incident, emergency or a planned refurbishment.

Peter Spryszynski showcases how a modular endoscopy facility was created and installed at Prince Charles Hospital, Brisbane in Australia to provide additional capacity for diagnostic procedures. The project is the result of an international effort to get a bespoke solution for endoscopy up and running within a very short timescale.

Panel:

Peter Spryszynski
Q-bital Healthcare Solutions,
Australia

The sensitive choice of putting patients first and maintaining hygiene in a durable environment

Organised by
DUPONT
Tedlar®

12.30–13.00

Have you ever felt distressed without really being able to determine the origin of your discomfort? Have you even been unable to express this feeling of distress? And then, suddenly, the stressor stops and you feel whole again when it stops.

In this workshop, we will document the adverse impact an environment may generate through negative stimulation. We will specifically investigate how the sense of sight, hearing and touch may impact human health. We will use real-life examples illustrating potential solutions offered to designers in order to optimise the surrounding of patients in the healthcare system. We will show how these examples can facilitate the operation and maintenance of healthcare facilities by providing surfaces that enable the highest level of hygiene. We will also explore how such solutions may help reduce the environmental footprint by building for durability. Designers do not have to choose between patient experience, hygiene and durability. Solutions exist that allow all of these without compromise.

Panel:

Lucie Garreau-iles
DuPont Tedlar,
Switzerland

ARTS & HEALTH HOUR: Creative partnerships: Integration

Organised by
Art in Site

12.00–13.00

The third of three daily sessions will take a look at artwork that integrates with architecture, clinical journeys and digital space. Participants will explore what happens when we move from a focus on art "interventions" to artistic "infrastructure". In a post-pandemic world, what kind of artistic infrastructure can create a standard for healthcare environments, and which partnerships are key to a more ambitious approach for artistic integrations?

Panel:

Peter Shenai
Art in Site,
UK

Lucy Zacaria, Imperial Health Charity
Dr Simon Nadel, St Mary's Hospital; Imperial College London
Cat Powell, Sheffield Children's Hospital
Jade Richardson, Sheffield Children's Hospital
Jacqueline Poncelet, Artist
Oona Culley, Artist
Ruth Charity, Artlink at Oxford University Hospitals
Guy Noble, UCLH Arts and Heritage

Empowering movement through planning and design

Organised by
arjo
with people in mind

12.45–13.15

Designing a care facility is about planning for the future, and it will impact both the efficiency and quality of care and the work environment for caregivers. As outlined in our Positive Eight philosophy, the right environment, equipment and caregiver skills can result in improved care with more mobile patients, reduced work-related injuries, and improved financial outcomes. Design should consider the patient's mobility level, in order to create a care environment that supports their dependency level. This presentation will consider elements of a patient's episode of care from admission to discharge. The presentation will include videos to illustrate the care processes undertaken in the various clinical environments, highlighting the need for collaboration and smart design to support patient care, caregiver safety and operational efficiencies.

Panel:

Simon Saulis
Arjo, UK

Mark Pinder
Arjo, UK

REGISTRATION AND SPONSORSHIP

DELEGATE REGISTRATION

As well as virtual networking, delegates will enjoy unique professional development opportunities, building knowledge of the socio-economic global context, and emerging practice, skills and core competencies in designing and commissioning health services, technology and infrastructure, project management, and the evidence base for healthcare design, sustainable development and quality improvement.

Registered participants will receive virtual access to both 'live' streaming and video recordings of all sessions for 'on-demand' viewing for one month after the event.

A range of tickets are available, giving attendees from all over the world great value for money. Registration is open now with Early Bird savings for individual and group bookings until 2 June. Visit www.europeanhealthcaredesign.eu for details.

Early bird rates (until 2 June):   4-day ticket: £195.00 *(+ VAT in the UK)*
1-day ticket: £75.00 *(+ VAT in the UK)*

Early bird group rates (until 2 June):
3 individual 4-day tickets: £497.25 Save £87.75 (15%) *(+ VAT in the UK)*
5 individual 4-day tickets: £780.00 Save £195.00 (20%) *(+ VAT in the UK)*
10 individual 4-day tickets: £1462.50 Save £487.50 (25%) *(+ VAT in the UK)*

Standard rates (from 3 June):   4 day ticket: £245.00 *(+ VAT in the UK)*
1-day ticket: £95.00 *(+ VAT in the UK)*

Standard group rates (from 3 June):
3 individual 4-day tickets: £625.00 Save £110.00 (15%) *(+ VAT in the UK)*
5 individual 4-day tickets: £980.00 Save £245.00 (20%) *(+ VAT in the UK)*
10 individual 4-day tickets: £1837.50 Save £612.50 (25%) *(+ VAT in the UK)*

Members of Architects for Health, the Union of International Architects – Public Health Group, Australian Health Design Council, New Zealand Health Design Council, Design in Mental Health Network and the European Health Property Network are entitled to discounted rates. Please apply for your discount code by emailing info@europeanhealthcaredesign.eu.

