AT THE TIPPING POINT
RESEARCH • POLICY • PRACTICE

PRELIMINARY PROGRAMME
AT THE TIPPING POINT
DESIGNING FOR POPULATION AND PLANETARY HEALTH

Register at www.europeanhealthcaredesign.eu | info@europeanhealthcaredesign.eu
Our objective in 2020 is therefore clear: to construct a comprehensive narrative for sustainable design in the new context of a global public health emergency. Actors at all levels need to construct a comprehensive design narrative for the sustainable development of population-based health systems.

This year, owing to the pandemic, the 6th Annual European Healthcare Design 2020 Congress, Awards & Exhibition takes place over five days (14-18 September 2020) in an exclusively virtual setting. The disruption has been considerable but, as organisers, Architects for Health and SALUS Global Knowledge Exchange are excited by the prospect of extending access to world-leading research, practice and policy thinking in the healthcare design field to a global audience remotely at a time when it’s needed more than ever before.

Healthcare is now the biggest ‘industry’ in the world and the single largest component in the economies of many developed countries. It’s a voracious consumer of goods and services, producer of waste and generator of carbon. But a population-based health system has responsibilities to planetary health that extend beyond care delivery.

A fundamental transformation in service models is required. This carries significant risk because prescriptive and top-down changes to complex systems have unintentional consequences, which are often more disruptive than a reform’s primary objectives.

Redesigning healthcare systems

Redesigning networks at a whole-system level is critical. Emissions originating directly from healthcare facilities make up 17 per cent of the sector’s worldwide footprint, but 71 per cent of emissions is derived from the healthcare supply chain.¹ Services need to be redesigned to shift care upstream and place greater emphasis on primary care, prevention and self-management.

Where are we making better use of digital technologies, developing more integrated forms of care, removing duplication and redundancy from care pathways, empowering patients, and moving care closer to home? How do we increase the resilience of services while reducing their impact on the environment?

Digital connectivity provides a framework by which healthcare networks can inform and empower staff and patients, and move them efficiently around the system. We also need to understand what advances have been made in AI, pharma, robotics and algorithmic diagnosis.

The ability of population-based healthcare systems to align to the UN’s Sustainable Development Goals and the Paris Agreement’s global climate goals relies on a dynamic integration of health and social care with housing, planning, transport and social support. Healthcare projects will increasingly be part of wider mixed-use developments, which in turn will require mixed funding.

From disposable to circular

The age of the disposable building has passed. If we adopt a circular economic model then any healthcare building should be capable of alternative future use and fulfil a greater role in the public realm. And more extreme climates will require buildings designed to be climate adaptable, very low- or zero-carbon, and energy efficient. Active buildings can integrate renewable energy technologies for heat, power and transport as components of an active healthcare network integrated into the smart city.

The future will also see investment in greening our cities, communities and health buildings.

¹ Health Care Climate Council (2019). 'Health Care and the Climate Crisis: A Global Scan to 2030.'
Healthcare design post COVID-19

The impact of COVID-19 on healthcare design will be felt for years. In some cases, the pandemic will accelerate trends already in play prior to the crisis, such as the need for infrastructure to be adaptable to changing needs, closer co-ordination of primary and secondary care, and delivery of health services via digital technology. In other ways, COVID-19 has raised new design issues. For example, designing in surge acute and critical care capacity, supporting the mental health of patients and health workers, the impact of social isolation and health inequalities, and resourcing staff with proper medical equipment and PPE.

European Healthcare Design 2020 features five days of streams, comprising 60 sessions of talks, panel discussions and workshops. The first three days (14-16 September) will include two streams running alongside each other, as well as a third stream of poster presentations. On days four and five (17-18 September), there will also be three streams: one dedicated to the new COVID-19 Global Summit on Healthcare Design: A New Paradigm; one continuing the presentations from EHD2020; and the third devoted to the European Healthcare Design Awards 2020 shortlisted projects. Every day between 13.00 and 13.30, we will also be hosting an ‘Innovation showcase’ for exhibitors in the virtual ‘Expo area’. And to conclude the congress, day five (18 September) will culminate with a virtual ceremony to present the EHD2020 Awards.

Please note that all times in the programme are British Summer Time (BST).

For details about online registration and sponsorship opportunities, please go to page 20 of this programme.

In direct response to the pandemic, we are excited to announce the launch of the COVID-19 Global Healthcare Design Summit: A New Paradigm, fully integrated into the 6th European Healthcare Design Congress, which will now take place in a virtual setting on 14-18 September 2020. In a matter of months, 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 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.

The convergence of the dual threats of infectious disease and climate crisis requires actors at all levels of society to construct a comprehensive design narrative for the sustainable development of population-based health systems.

The programme for the COVID-19 Global Summit (see page 14 and page 17) will launch with keynote talks from three global health leaders who have been involved in work relating to the pandemic on a number of fronts:

**PROF DAME ANNE JOHNSON**
Professor of Infectious Disease Epidemiology at the University College London, and co-director of UCL Health of the Public

**DR LIZ PASLAWSKY**
Integrative leadership CEO/executive coach, and visiting professor at the Ukrainian Catholic University

**DR LAYLA MCCAY**
Director of International relations, NHS Confederation

Sessions will then follow on ‘European health system responses’; ‘Resilient hospitals: the sustainable response’; ‘A new design language: integrating guidance with humanity’; and ‘Strategies to flex and adapt’.

The second day of the Summit (and final day of the virtual EHD 2020 Congress) will include four sessions looking at: ‘New models of care: telemedicine at last?; ‘The role of primary care in a pandemic’; ‘Design strategies for infection control’; and ‘Mental health, wellbeing and resilience’.

We are delighted to invite you to participate in the COVID-19 Global Healthcare Design Summit: A New Paradigm 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: DESIGNING FOR POPULATION AND PLANETARY HEALTH
14 September 2020 Main stage (all times are British Summer Time; all sessions streamed exclusively online)

SESSION 1
Opening plenary: Designing for population and planetary health
Chair: John Cooper, Architects for Health, UK

08.45 Chair’s welcome
John Cooper, Programme chair, Architects for Health, UK

09.00 Keynote: Rescuing planetary health: the role of the health sector
Dr Howard Frumkin, Professor emeritus, University of Washington School of Public Health, USA

09.15 Keynote: Climate change and healthcare: from threat to opportunity
Dr Nick Watts, Executive director, Lancet Countdown, UCL; Chair, NHS Net Zero, UK

09.30 Keynote: Healthcare’s climate footprint
Sonia Roschnik, Global climate policy director, Health Care Without Harm, UK

09.45–10.15 Panel discussion

SESSION 2
Healthcare in harmony: designing with nature
Chair: Sue Morgan, Design Council, UK

11.30 Carbon footprint of the health sector – a global assessment
Tamer Rabie, Lead health specialist, World Bank Group, USA
Stephen Dorey, Senior environment and health specialist, World Bank Group, UK
Caroline Anitha Devadason, Consultant, World Bank Group, USA
Manfred Lenzen, Professor of Sustainability Research, University of Sydney, Australia

11.45 Integrating green and blue infrastructure into healthcare investment
Luke Engleback, Chartered landscape architect, eco-urbanist, founder/director, Studio Engleback, UK

12.00 Hospitals as superorganisms: how humans, plants, microbes, viruses and other selfish entities can shape the health of our cities
Steven Ware, Architect and partner, Art & Build, France

12.15–12.45 Panel discussion

13.00–13.30 Innovation showcase – Expo area

SESSION 3
Transforming health infrastructure
Chair: Richard Mann, AECOM, UK

14.45 Delivering major projects and programmes – setting up for success
Kieran McDaid, Director, capital estates and major projects, Moorfields Eye Hospital, UK
David Powell, Project director, Velindre Cancer Centre; Executive director, Alder Hey Children’s NHS FT, UK; Peter Ward, Director, real estate development, King’s College London, and Guy’s and St Thomas’ NHS FT, UK

