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PRELIMINARY PROGRAMME

BLURRING THE BOUNDARIES

DESIGNING PLACE-BASED HEALTH SYSTEMS

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TIMETABLE OF EVENTS

March 2019

Launch of the Preliminary Programme and online registration

11 April 2019

Deadline for early bird/speaker registration, and manuscripts

1 May 2019

Deadline for written papers/manuscripts

Monday 17 June 2019

09.00–18.00: EHD2019 Congress & Exhibition

18.00–20.30 Welcome Drinks Reception

Tuesday 18 June 2019

08.00–18.00: EHD2019 Congress & Exhibition

17.00–18.00 EHD2019 Awards

18.30–22.00: Garden Party

Wednesday 19 June 2019

09.00–19.00: Study visits to UK health facilities
(exact times to be advised)

Cover credits (clockwise from top left):
Psykiatrisygehus i Vejle, Denmark, designed by Arkitema Architects;
Hospital of "Ile de Nantes, France, designed by Art & Build in collaboration with Pargade Architectes, Atelia, Signes Paysage;
Maternity Unit at Kachumbala Health Centre 3, Uganda, designed by HKS Architects and EFOD;
Omagh Hospital and Primary Care Complex, Northern Ireland, designed by Todd Architects with Hall Black Douglas.

BLURRING THE BOUNDARIES
DESIGNING PLACE-BASED HEALTH SYSTEMS

Accessible health systems that provide timely, affordable, high-quality care are a cohesive, binding force. The future promises huge benefits but the intervening journey may test our political, economic and social fabric. Amid such upheaval, can our health systems meet both our current needs and future demands?

Ten years since the global financial crisis, economic and social insecurity remains rife amid a widening gulf in wealth distribution across the world. Consequently, societies are polarising in many countries and established political orders and values are fracturing. Never has it seemed more timely to improve and transform health systems that provide security and underpin economic productivity at the same time as continuing to demonstrate the value of investing in science and technology for the public good.

We're also at the beginning of the fourth industrial revolution, which is blurring the lines between the physical, digital and biological worlds. As advances in AI and personalised medicine create enormous benefits in diagnosis, pharma and treatment, as importantly, we now have the digital capacity to connect and integrate healthcare systems, allowing population and place-based models of care to evolve fully.

Blurring the boundaries

Providing an interdisciplinary global forum for researchers, practitioners and policy advisors, the 5th European Healthcare Design 2019 Congress & Exhibition will be held on 17–19 June, 2019 at the Royal College of Physicians in London, UK. Organised by Architects for Health and SALUS Global Knowledge Exchange, the Congress adopts a whole-system approach to redesigning international health systems, services and infrastructure through the exchange of knowledge, research and best practice.

Globally, the shift towards population- and place-based health systems is gaining momentum. Providers can no longer focus only on treating the sick and infirm in the traditional hospital, but must partner with other sectors, such as housing, transport, urban planning and the workplace to design healthier communities, helping people to stay well by improving opportunities for physical activity, access to nutritious food and social and cultural interaction.

As the boundaries between public health and healthcare blur with personal responsibility and lifestyles, a redefinition of building typologies and reclassification of funding streams is needed to support place-based systems of care. Meanwhile, digital connectivity is changing the traditional patient-physician relationship. How will this and other technologically led advances change our healthcare architecture? The interplay between technological change, clinical advances and patient-centred design and health creates new standards and, potentially, exciting forms for operating rooms, intensive care and emergency units, cancer facilities, and laboratories.

The definition of healthcare architecture is widening; as medicine and social care share space in community settings, so traditional building typologies become redundant. As our high-street shops fall empty, their replacement with innovative social and healthcare centres that also provide wellness-based services, may help sustain town centres. Equally, locating these facilities in places with high footfall such as transport hubs, will create opportunities to join up public health and healthcare services where it is needed, improving access, enabling earlier diagnosis, and creating more efficient care pathways.

The arts also have a role to play in this new blurred world – helping to tackle social isolation, providing cognitive stimulation, reducing stress, and supporting rehabilitation. We can use the fusion of art and digital technology in the real and virtual worlds to improve outcomes and enhance staff and patient experience.