Please note:
A discount code may only be used once by the same user; VAT is not applicable to tickets bought by registrants outside the UK.

SPONSORSHIP AND INNOVATION ZONE

By sponsoring or exhibiting at EHD2021, your organisation will be supporting and participating in the creation and exchange of knowledge between 1000 of the world's leading health researchers, practitioners and policymakers.

A knowledge-led approach to sponsorship creates opportunities to align your brand with a range of content-focused offerings, including keynote and themed streams and sessions, posters and workshops. These can be combined with other exciting content and branding opportunities to interact with the participants, such as hosting your own themed seminar room and a virtual stand within the Innovation Zone, enabling you to promote and provide professional development on your latest technologies, products and projects. The Innovation Zone is ideal for technical presentations; product demos and launches; development roadmaps; innovation Q&As; case study showcases; and roundtable seminars. Each sponsorship opportunity also includes a generous number of delegate passes to support your own team's professional and business development, and to offer to your healthcare clients.

The publication and dissemination of videos of all the talks, full written research papers, and posters on SALUS Global Knowledge Exchange (www.salus.global) and SALUS TV also ensure that your sponsorship support gains from association with the congress partners, content and outputs across multiple social media channels all year round.

A range of sponsorship packages is available from £2000-£6000 with discounts on purchases of two packages or more. Click on Sponsorship in the top navigation at www.europeanhealthcaredesign.eu to view available packages or contact Marc Sansom directly at marc@salus.global.

AWARDS SPONSORSHIP

By sponsoring the EHD2021 Awards, you can show your support and recognition of the outstanding performances of the award winners, aligning your brand in UK, European and international markets around the values of design excellence and innovation.

Your brand will also gain international exposure through the digital marketing around the congress and the awards. This includes promotion of the shortlist announcement before the event; e-news announcements of the award winners; broadcasting during the event of the videos of the shortlisted projects' presentations and the closing awards ceremony; as well as making these available to watch post event via SALUS TV. Live judging of the shortlisted presentations is planned for 18, 19 and 20 May.

We look forward to confirming your support and partnering with you in the raising of design quality standards around the globe.

For more information, please contact Marc Sansom at marc@salus.global.

THE PROGRAMME COMMITTEE

Emma Stockton MD
Consultant paediatric anaesthetist,
Great Ormond Street Hospital for Children, UK

Chetna Bhatia
Principal (healthcare), SAA Architects, Singapore

Prof Noemi Bitterman PhD
Academic director, Masters of Industrial Design
(MID), Technion, Israel

John Cooper BA Dip Arch, RIBA
Director, John Cooper Architecture (JCA), UK

John Cole CBE
Honorary professor,
Queen's University Belfast, UK

Göran Lindahl PhD
Associate professor, head of division building
design, Chalmers University, Sweden

Ganesh Suntharalingam MB BChir
President, Intensive Care Society, UK

Christine Chadwick
Principal, CannonDesign, Canada

Sasha Karakusevic BDS, MBA
Project director, NHS Horizons; senior fellow,
Nuffield Trust, UK

Sylvia Wyatt MA, AHSM
Health and care strategic advisor and consultant,
UK

David Allison FAIA, FACHA
Alumni distinguished professor; director of
architecture + health, Clemson University, USA

Evangelia Chrysikou
Programme director, MSc Healthcare Facilities,
Bartlett Real Estate Institute, UK

Marte Lauvsnes
Manager, Advisory and Planning Department,
Sykehusbygg, Norway

Karin Imoberdorf Dipl Arch, MPH
Architect, LEAD Consultants, Switzerland

Upali Nanda PhD
Principal and director of research, HKS, USA

Davide Ruzzon
Director of TUNED, Lombardini22, Italy

Organising Committee

Christopher Shaw, chair, Architects for Health

Jonathan Erskine, director, European Health Property Network

Kate Copeland, chair, Australian Health Design Council

Jim Chapman, visiting professor, Manchester School of
Architecture

Alessandro Caruso, director, Design in Mental Health Network

www.europeanhealthcaredesign.eu | 14-17 JUNE 2021

EUROPEAN HEALTHCARE DESIGN

RESEARCH • POLICY • PRACTICE

COVID-19 GLOBAL SUMMIT

For further enquiries on the event programme, sponsorship or exhibition opportunities, contact:

SALUS Global Knowledge Exchange

T: +44 (0)1277 634176 E: info@europeanhealthcaredesign.eu W: www.europeanhealthcaredesign.eu

europeanhealthcaredesign2021.hubilo.com

For online registration and fees, please visit
https://europeanhealthcaredesign2021.hubilo.com
Special early-bird discounts
are available until 2 June 2021
For exhibition and sponsorship enquiries, contact
marc@salus.global