15.30 A manifesto for the new UK hospital building programme
John Cooper, Programme chair, Architects for Health, UK

15.45–16.15 Panel discussion

SESSION 4
Sustainable development of major projects
Chair: Sunand Prasad, Penoyre & Prasad, UK

16.45 Designing zero-carbon hospitals that heal
Andy Vernon, Director of healthcare; Eimear Moloney, Associate director, Hoare Lea, UK

17.00 Feasibility study versus a masterplan – which project definition methodology works best?
Robin Guenther, Healthcare practice leader and firmwide sustainability principal; Anthony Mistretta, Healthcare operations and strategic planning executive; Jeffrey Dreesman, Western US healthcare practice leader, Perkins and Will, USA

17.15 Achieving healthcare transformation in times of austerity
John Kelly, Director, ETL, UK; Frank Kittredge, Director, HKS, USA

17.30 Silicon Valley at the tipping point: Stanford Medicine Project Renewal
George Ruhl Tingwald MD, MArch, Director of medical planning, Stanford Health Care, USA
Jill Sullivan MSN, Vice-president, Lucile Packard Children’s Hospital at Stanford, USA
Niraj Dangoria, Associate dean for facilities planning and management, Stanford University, USA

17.45–18.15 Panel discussion

SESSION 4A
The room where life begins: a parametric model for labour and delivery planning
Felicia Cleper-Borkovi, Senior consultant, healthcare, Arup; Henry Chong Lee MD, MS, Associate professor, Dept of Pediatrics, Stanford School of Medicine; Prof Louis Halamek and Lilian Sie, Stanford University; Paul Moran, Level 10 Construction; Ajit Singh, Artiman Ventures, USA
### SESSION 5
**The future hospital**
**Chair:** Richard Cantlay, Mott MacDonald, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.30</td>
<td>Integrated patient room ‘healing’ technology design - a stepwise approach&lt;br&gt;Merlijn Smits MSc, Design manager, R4heal, Radboud University Medical Center, Netherlands</td>
</tr>
<tr>
<td>10.45</td>
<td>Conceptualisations of AI smart hospitals by experts in teamwork&lt;br&gt;Johan van der Zwart, Assistant professor, Architecture &amp; Health, NTNU, University of Science and Technology, Norway</td>
</tr>
<tr>
<td>11.00</td>
<td>Bringing proton-beam therapy to UK patients&lt;br&gt;John McIntosh, General manager, Rutherford Estates, UK&lt;br&gt;Kevin Turnbull, Director, JDDK Architects, UK&lt;br&gt;Mura Mullan, Director, JDDK Architects, UK</td>
</tr>
<tr>
<td>11.15</td>
<td>Advancing technology versus architectural and environmental design&lt;br&gt;Emma Smyth, Architect, HDS Architects, UK&lt;br&gt;Richard Lavine, Director, HDS Architects, UK</td>
</tr>
<tr>
<td>11.30–12.00</td>
<td>Panel discussion</td>
</tr>
</tbody>
</table>

### SESSION 6
**Neuroscience and navigation**
**Chair:** Eve Edelstein, Clinicians for Design, USA

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.45</td>
<td>Evaluating and optimising wayfinding in healthcare settings through biometric data and virtual-response testing&lt;br&gt;Saleh Kalantari, Assistant professor, Cornell University, USA&lt;br&gt;Robin Snell, Principal, Parkin Architects, Canada</td>
</tr>
<tr>
<td>14.00</td>
<td>Empowerment through digital wayfinding solutions&lt;br&gt;Steinar Valade-Amland, Head of strategy and business development, Triagonal Information Design, Denmark</td>
</tr>
<tr>
<td>14.15</td>
<td>Human-responsive healthcare buildings and neuroscience&lt;br&gt;Davide Ruzzon, Director, Lombardini22 Milan; NAAD Master, IUAV University of Venice, Italy</td>
</tr>
<tr>
<td>14.30–15.00</td>
<td>Panel discussion</td>
</tr>
</tbody>
</table>

### SESSION 7
**Designing for clinical research**
**Chair:** Christine Chadwick, Cannon Design, Canada

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.30</td>
<td>Human-centred design for tomorrow’s healing environments&lt;br&gt;Emily Bateman, Project manager, Perkins and Will, USA; Elizabeth Rack, Principal, Perkins and Will, USA; Dr Eve Edelstein, Co-founder, Clinicians for Design, USA</td>
</tr>
<tr>
<td>15.45</td>
<td>Clinical research facilities – facilitating the realisation of population health&lt;br&gt;Niraj Dangoria, Associate dean, Stanford University School of Medicine, USA</td>
</tr>
<tr>
<td>16.00</td>
<td>Reimagining clinical and research environments as a shared urban experience&lt;br&gt;Gavin Henderson, Principal director, Stanton Williams Architects, UK</td>
</tr>
<tr>
<td>16.15–16.45</td>
<td>Panel discussion</td>
</tr>
</tbody>
</table>

### SESSION 8
**Future visions: Surgical, emergency and ward design**
**Chair:** Hank Adams, HDR, USA

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.15</td>
<td>The surgery unit of the future: an experimental prototype&lt;br&gt;Ana Lucia Morales Tarazone, Architect, LAHB, Spain</td>
</tr>
<tr>
<td>17.25</td>
<td>Clinical scenario-driven approach of design and technology at the normal ward&lt;br&gt;Harry van Goor, Professor of Surgery and Innovation, Radboud University Medical Centre, Netherlands</td>
</tr>
<tr>
<td>17.35</td>
<td>What do care partners find important in a surgery centre waiting room?&lt;br&gt;Anjali Joseph, Professor; Endowed chair, Center for Health Facilities Design and Testing; Roxana Jafarifiroozabadi and Rutali Joshi, Graduate assistants, doctoral candidates, Clemson University, USA</td>
</tr>
<tr>
<td>17.45</td>
<td>Designing the physician workspace to support handovers in the emergency dept&lt;br&gt;Rutali Joshi, Doctoral candidate; Anjali Joseph, Endowed chair, Center for Health Facilities Design and Testing, Clemson University, USA; David Allison, Director of graduate studies, Clemson University, USA</td>
</tr>
<tr>
<td>17.55</td>
<td>Novel design research methodologies for understanding space&lt;br&gt;Bella Shah Nagappan, Resident physician; Ben Bassin, Assistant professor, Emergency Medicine; Cemal Sozener, Associate professor, Emergency Medicine, University of Michigan, USA</td>
</tr>
<tr>
<td>18.05</td>
<td>Renovating for planetary health: reducing the impact of surgical services on the climate&lt;br&gt;Shelly Fleck, Director, surgical services; Dr Kelly Lefaivre and Dr Peter Gooderham, Surgeon leads, Vancouver General Hospital, Canada; Knut Boeck, Principal, DYS Architecture, Canada</td>
</tr>
<tr>
<td>18.15–18.45</td>
<td>Panel discussion</td>
</tr>
</tbody>
</table>
DAY 1, STREAM 3: POSTER PRESENTATIONS
14 September 2020 (all times are British Summer Time; all sessions streamed exclusively online)

SESSION 9
Healthcare at home and in the community
Chair: Femke Feenstra, Gortemaker Algra Feenstra Architects, Netherlands

14.30 Helping people lead healthy lives
Jean Hansen, Sustainable principal, senior professional associate, HDR, USA
Matthew Cunha-Rigby, Sustainable leader, HDR, USA
Eileen Gohr, Senior sustainable consultant, HDR, USA

14.40 CU@Home – proactively managing safe transitions to home after joint replacement surgery
Anjali Joseph, Professor, Endowed chair, Director, Center for Health Facilities Design and Testing, Clemson University, USA
Sahar Mihandoust, Research Assistant Professor, Architecture & Health, Clemson University, USA