Many healthcare facilities have been limited historically by being single-use developments. As boundaries blur, there are real opportunities for creating sustainable mixed-use communities on green campus sites. These can be concrete expressions of the new taxonomy of healthcare and social architecture, and communicate, in built form, new models for integrated and place-based care.

The design of every building and care system must address the sustainable use of energy, and material and human resources in capital; even more important is a sustainable revenue stream, which should extend to procurement processes and commercial business cases. And, as climate change leads to ever-greater weather extremes, we must develop innovative solutions for designing in imperilled environments. In all senses of the term, we welcome examples of genuine design innovation in sustainable development.

European Healthcare Design 2019 features two days of insightful, provocative and entertaining talks. Each day will open and close with keynote plenary sessions, before splitting into four streams (eight in total). The final session of day two will be devoted to a ceremony to present the European Healthcare Design Awards 2019, followed by the highly popular Garden Party in the Royal College of Physicians' medicinal gardens.

The congress will also host a welcome drinks reception, a poster gallery of innovative research and design projects (pp17–19), an exhibition of the latest design and technology solutions, and study tours of some of the UK's most innovative new health facilities (pp22–23).

JOHN COOPER
EHD2019 Programme
Chair
Architects for Health

MARC SANSOM
Director
SALUS Global Knowledge
Exchange

Organised by:

KEYNOTE SPEAKERS

DR MARK BRITNELL
Global chairman and
senior partner for
healthcare, government
& infrastructure, KPMG
International

GEOFF MULGAN
Chief executive officer,
Nesta

DR DOMINIC KING
Medical director,
Google DeepMind

SIR ANDY HAINES
Professor of Public Health
and Primary Care, London
School of Hygiene & Tropical
Medicine

08.00	REGISTRATION OPENS

SESSION 1
Opening plenary
Chair: Richard Darch, Archus, UK

08.45	**Welcome and introduction** John Cooper, Programme chair, Architects for Health, UK
08.50	**Chair's welcome** Richard Darch, Chief executive, Archus, UK
09.00	**Keynote: Designing the perfect health system: a global perspective** Mark Britnell, Global chairman and senior partner for healthcare, KPMG International, UK
09.30	**Keynote: Transforming healthcare through science, innovation and the arts** Geoff Mulgan, Chief executive officer, Nesta, UK
10.00	**Panel discussion**
10.15–10.45	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 2
Architecture and wellness in the circular economy
Chair: Jeremy Myerson, Royal College of Art, UK

10.45	**Blurring the boundaries – a new generation of NHS buildings** John Cooper, Director, John Cooper Architecture, UK
11.10	**The benefits of the circular economy on health and healthcare** David Cheshire, Director, sustainability, AECOM, UK Sunand Prasad, Senior partner, Penoyre & Prasad, UK
11.35	**The life, death and resurrection of wellness: enriched environments for activated optimal health** Tye Farrow, Senior partner, architecture, Farrow Partners, Canada
12.00	**Panel discussion**
12.30–14.00	**LUNCH, EXHIBITION & POSTER GALLERY**

SESSION 3
Foundations of healthcare design
Chair: Mardelle McCuskey Shepley, Cornell University, USA

14.00	**The role of intuition in evidence-based design** D Kirk Hamilton, Professor of Architecture, Texas A&M University, USA Stefan Lundin, Partner, White Arkitekter, Sweden
14.20	**Research 101: evidence-based design meets design-based evidence** Upali Nanda, Director of research, HKS, USA Evangelia Chrysikou, Lecturer, Bartlett Real Estate Institute, UCL, UK Dan Flower, Director of design, HKS, UK Jane Ho, Director of healthcare, HKS, UK
14.40	**Accelerating collaboration between clinicians and architects to measure and improve healthcare design** Andrew Ibrahim, Chief medical officer and senior principal, HOK, USA
15.00	**Panel discussion**
15.30–16.00	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 4
Beyond the hospital
Chair: Bas Molenaar, Technical University Eindhoven, Netherlands