14.50–15.10 Panel discussion

SESSION 10
Design quality: Culture and communication
Chair: Gary Hamilton, WSP, USA

16.00 Hospitals should make you feel better
Ivan Harbour, Senior partner, Rogers Stirk Harbour + Partners, UK

16.10 Designing for cultural sustainability: development of a toolkit to support the design of culturally sustainable healthcare environments
Sophie Crocker, Medical planner and designer researcher, HKS Architects, UK

16.20 Health in the built environment – new systems to bridge architecture and medicine
Timothy D Rossi, Founder, Architectural Medicine, USA

16.30 How we can use graphic communication sustainably to aid the user journey within a UK hospital
Alex Harrington, Graphic designer and researcher, UK

16.40–17.10 Panel discussion
SESSION 11
The health gap: building a healthy and health-creating society
Chair: Chris Liddle, HLM, UK

08.50 Welcome and introduction

09.00 Keynote: Health is made at home, hospitals are for repairs
Lord Nigel Crisp, Independent crossbench member of the House of Lords; Co-chair, All-Party Parliamentary Group on Global Health, UK

09.15 Keynote: The stalling of life expectancy and the increasing health gap: what to do?
Jennifer Dixon, Chief executive, The Health Foundation, UK

09.30 Keynote: Health and wellbeing in socio-technological ecosystems
Alberto Sanna, Director, Research Center for Advanced Technologies in Health and Wellbeing, San Raffaele Scientific Institute, Italy

09.45–10.15 Panel discussion

SESSION 12
Population health in practice
Chair: Paul Bell, Ryder, UK

11.15 Healthcare in placemaking: putting population health needs at the heart of regeneration
Helen Revitt, Regional director, AHR, UK
Alison Evans, Regional director, AHR, UK

11.30 Reshaping primary care
Jason Pearson, Director of healthcare and science architecture, AECOM, UK
Jack Dunmore, Strategic estates manager, NHS WEL CCGs – Newham, Tower Hamlets and Waltham Forest, UK

11.45 How design can reduce aggressive behaviours of patients. Experiences from primary care in the Spanish health system
Angela Elisabeth Müller, Architect and consultant, Parra-Müller, Spain

12.00 Redefining the shape and form of health systems – the new Healthcare Centre Holstebro, Denmark
Birgitte Ernst, Partner, Arkitema Architects, Denmark

12.15–12.45 Panel discussion

13.00–13.30 Innovation showcase – Expo area

SESSION 13
Integrating care in the community
Chair: John Cooper, Architects for Health, UK

15.00 Regenerative design is a trigger for developing healthy communities: a case study of the University Hospital Tübingen, Germany
Tatiana Epimakhova, Architect, Heinle, Wischer and Partner, Freie Architekten, Germany
Edzard Schultz, Partner, Heinle, Wischer and Partner Freie Architekten, Germany

15.15 Great Ormond Street Hospital as a part of the city – a health-led approach to public realm
Magali Thomson, Project lead for placemaking, Great Ormond Street Hospital NHS FT, UK

15.30 Redesigning systems of health: human-centred, participatory and systems-minded approaches to co-designing community health initiatives
Mikaela Patrick, Research associate, STEMA, UK

15.45 Wayfinding way beyond the point of care delivery
Steinar Valade-Amland, Head of strategy and business development, Triagonal Information Design, Denmark
Louise H Kristiansen, Research assistant, Triagonal Information Design, Denmark

16.00–16.30 Panel discussion

SESSION 14
The hospital in the city
Chair: Mario Bozzo, SALUS Global Knowledge Exchange, UK

17.00 Royal St: better health and wellbeing for people through an evidence-based, outcome-focused approach
Katie Wood, Director; Angela Crowther, Associate, Arup, UK

17.15 Focusing on population health through a living design framework
Basak Alkan, Senior urban designer, senior associate, Perkins and Will, USA

17.30 The patient’s medical home – theory into practice: a frontline experience
Colleen McKinstry, Healthcare consultant, principal/co-owner; Stacey Stritchuk, Healthcare consultant, principal/co-owner, 143 HealthCARE Consulting, Canada

17.45–18.15 Panel discussion
DAY 2, STREAM 5: ART, ARCHITECTURE AND MEDICINE
15 September 2020 Breakout session (all times are British Summer Time; all sessions streamed exclusively online)

SESSION 15
Multi-disciplinary and participatory design
Chair: David Martin, Stantec, UK

08.00 Tall hospitals
Regina Kennedy, Associate; Tina Nolan, Director, ETL, UK; Paul Johnson, Director, BDP UK; Bob Klaber, Consultant general paediatrician, Imperial College Healthcare NHS Trust, UK

08.15 Shaping sustainable health infrastructure through participatory design
Jane Carthey, Doctoral student, Queensland University of Technology, Australia

08.30–08.50 Panel discussion

SESSION 16
Art & Design Studio Workshop
Facilitators: Louisa Williams, Director, Art in Site, UK
Martin Jones, Director, Art in Site, UK
Peter Shenai, Creative strategist, Art in Site, UK
Katharine Lazenby, Art in Site, UK
James Leadbitter, Madlove, UK
Lucy Zacaria, Imperial Health Charity, UK
Liz O’Sullivan, Guy’s & St Thomas’ NHS Foundation Trust, UK

10.30–12.30 Art as a tool for mental and physical wellbeing
Design studio Art in Site present a series of talks culminating in a round table discussion, asking: “How can art directly improve our health and wellbeing – both physically and mentally?” Bringing together leading practitioners and activists we will hear how art is serving mental/physical wellbeing in hospitals and beyond: bringing better sleep, mental health recovery, aiding clinical procedures, neuro-rehabilitation, and more. The panel will discuss new innovations, the importance of process, the challenges art faces in demonstrating its value, and the vital role of broader collaborations between artists, designers, clinical teams, patient communities, and the public.

SESSION 17
Designing for critical care and surgery
Chair: Ganesh Suntharalingam, Intensive Care Society, UK

14.30 Return to the fishbowl: increasing visibility in the ICU
D Kirk Hamilton, Julie & Craig Beale Endowed Professor of Health Facility Design, Texas A&M University, USA
Sandra M Swoboda, Research programme co-ordinator, Schools of Medicine & Nursing, Johns Hopkins University, USA
Charles D Cadenhead, Senior principal and senior medical planner, EYP Architecture & Engineering, USA

14.45 Translating research into practice: a web-based ‘Safe Operating Room design’ tool to support evidence-based design decision-making
Anjali Joseph, Professor, Endowed chair, Director, Center for Health Facilities Design and Testing, Clemson University, USA
Herminia Machry, Graduate assistant, Clemson University, USA

15.00 Present-day challenges of integration and control for the operating theatres of the future
Adrian Hall, Chief operating officer, Brandon Medical Co, UK

15.15–15.45 Panel discussion

SESSION 18
Research-based changes for COVID-19 healthcare facilities
Facilitators: Eve Edelstein, Clinicians for Design; USA
Panel: Dr Ruth Fanning, Stanford University; Dr Emma Stockton, Great Ormond Street Hospital; John Riordan, University of Virginia; Kevin van den Wymelenberg, University of Oregon; George Tingwald, Stanford University; Kate Bradley, MJ Medical; Jennifer Whinnett, Guy’s and St Thomas’ NHS Foundation Trust; Elizabeth Whelan, University of Greenwich; Marc Levinson, Murphy Philips Architects; Davide Ruzzon, Lombardini22; Kevin Turner, Human Experience Design; Hala ElKhorrutzy, Perkins&Will; Jerry Johnson, Perkins&Will; Niraj Dangoira, Stanford University; Amy Sickler, Perkins&Will