16.00	**From hospital to health campus** Richard Darch, Chief executive, Archus, UK
16.20	**Place-based access to care and research** James Crispino, Global practice area leader – healthcare, community sector, Gensler, USA Richard Tyson, Intelligent places strategy director, Gensler, USA Louis Shapiro, CEO, Hospital for Special Surgery, USA Chris Smith, CEO, Maplewood Healthcare, USA
16.40	**Panel discussion**

SESSION 5
Keynote plenary
Chair: John Cooper, Architects for Health, UK

17.00	**Keynote: AI and digital innovation in healthcare: challenges and opportunities** Dominic King, Medical director, Google DeepMind, UK
17.45	**Panel discussion**
18.00	**Close**
18.00–20.30	**EXHIBITION, POSTER GALLERY & WELCOME DRINKS RECEPTION**

DAY 1, STREAM 2: PLACE-BASED HEALTHCARE
17 June 2019 Council Chamber

Stream 2 begins at 10.45 in the Council Chamber, after the day's opening plenary session (08.45–10.15).

SESSION 6
Policy and practice of place-based health
Chair: **Sasha Karakusevic,** NHS Horizons, UK

10.45	**Design of place-based health systems – lessons from Scotland** Susan Grant, Principal architect, NHS Health Facilities Scotland, UK Heather Chapple, Design director, Architecture & Design Scotland, UK
11.05	**Health precinct design** Rebecca Moore, Director, Conrad Gargett, Australia
11.25	**Envisioning the future of health networks: hospital as part of a sustainable system** Eva Henrich, Architect, healthcare architecture, Heinle, Wischer und Partner, Germany
11.45	**Designing a global index of future-readiness for healthcare challenges** Gerard Briscoe, Research associate, Helen Hamlyn Centre for Design, Royal College of Art, UK Gail Ramster, Senior research associate, Helen Hamlyn Centre for Design, Royal College of Art, UK
12.05	**Panel discussion**
12.30– 14.00	**LUNCH, EXHIBITION & POSTER GALLERY**
12.40– 13.50	**WORKSHOP: How future-ready is your city to deliver healthcare? The challenges and opportunities** Organised by: **WSP** **Royal College of Art THE HELEN HAMLYN CENTRE FOR DESIGN** **For the full abstract and details of the panel, please go to page 16**

SESSION 7
Designing for whole health models
Chair: **Simon Kydd,** WSP, UK

14.00	**How to develop integrated care** Cressida Toon, Partner, Sonnemann Toon Architects, UK Suzanne MacCormick, Associate director, healthcare advisory, WSP, UK
14.20	**Pioneering the present: learning lessons from Kaiser Permanente** Tony Burley, Managing principal, IBI Group, UK
14.40	**Guidelines for planning and design in a 4D healthcare system** Tina Nolan, Director of healthcare planning, Essentia Trading, UK Regina Kennedy, Associate director, healthcare planning, Essentia Trading, UK
15.00	**Panel discussion**
15.30– 16.00	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 8
Sustainable design in low-resource settings
Chair: **Sylvia Wyatt,** AgeUK IW, UK

16.00	**The parametric hospital: a model for all cases** Patricio Martínez, Partner-director, PMMT, Spain
16.20	**Building resourcefulness: case studies of building health interventions with communities in Peru and Sierra Leone** Mikaela Patrick, Research associate and designer, Helen Hamlyn Centre for Design, Royal College of Art, UK Dr Geordan Shannon, Research fellow, Institute for Global Health, University College London, UK Nicole Minckas, Research Associate Institute for Global Health, University College London Des Tan, Chief technology officer, STEMA, UK
16.40– 17.00	**Panel discussion**

Stream 2 will be brought to a close at 17.00, whereupon delegates are invited to return to the Wolfson Theatre for the day's closing plenary session (17.00–18.00).

Stream 3 begins at 10.45 in the Linacre and Sloane Room, after the day's opening plenary session (08.45–10.15).