16.15–18.00 Clinicians for Design Front-line Provider Workshop
This interactive workshop is for clinicians, designers and estates professionals who have worked at the front line of COVID-19 care, or have planned or developing innovative means to design safer healthcare facilities. Participants will discuss the challenges faced, the solutions developed, and the issues remaining to prepare for the next surge of COVID-19, or next health crisis. Presentations by doctors specialising in intensive care, emergency medicine, and anaesthesia, among others, will be followed by active discussion facilitated by members of the AIA COVID-19 Front Line Task Force and others around the world who developed new guidance for facility design that considers the latest evidence regarding how components of design influence transmission risk for providers and patients.
SESSION 20
Designing for children
Chair: Davide Ruzzon, TUNED, Lombardini22, Italy

13.45 Designing paediatric networks – it’s not child’s play
Deirdre Foley-Woods, Director, ETL, UK
Alice Dowling, Consultant, ETL, UK

13.55 Inclusive design thinking – designing from small to big
Astrid Piber, Partner, senior architect, UNStudio, Netherlands

14.05 The impact of single-family room design on family engagement in the neonatal ICU
Herminia Machry, Graduate research assistant, Clemson University, USA
Anjali Joseph, Professor, Clemson University, USA

14.15– Panel discussion

SESSION 21
Technology and the future of care
Chair: John Kelly, ETL, UK

15.30 Shaping the future of care
David Lewis, Partner, NBBJ, UK

15.45 Cognitive design: adaptive biophilia for older hospitals
David Navarrete, Director, research initiatives, Sky Factory, USA

16.00–16.20 Panel discussion

SESSION 22
System design to improve population health
Chair: John Cole, Queen’s University Belfast; International client advisor, UK

17.30 Healthy data – leveraging healthcare information to design a healthier society
Nolan Rome, US director of healthcare, WSP, USA
Kevin Cassidy, Canada director of healthcare, WSP, Canada

17.40 Circulating health information towards health action: a design approach to translating clinical guidelines for population impact
Nita Lakhani, Student, Ontario College of Art and Design, Canada
Peter Jones, Associate professor, Ontario College of Art and Design, Canada

17.50 Promoting community advancement and education
James Crispino, Global practice area leader, Gensler, USA

18.00 Design’s ability to transform and deliver population health
Louis A Meilink Jr, Senior principal, Ballinger, USA
Christina Grimes, Associate principal and director of healthcare planning, Ballinger, USA

18.10–18.40 Panel discussion
## SESSION 23
### Designing for climate adaptation
**Chair:** Jonathan Erskine, Director, European Health Property Network, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00</td>
<td>Adapting rural health services in Victoria, Australia</td>
<td>Allen Kong, Director, Allen Kong Architect, Australia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peter Birkett, CEO, Hesse Rural Health Services, Australia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Andrea Dunlop, Manager, workforce and service development, Hesse Rural Health Services, Australia</td>
</tr>
<tr>
<td>09.15</td>
<td>Towards a carbon-positive healthcare infrastructure</td>
<td>Kelly Alvarez Doran, Senior principal, MASS Design Group, UK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>John Maher, Architect, MASS Design Group, USA</td>
</tr>
<tr>
<td>09.30</td>
<td>How to reduce whole-life carbon in a new London development</td>
<td>Helen Hough, Associate, Bryden Wood, UK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Martina Cardi, Associate, Bryden Wood, UK</td>
</tr>
<tr>
<td>09.45</td>
<td>The adaptive hospital</td>
<td>Dale Sinclair, Director – architecture, technical practice, AECOM, UK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lindsey Sokolich, Deputy director of strategic development, Moorfields Eye Hospital and UCL Institute of Ophthalmology, UK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Panel discussion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## SESSION 24
### Healthcare’s climate footprint
**Chairs:** Katie Wood, Arup, UK  
Kristian Steele, Arup, UK  
Panel: Ian Milimo, UNDP, UK  
Rosemary Kumwenda, UNDP, UK  
Scott Brady, Health Care Without Harm, UK  
William Clark, Health Care Without Harm, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.00</td>
<td>DESIGN WORKSHOP: Healthcare’s climate footprint: how the health sector contributes to the global climate crisis and opportunities for action</td>
<td>The healthcare sector, which sits on the front lines as a first responder to climate change, also makes a significant contribution to the problem. This workshop will explore how healthcare can respond to the climate emergency not only by treating those affected by the climate crisis and its causes but also by practising primary prevention, radically reducing its own emissions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Innovation showcase – Expo area</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## SESSION 25
### Resilient design in the circular economy
**Chair:** Alan Kondys, IHP and Vinci, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.30</td>
<td>Resilient healthcare design</td>
<td>Gary Hamilton, Senior vice-president, WSP, USA</td>
</tr>
<tr>
<td>14.45</td>
<td>A field guide to safe and circular building materials</td>
<td>Jean Hansen, Sustainable principal, senior professional associate, HDR, USA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wendy Vitto, Executive director, Health Product Declaration Collaborative, USA</td>
</tr>
<tr>
<td>15.00</td>
<td>Wood in healthcare buildings, sustainable and healthy – theory and practice: Psychiatric Clinic, Södra Älvsborgs Sjukhus, Borås, Sweden</td>
<td>Magnus Bunner, Architect, White Arkitekter, Sweden</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jens Axelsson, Architect, White Arkitekter, Sweden</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Panel discussion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## SESSION 26
### Building a resilient system: how do we support societies to be healthy, accountable and resilient?
**Panel:** Suzanne MacCormick, WSP, UK  
Nolan Rome, WSP, USA  
Kevin Cassidy, WSP, Canada  
Lord Nigel Crisp, House of Lords; All-Party Parliamentary Group on Global Health, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>WORKSHOP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16.15</td>
<td>The challenges that COVID-19 has brought to our healthcare systems is undeniable but what it has given us is a once-in-a-generation opportunity to rethink how services could be delivered and what it is possible to achieve. Realising that it isn’t just a hospital that needs to be resilient but an entire system and community to ensure a sustainable future we will use this workshop to discuss:</td>
<td></td>
</tr>
<tr>
<td>17.45</td>
<td>• How can we support people to be an active participant in their own health?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decentralising care – how can we:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– improve access to primary care when we have a dearth of capacity?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– use our acute facilities to ensure optimal care and safety?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– ensure appropriate use of our emergency departments?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Virtual care is here to stay – how will this impact hospital design and primary care facilities?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What will this new world look like and how can we best design for excellence? This virtual workshop is designed to engage and stimulate discussion among all participants, building a holistic picture of design considerations as the end result.</td>
<td></td>
</tr>
</tbody>
</table>
## SESSION 27
### Transformation, investment and guidance

**Chair:** Simon Kydd, WSP, UK

- **08.00** Health service sustainability and investment prioritisation framework
  
  Matthew Holmes, Global healthcare director, Jacobs, Australia
  
  Annabel Frazer, Director, clinical health planner, Jacobs, Australia

- **08.15** Better structured projects – a case study from building a model for healthcare delivery across a country
  
  Conor Ellis, Head of business planning and strategy, Archus, UK
  
  Nicola Clemo, Associate partner, Rider Levett Bucknall, UK

- **08.30** When integrated project delivery is not enough and changes are needed: some examples from inpatient wards with 100-per-cent single-occupancy rooms
  
  Liesbeth van Heel, Senior policy advisor and PhD student, Erasmus University Medical Centre, Netherlands

- **08.45** Sixty years of research and guidance: Health Building Notes and Technical Memoranda
  
  Susan Holding, Associate director, Archus, UK
  
  Richard Darch, Chief executive, Archus, UK

- **09.00–09.30** Panel discussion

---

## SESSION 29
### Driving a greener NHS

**Panel:** Cameron Hawkins, NHSPS, UK
Wendy Broomhead, Scott Hughes Design, UK
Simon Taylor, NHSPS, UK
Rhea Horlock, NHSPS, UK

**14.00–15.30** The NHS is the UK’s largest public-sector emitter of carbon emissions and has a duty to respond to government targets, including being net carbon-zero by 2050. NHS England has recently launched its ‘Greener NHS’ campaign, and NHS Property Services is committed to making its properties more environmentally friendly. This ranges from the way they build, refurbish and update buildings, increase space utilisation, and encourage best practice among its tenants and employees. In this workshop, speakers will discuss the challenges in transforming the estate, progress to date, and future priorities.

---

## SESSION 30
### Professional education to build workforce capacity in healthcare design and planning

**Chair:** Evangelia Chrysikou, The Bartlett Real Estate Institute, UK

**Panel:**
- Hina Lad, UCL, UK
- Jonas Rehn, UCL, UK
- Nuria Hernandez, UCL, UK
- Gerard Abou Jaoude, UCL, UK
- Yolande Barnes, UCL, UK

**16.00–17.30** Huge population growth and associated rise in life expectancy over the last 150 years, alongside the development of new drugs and medical technologies, greater public awareness of the value of health and the emergence of chronic lifestyle diseases, had already established healthcare as the world’s largest industry before the COVID-19 pandemic. With this new challenge stimulating even greater investment into healthcare systems and infrastructure, the need to build workforce capacity in healthcare planning and design is an urgent requirement for governments and industry all over the world. This workshop, delivered by the course directors of The Bartlett Real Estate Institute’s (BREI) Healthcare Facilities MSc, will demonstrate the value of an integrated and interdisciplinary programme related to healthcare facilities in the widest sense, providing attendees the opportunity to learn how professional education can help build industry capacity to support all aspects of the process of creating, renewing or managing healthcare facilities, including: development and capital projects; building solutions and systems; modern economics and finance for real estate; forms of value for real estate; health systems, services and technologies.
SESSION 31
Designing new models of care
Chair: Jonathan Wilson, GB Partnerships, UK

11.30 Redefining primary care
Chris Thornton, Healthcare sector lead, ADP, UK

11.40 Lessons learnt from the implementation of new care models in the North East
Gregory Maniatopoulos, Senior research associate, Newcastle University, UK
Jonathan Erskine, Executive director, European Health Property Network / Honorary fellow, Durham University, UK

11.50 No place like home – an innovation hub for outpatient care
John Kelly, Director, ETL, UK
Tina Nolan, Director, ETL, UK
Jack Goodall, Consultant, ETL, UK

12.00–12.30 Panel discussion

SESSION 32
Lean and productive healthcare design
Chair: Bill Hercules, WJH Health, USA

13.45 Production success
Li Liljeberg, Architect, LINK arkitektur, Sweden
Anna Rolf, Architect, LINK arkitektur, Sweden

13.55 ABW tool: how to ease change resistance in an activity-based working environment when planning the hospital
Paula Turunen, Chief physician of the project, Kanta-Häme Hospital District, Finland

14.05 Physician engagement and perspective in the Lean facility design process
Benjamin Bassin MD, EDAC, Director of critical care operations, associate service chief, attending physician, University of Michigan Health System, USA
Cemal Sozener MD, MEng, EDAC, Medical director, Comprehensive Stroke Center; Attending physician, University of Michigan Health System, USA
Diana Anderson MD, MArch, Healthcare architect, internist, fellow in Geriatric Medicine, University of California – San Francisco, USA
Juliet Rogers PhD, MPH, President, Blue Cottage of CannonDesign, Blue Cottage Consulting, USA

14.15–14.35 Panel discussion

SESSION 33
Designing for nursing
Chair: Marte Lauvsnes, Sykehusbygg, Norway

15.30 Exploring the relationship between access to nature views and nurse burnout
Sahar Mihandoust, Research assistant professor, Clemson University, USA
Debajyoti Pali PhD, Professor and Rockwell Endowment chair, Texas Tech University, USA

15.40 Effects of inpatient unit design on nurses' walking distances and job satisfaction in three Jordanian hospitals
Bushra B Obeidat, Assistant professor, Jordan University of Science and Technology, Jordan

15.50 Horseshoe, cockpit and dragonfly: nurse movement patterns in the ICU
D Kirk Hamilton, Julie & Craig Beale Endowed Professor of Health Facility Design, Texas A&M University, USA

16.00–16.30 Panel discussion
## SESSION 34
### COVID-19: A new paradigm – systems, science and society  
**Chair:** John Cooper, Architects for Health, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.50</td>
<td>Welcome</td>
<td></td>
</tr>
</tbody>
</table>
| 09.00  | COVID-19: insights, outlook and the path ahead | Prof Dame Anne Johnson, Professor of Infectious Disease Epidemiology; Co-director, UCL  
Health of the Public, University College London, UK |
| 09.15  | A population health-based approach in response to COVID-19 in Australia and NZ | Dr Liz Paslawsky, Integrative leadership CEO/executive coach; Visiting professor, Ukrainian Catholic University, Australia/Ukraine |
| 09.30  | A global race to respond and recover | Dr Layla McCay, Director of international relations, NHS Confederation, UK |

### SESSION 35
### European health system responses  
**Chair:** John Cole, Queen’s University Belfast; International client advisor, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.30</td>
<td>An immediate response to the pandemic: lessons learned from Germany</td>
<td>Tatiana Epimakhova, Architect; Edzard Schultz, Partner, Heinle, Wischer und Partner, Germany</td>
</tr>
<tr>
<td>11.45</td>
<td>Supporting the NHS in the COVID-19 emergency</td>
<td>Alan Kondys, Health sector and framework director, Integrated Health Projects, UK</td>
</tr>
<tr>
<td>12.00</td>
<td>The holistic approach – the Swiss response</td>
<td>Karin Imoberdorf, Architect, Lead Consultants, Switzerland</td>
</tr>
<tr>
<td>12.15</td>
<td>The Swedish experience: a regional health system approach</td>
<td>Göran Lindahl, Associate professor, Chalmers University of Technology / CVA; Cristina Caira, Artistic professor, Centre for Health Care Architecture, Chalmers University, Sweden</td>
</tr>
</tbody>
</table>

### SESSION 36
### Resilient hospitals: the sustainable response  
**Chair:** Cliff Harvey, Union of International Architects’ Public Health Group, Canada

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00</td>
<td>What naval history can teach hospital design about vulnerability</td>
<td>Chris McQuillan, Principal, B+H Architects, Canada</td>
</tr>
<tr>
<td>14.15</td>
<td>Best-in-class sustainability for the new South Niagara Hospital</td>
<td>Juhee Oh, Antoni Paleshi and Ben Embir, WSP, Canada</td>
</tr>
<tr>
<td>14.30</td>
<td>Reframing with the “must haves” in mind: safety and authenticity</td>
<td>Collin Beers, Senior principal; Maria Ionescu, Senior healthcare architect, Stantec, USA</td>
</tr>
<tr>
<td>14.45</td>
<td>Resetting... how to adapt hospitals to our new reality</td>
<td>Jennifer Aliber, Principal, Shepley Bulfinch, USA</td>
</tr>
</tbody>
</table>

### SESSION 37
### A new design language: integrating guidance with humanity  
**Chair:** Ganesh Suntharalingam, Intensive Care Society, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.00</td>
<td>Emergency hospitalisation: increasing healthcare capacity</td>
<td>Clara Rius, Associate Architect, Estudi PSP Arquitectura, Spain</td>
</tr>
<tr>
<td>16.30</td>
<td>Clinician-informed design: new design guidance from the front line of COVID-19 care</td>
<td>Dr Eve Edelstein, Co-founder, Clinicians for Design, USA; Dr Emma Stockton, Consultant, Great Ormond Street Hospital; Building Blocks for Clinicians, UK; Dr Diana Anderson, Co-founder, Clinicians for Design, USA; Dr Ruth Fanning, Clinical professor, Stanford University, USA</td>
</tr>
<tr>
<td>16.45</td>
<td>COVID-19 Facility Response Guide – the story of one group’s effort to assist in resource-challenged areas of the world</td>
<td>Jason-Emery Groen, Design director, HDR, Canada; Tim Hickory, Director of operations, Construction for Change, USA</td>
</tr>
</tbody>
</table>

### SESSION 38
### Strategies to flex and adapt  
**Chair:** Kevin Cassidy, WSP, Canada

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.00</td>
<td>Expect the unexpected: case studies of “surge” health facilities and hospitals</td>
<td>George J Mann, Architect AIA, The Ronald L Skaggs Endowed Professor of Health Facilities Design, Texas A&amp;M University, USA</td>
</tr>
<tr>
<td>18.15</td>
<td>Clinical and engineering excellence for truly adaptable space</td>
<td>Suzanne MacCormick, Global healthcare business growth lead, WSP, UK; Nolan Rome, Senior vice-president, US healthcare director, WSP, USA</td>
</tr>
<tr>
<td>18.30</td>
<td>FleXX hospital: surge scenario</td>
<td>Sophie Crocker, Architectural designer and health design researcher, HKS, UK</td>
</tr>
</tbody>
</table>

### SESSION 39
### COVID-19: A new paradigm – science and technology  
**Chair:** John Cooper, Architects for Health, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.30</td>
<td>A population health-based approach in response to COVID-19 in Australia and NZ</td>
<td>Dr Liz Paslawsky, Integrative leadership CEO/executive coach; Visiting professor, Ukrainian Catholic University, Australia/Ukraine</td>
</tr>
<tr>
<td>09.45</td>
<td>A global race to respond and recover</td>
<td>Dr Layla McCay, Director of international relations, NHS Confederation, UK</td>
</tr>
</tbody>
</table>

### SESSION 40
### European health system responses  
**Chair:** John Cole, Queen’s University Belfast; International client advisor, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.30</td>
<td>An immediate response to the pandemic: lessons learned from Germany</td>
<td>Tatiana Epimakhova, Architect; Edzard Schultz, Partner, Heinle, Wischer und Partner, Germany</td>
</tr>
<tr>
<td>11.45</td>
<td>Supporting the NHS in the COVID-19 emergency</td>
<td>Alan Kondys, Health sector and framework director, Integrated Health Projects, UK</td>
</tr>
<tr>
<td>12.00</td>
<td>The holistic approach – the Swiss response</td>
<td>Karin Imoberdorf, Architect, Lead Consultants, Switzerland</td>
</tr>
<tr>
<td>12.15</td>
<td>The Swedish experience: a regional health system approach</td>
<td>Göran Lindahl, Associate professor, Chalmers University of Technology / CVA; Cristina Caira, Artistic professor, Centre for Health Care Architecture, Chalmers University, Sweden</td>
</tr>
</tbody>
</table>

### SESSION 41
### Resilient hospitals: the sustainable response  
**Chair:** Cliff Harvey, Union of International Architects’ Public Health Group, Canada

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00</td>
<td>What naval history can teach hospital design about vulnerability</td>
<td>Chris McQuillan, Principal, B+H Architects, Canada</td>
</tr>
<tr>
<td>14.15</td>
<td>Best-in-class sustainability for the new South Niagara Hospital</td>
<td>Juhee Oh, Antoni Paleshi and Ben Embir, WSP, Canada</td>
</tr>
<tr>
<td>14.30</td>
<td>Reframing with the “must haves” in mind: safety and authenticity</td>
<td>Collin Beers, Senior principal; Maria Ionescu, Senior healthcare architect, Stantec, USA</td>
</tr>
<tr>
<td>14.45</td>
<td>Resetting... how to adapt hospitals to our new reality</td>
<td>Jennifer Aliber, Principal, Shepley Bulfinch, USA</td>
</tr>
</tbody>
</table>
17 September 2020 Breakout session (all times are British Summer Time; all sessions streamed exclusively online)

SESSION 39
Designing for mental health
Chair: Alex Caruso, Design in Mental Health Network, UK
08.30
Anything but institutional – a new model of care for young people experiencing mental ill health – the New Orygen Development, Parkville, Australia
Tonya Hinde, Associate director, Billard Leece Partnership, Australia
Kerryn Pennell, Director of strategy and development, Orygen, National Centre of Excellence in Youth Mental Health, Australia
Paul Longridge, Associate, Billard Leece Partnership, Australia

08.45
Metabolic syndrome and architecture: improving our health and wellbeing
Anthony Jones, Associate director, The Fairhursts Design Group, UK
Linda Jordan, Associate, The Fairhursts Design Group, UK

09.00
Interrogating the ‘desktop precedent study’: a predominant but little-discussed research method in contemporary healthcare facilities design
Rebecca McLaughlan, DECRA research fellow, University of Newcastle, Australia

09.15
Artworks for New Broadmoor Hospital
Martin Jones, Director, Art in Site, UK
Louisa Williams, Director, Art in Site, UK

09.30–10.00
Panel discussion

SESSION 40
Designing for cancer care
Chair: Graham Cossons, Hoare Lea, UK
11.00
Shaare Zedek Cancer Centre, Israel
Tye Farrow, Senior partner, Farrow Partners, Canada

11.15
Healthcare architecture education: designing the first Maggie’s Center in Israel
Nirit Pilosof, Postdoctoral researcher, Technion – Israel Institute of Technology, Israel

11.30
Design, health and community – an analysis of small-scale cancer care facilities and the implications for the existing Brisbane, Australia Age Care model
Gabriella Avenia King, Graduate of Architecture, Hassell, Australia

11.45–12.15
Panel discussion

13.00–13.30
Innovation showcase – Expo area

SESSION 41
The future of health planning
Chair: Richard Darch, Archus, UK
John Kelly, ETL, UK
Tina Nolan, ETL, UK
14.30–16.00
Professionalising health planning globally
As health systems around the world grapple with the acceleration of new technologies, COVID-19, and how these pressures impact and shape healthcare delivery, health planners have the opportunity to be centre stage. But how are the sub-disciplines of strategic health planning, clinical planning and space planning informing the design of health systems, clinical processes and new facilities?
At last year’s congress, an interdisciplinary group of delegates met to form a new professional body to regulate and represent health planners from around the globe, and bring rigour and professionalism to the discipline. More than 12 months on, the Health Planning Academy has been formed. This seminar will feature a panel of seasoned health planners debating how best to position the discipline to inform health policy around the world.

SESSION 42
Paradigm shifts in healthcare architecture
Chair: Brenda Bush-Moline, Stantec, USA
16.30
The future of an architecture for health
David Allison, Director of Graduate Studies in Architecture + Health / Alumni Distinguished Professor, Clemson University, USA
Edzard Schultz, Partner, Heinle, Wischer und Partner, Germany
Eva Henrich, Architect, Heinle, Wischer und Partner, Germany

16.45
Physician engagement in the development of the Vancouver General Hospital Surgical Center
Peter Gooderham, Surgeon lead, Vancouver General Hospital, Canada
Shelly Fleck, Clinical project director, Vancouver General Hospital, Canada
Kelly Lefaivre, Surgeon lead, Vancouver General Hospital, Canada

17.00
A paradigm shift: providing critical care in a purposefully designed emergency critical care unit: a five-year post-occupancy analysis
Cemal Sozener, Associate Professor of Emergency Medicine, University of Michigan Medical School, USA
Benjamin Bassin, Assistant Professor of Emergency Medicine, University of Michigan Medical School, USA

17.15–17.45
Panel discussion
**SESSION 43**  
**Healthcare Design (Over 25,000 sqm)**  
Lead judge: Kate Copeland, Australian Health Design Council, Australia  
Panel judges: Simon Kydd, WSP, UK; Bill Hercules, WJH Health, USA  
<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Location</th>
<th>Judges</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.00</td>
<td>Blacktown Hospital Acute Services Building, Australia</td>
<td>Arthur Collin, Jacobs, Australia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08.15</td>
<td>National Centre for Infectious Diseases &amp; Ng Teng Fong, Centre for Healthcare Innovation, Singapore</td>
<td>Jerry Ong, CPG Consultants, Singapore; Loke Mun Sing, MOH Holdings, Singapore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08.30-08.50</td>
<td>Panel discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SESSION 44**  
**Design for Adaptation and Transformation**  
Lead judge: Jim Chapman, Manchester School of Architecture, UK  
Panel judges: Chris Shaw, Medical Architecture, UK; Jane McElroy, NBBJ, UK  
<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Location</th>
<th>Judges</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.30</td>
<td>National Centre for Infectious Diseases &amp; Ng Teng Fong, Centre for Healthcare Innovation, Singapore</td>
<td>Jerry Ong, CPG Consultants, Singapore; Loke Mun Sing, MOH Holdings, Singapore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09.45</td>
<td>Kantor Centre of Excellence: The Anna Freud Centre and The Pears Family School, UK</td>
<td>Mark Rowe, Penoyre &amp; Prasad, UK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00</td>
<td>Värnamo Hospital, Operation and ICU Clinic, Sweden</td>
<td>Anders Medin, White Arkitekter, Sweden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.15-10.45</td>
<td>Panel discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SESSION 45**  
**Design Innovation for Quality Improvement**  
Lead judge: Johnathan West, Royal College of Art, UK  
Panel judges: Danny Gibson, MJ Medical, UK; Phil Wade, Phil Wade Business Consulting, UK  
<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Location</th>
<th>Judges</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.45</td>
<td>Operating Room 4.0 (OR4.0), Spain</td>
<td>Jordi Rovira, MySphera, Spain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.00</td>
<td>Sensory lighting technology reducing patient stress and anxiety in the healing environment, UK</td>
<td>Helen Green, Barnsley Hospital, UK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.15-12.45</td>
<td>Panel discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SESSION 46**  
**Healthcare Design (Under 25,000 sqm)**  
Lead judge: Liesbeth van Heel, Erasmus University Medical Centre, Netherlands  
Panel judges: Coen van Wijngaart, archipelago architects, Belgium; Christine Chadwick, Cannon Design, Canada  
<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Location</th>
<th>Judges</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.45</td>
<td>The Ark, Noah’s Ark Children’s Hospice, UK</td>
<td>Barnaby Johnston, Squire &amp; Partners, UK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.00</td>
<td>University of Cincinnati Gardner Neuroscience Institute, USA</td>
<td>Jerry Johnson and Adana Johns, Perkins and Will, USA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.15</td>
<td>Zayed Centre for Research into Rare Disease in Children, UK</td>
<td>Gavin Henderson, Stanton Williams, UK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.30-15.00</td>
<td>Panel discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SESSION 47**  
**Interior Design and Arts**  
Lead judge: Alexandra Coulter, Arts & Health South West, UK  
Panel judges: Femke Feenstra, Gortemaker Algra Feenstra Architects, Netherlands; Charlotte Rubin, White Arkitekter, Sweden  
<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Location</th>
<th>Judges</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.30</td>
<td>MUSC Shawn Jenkins Children’s Hospital and Pearl Tourville Women’s Pavilion, USA</td>
<td>Perkins and Will</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.45</td>
<td>The Prince and Princess of Wales Hospice, UK</td>
<td>Alastair Forbes, Ryder Architecture, UK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.00</td>
<td>Zayed Centre for Research into Rare Disease in Children, UK</td>
<td>Gavin Henderson, Stanton Williams, UK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.15-16.45</td>
<td>Panel discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**SESSION 48**

**New models of care: telemedicine at last?**

Chair: Danny Gibson, MJ Medical, UK

**08.30** Creating a better normal – can technology redefine new models of care?
Roneel Singh, Director, technology systems, WSP Australia
Manoj Indrarahan, Associate director, technology systems, WSP Australia

**08.45** Inpatient telemedicine for COVID-19: new model of care at Sheba Medical Center in Israel
Nirit Pilosof, Postdoctoral fellow, University of Cambridge, UK/Israel

**09.00** Telemedicine in the COVID-19 era: does a mobile phone and a secure connection do the trick?
Chongling Sun, Student, University College London, UK
Dr Evangelia Chrysikou, Programme director, University College London, UK
Ava Fatah gen Schieck, Reader (Associate Professor), University College London, UK

**09.15—10.00** Panel discussion

**SESSION 49**

**The role of primary care in a pandemic**

Chair: Evangelia Chrysikou, The Bartlett Real Estate Institute, UK

**10.00—11.15** Integration of primary care and public healthcare at the epicentre of the fight against COVID-19: a new paradigm
Dr Evangelia Chrysikou, Programme director, The Bartlett Real Estate Institute, University College London, UK
Professor Gabriel Ibijaro, representing the UK, Professor, NOVA University, Portugal
Prof Christos Lions, representing Greece/EU, Professor of General Practice and Primary Health Care; Head, Clinic of Social and Family Medicine, School of Medicine, University of Crete, Greece
Dr Lorena Dini MD, MScIH, PhD, representing Germany, Physician, Charité Universitätsmedizin Berlin, Institute of General Practice, Germany
Dr Elena Petelos, representing the Netherlands / EU-level perspective, Lecturer in evidence-based medicine and evidence-informed policy, University of Crete, Greece
Professor Daniel Maceira, representing Argentina, Senior researcher, Center for the Study of State and Society (CEDES), Argentina
Laura Bouzas Aviles, BUPA Group, Spain

**SESSION 50**

**Design strategies for infection control**

Chair: Katie Wood, Arup, UK

**11.45** Methods to reduce the impact of aerosol transport in buildings: thoughtful ventilation design to address COVID-19 risks
Chiara Pozzuoli, Regional manager of Europe; Associate, RWDI, Italy
Duncan Phillips, Global practice area leader, building performance, RWDI

**12.00** Shifting boundaries of high-risk infection hotspots: extending adaptability and mitigating infection risk in naturally ventilated COVID-19 wards
Stavroula K Koutroumpi EPSRC PhD researcher, University of Cambridge, UK

**12.15** Evaluation of droplet production by a new design of clinical hand wash basin for the healthcare environment
Samuel Yui, Research scientist, University College London Hospitals, UK

**12.30—13.00** Panel discussion

**SESSION 51**

**Mental health, wellbeing and resilience**

Chair: Coen van den Wijngaart, archipelago, Belgium

**14.30** Back to health: enhancing wellbeing and personal resilience
Brenda M Bush-Moline, Vice-president; Daniel Aizenman, Senior principal, Stantec, USA

**14.45** Biophilic design and environmental psychology: application in healthcare design for improving mental health
Maitê De Souza Pereira, Post graduation student, Architecture for healthcare, Pontifícia Universidade Católica do Rio de Janeiro, Brazil
Mariah Gonçalves Toledo, Architect and urbanist, Brazil

**15.00** Temporary hospitals during COVID-19 emergency in Italy from an architectural and psychological perspective: design strategies, humanisation of healthcare settings and restoration in biophilic environments
Giulia Perugi PhD, Architect, Sapienza University of Rome, Italy
Francesca Di Carmine PhD, Psychologist, Sapienza University of Rome, Italy

**15.15** The influence of design on wellbeing in the Prince and Princess of Wales Hospice
Joanne Kinloch, PhD student, University of Strathclyde, UK

**15.30—16.00** Panel discussion
### DAY 5, STREAM 14: DESIGNING FOR YOUNG AND OLD
18 September 2020 Breakout session (all times are British Summer Time; all sessions streamed exclusively online)

#### SESSION 52
**Designing for older age**
Chair: Suzanne MacCormick, WSP, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00</td>
<td>Optimising aged care environment design evaluation</td>
<td>Lucio Naccarella, Principal research fellow, University of Melbourne, Australia</td>
</tr>
<tr>
<td>09.15</td>
<td>How can we improve hospitals with age-friendly design?</td>
<td>Laia Isern Meix, Architect, Vitaller Arquitectura, Spain</td>
</tr>
</tbody>
</table>
| 09.30 | Museums at the heart of person-centred dementia care: the case of House of Memories | Kerry Wilson, Head of research, Liverpool John Moores University, UK  
Carol Rogers, Executive director, National Museums Liverpool, UK |

**09.45–10.15**  
Panel discussion

**13.00–13.30**  
Innovation showcase – Expo area

#### SESSION 53
**New models of design and evaluation**
Chair: Göran Lindahl, Chalmers University of Technology / CVA, Sweden

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 13.45 | Multigenerational models of mental health design to support normalised living | Mark Carter, Director, Ryder Architecture, UK  
Victor Muniz, Associate, Ryder Architecture, UK |
| 14.00 | Reconciling LEED and salutogenic attributes in residential care environments for the aged: Part II literature review and metric typology | Stephen Verderber, Professor, University of Toronto, Canada  
Terri Peters, Assistant professor, Ryerson University, Canada |
| 14.15 | Design as a factor of behaviour change | Dalia Shilony, Independent interior designer, Israel |

**14.30–15.00**  
Panel discussion

#### SESSION 54
**Designing for women and children**
Chair: Stephanie Williamson, Guy’s and St Thomas’ NHS Foundation Trust, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 15.30 | Redefining paediatric healthcare services in Northern Greece in the context of the Stavros Niarchos Foundation Health Initiative | Moritz Spellenberg, Associate, Llewelyn Davies, UK  
Deirdre Foley Wood, Director, ETL, UK |
| 15.45 | Don’t just design another hospital ward – respectful design for respectful maternity care | Dr Sarah Joyce, ESRC postdoctoral fellow and practising architect, University of Leeds, UK |
| 16.00 | Protecting the most vulnerable: NICU design as a population health imperative | Francesqca Jimenez, Researcher, HDR, USA  
Renae Rich, Research analyst, HDR, USA  
Regina Reynolds, Director of nursing-nursery services, Parkland Health and Hospital System, USA  
Jeri Brittin, Research director, HDR, USA |

**16.15–16.30**  
Panel discussion
## SESSION 58
### Health and Life Sciences Research
#### Lead judge: David Powell, Velindre Cancer Centre; Alder Hey Children’s Hospital, UK
#### Panel judges: Karin Imoberdorf, LEAD Consultants, Switzerland; Tye Farrow, Farrow Partners, Canada

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00</td>
<td>German Cancer Research Centre Heidelberg, Research &amp; Development Centre for Imaging &amp; Radio-oncology, Germany</td>
</tr>
<tr>
<td>14.15</td>
<td>University of Cincinnati Gardner Neuroscience Institute, USA</td>
</tr>
<tr>
<td>14.30</td>
<td>Zayed Centre for Research into Rare Disease in Children, UK</td>
</tr>
</tbody>
</table>

**Panel discussion**

---

## SESSION 59
### Future Healthcare Design
#### Lead judge: Cliff Harvey, Union of International Architects’ Public Health Group, Canada
#### Panel judges: Paul Bell, Ryder, UK; Hank Adams, HDR, USA

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.45</td>
<td>Expansion University Hospital, Germany</td>
</tr>
<tr>
<td>16.00</td>
<td>Redemption Hospital: Caldwell, Liberia</td>
</tr>
</tbody>
</table>

**Panel discussion**

---

## SESSION 60
### Awards ceremony
#### Chair: John Cooper, Programme chair, Architects for Health, UK

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.45</td>
<td>European Healthcare Design Awards 2020 ceremony</td>
</tr>
</tbody>
</table>

Main stage
Virtual Sponsorship package, including virtual exhibition booth: £6000

- Branding on EHD website, event literature and digital newsletters
- Branding on all EHD and SALUS social channels
- Company profile, logo and web/social links in virtual event hub
- Session sponsorship in EHD 2020 or COVID-19 Global Summit programme
- 1-year annual membership of SALUS
- Branding on virtual event lobby carousel
- Live streaming webinar facility
- Pre-recorded promotional video
- Live chat and 1-2-1 video meets
- 8 x full-event 5-day delegate passes (or equivalent 1-day passes)
- Digital briefcase – corporate and product literature
- Qualified audience analytics and lead manager
- Event offer option for delegates

Virtual Exhibitor package: £3500

- Branding on EHD website, event literature and digital newsletters
- Branding on all EHD and SALUS social channels
- Company profile, logo and web/social links in virtual event hub
- Innovation showcase – live streaming webinar facility
- Pre-recorded promotional video
- Live chat and 1-2-1 video meets
- 4 x full-event 5-day delegate passes (or equivalent 1-day passes)
- Digital briefcase – corporate and product literature
- Qualified audience analytics and lead manager
- Event offer option for delegates

ATTENDEE REGISTRATION

Presented in its new virtual format from 14-18 September, the 6th European Healthcare Design 2020 (EHD 2020) Congress and Awards, including the inaugural COVID-19 Global Healthcare Design Summit, is the world’s leading forum for the exchange of knowledge on the relationship between research and health policy and practice within the field of healthcare design.

Congress attendees will develop their knowledge of the political, social, economic and environmental context, 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.

With access to over 200 talks, workshops, poster and award presentations, and more than 25 virtual exhibitions – as well as the ability to create your own personal profile and network via live chat and messaging, and video meetings – attendees will enjoy a unique professional development and networking experience with colleagues in the healthcare design field from all over the world at accessible prices.

A range of ticket types is available, giving attendees from all over the world great value for money. Attendee registration is available at www.europeanhealthcaredesign.eu at the following rates:

**Early bird rates (available until 3 September)**

- UK – 5 days: £195 + VAT
- Rest of the World – 5 days: £195
- UK – 1 day: £75 + VAT
- Rest of the World – 1 day: £75

**Standard rates (available from 4 September)**

- UK – 5 days: £245 + VAT
- Rest of the World – 5 days: £245
- UK – 1 day: £95 + VAT
- Rest of the World – 1 day: £95

- Members of Architects for Health, the Union of International Architects Public Health Group, Australian Health Design Council, New Zealand Health Design Council, and the European Health Property Network are entitled to a 20% discount. Please apply for your discount code at info@europeanhealthcaredesign.eu. Please note that a discount code may only be used once by the same user.

- Please note VAT is not applicable to tickets bought by registrants outside of the UK. UK registrants will be e-mailed a VAT invoice receipt within five days of registration.
THE PROGRAMME COMMITTEE

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

Charlotte Ruben
Partner, White Arkitekter, Sweden

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; International client advisor, UK

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

Christine Chadwick
Consultant, Cannon Design, 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

Diana Anderson MD, MArch, ACHA
Dochtector, Geriatric fellow at UCSF Medical Center, USA

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

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

Davide Ruzzon
Director of TUNED, Lombardini22, Italy

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

Ganesh Suntharalingam MB BChir
President, Intensive Care Society, UK

Ganesh Suntharalingam MB BChir
President, Intensive Care Society, UK

Organising Committee
Christopher Shaw, Chairman, 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
Stephanie Williamson, Director of design and development, Guy’s and St Thomas’ NHS FT
Alessandro Caruso, Director, Design in Mental Health Network
Claudia Bloom, Executive board, Architects for Health

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

SALUS Global Knowledge Exchange
E: info@europeanhealthcaredesign.eu • T: +44 (0)1277 634176

www.europeanhealthcaredesign.eu
For online registration and fees, please visit www.europeanhealthcaredesign.eu

Special early-bird discounts are available until 3 September 2020 for members of Architects for Health

For exhibition and sponsorship enquiries, contact info@europeanhealthcaredesign.eu