SESSION 9
AI and digital innovation
Chair: Andrew Smith, BDP, UK

Time	
10.45	**Utilisation of a centralised customer management solution with AI-based predictive analytics to improve home-care operations in an integrated social and healthcare organisation** Jukka Korpela, Principal, Chainalytics, Finland Krista Korpela, Researcher, LUT University, Finland Toni Suihko, CIO, South Karelia Social and Health Care District, Finland Pentti Itkonen, CEO, South Karelia Social and Health Care District, Finland
11.05	**Rural communities re-imagined with the innovation in modular construction and digital (AI) technologies** Christine Chadwick, National senior director, infrastructure solutions, GEHC, Canada Daniel Zikovitz, Principal solutions architect, GEHC, Canada
11.25	**Artificial intelligence and diagnostic radiology – trend or travesty?** Dan Gibson, Director of health facility planning, MJ Medical, UK Kate Bradley, Senior consultant, MJ Medical, UK
11.45	**Hello Care: autonomous healthcare, home delivery** Greg Mare, Vice-president, healthcare practice leader, Americas, AECOM, USA Dale Sinclair, Director – architecture, technical practice, EMEA, AECOM, UK
12.05	**Panel discussion**
12.30–14.00	**LUNCH, EXHIBITION & POSTER GALLERY**

SESSION 10
Applying technological innovation in practice
Chair: David Martin, Stantec, UK

Time	
14.00	**Personalised healing environment enabled by bricks, bytes and behaviour** Harry van Goor, Professor of Surgery, Department of Surgery and Healthcare, Radboud University Medical Centre, Netherlands Rene Bleeker, Director, healthcare real estate development, Radboud University Medical Centre, Netherlands
14.20	**Humanising experience at the Hepatic ICU (Hospital Clínic of Barcelona): learnings acquired in the first year of service** Clara Rius, Architect and partner, Estudi PSP Arquitectura, Spain Mario Garcia, Biomedical engineer – technology and equipment, Hospital Clínic de Barcelona, Spain Miquel Sanz, Assistant co-ordinator of the intensive care unit, associate professor, University of Barcelona, Institute of Digestive and Metabolic Disease, Hospital Clínic de Barcelona, Spain
14.40	**Implementing a VR platform as an evaluation tool for effective hospital design in Germany** Tatiana Epimakhova, Architect, Heinle, Wischer und Partner, Germany Eva Henrich, Architect, Heinle, Wischer und Partner, Germany
15.00	**Panel discussion**
15.30–16.00	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 11
Data-driven design and planning
Chair: Christine Chadwick, GE Healthcare, Canada

Time	
16.00	**Increasing the pace and accuracy of design by integrating activity data and functional briefing** Conor Ellis, Head of health, partner, Rider Levett Bucknall, UK Georgina Whitman, Senior consultant, Rider Levett Bucknall, UK
16.20	**The integration of BIM data into the management of healthcare infrastructures** Abraham Jimenez, Head of service innovation, Pinearq, Spain
16.40–17.00	**Panel discussion**

Stream 3 will be brought to a close at 17.00, whereupon delegates are invited to return to the Wolfson Theatre for the day's closing plenary session (17.00–18.00).

DAY 1, STREAM 4: ART, DESIGN AND TECHNOLOGY
17 June 2019 Seligman Theatre and Platt Room

Stream 4 begins at 10.45 in the Seligman Theatre and Platt Room, after the day's opening plenary session (08.45–10.15).

SESSION 12
From emergency to theatre: the art of design
Chair: Noemi Bitterman, Technion, Israel

10.45	**Adaptability of an operating theatre suite** Rozalind Murphy, Associate architect, O'Connell Mahon Architects, Ireland
11.05	**Using the arts to reduce anxiety, aggression and violence at St Thomas' new emergency department** Peter Shenai, Creative strategist, Art in Site, UK Louisa Williams, Director, Art in Site, UK Martin Jones, Director, Art in Site, UK Liz O'Sullivan, Arts manager, capital development, Guy's and St Thomas' NHS Foundation Trust, UK
11.25	**Cognitive biophilia: making space for restoration** David Navarrete, Director, research initiatives, Sky Factory, USA Skye Witherspoon, CEO, Sky Factory, USA Bill Thompson, Director, international operations, Sky Factory, USA
11.45	**Models of care: comparative evaluation of ophthalmology outpatient clinic design by digital simulation** Nirit Pilosof, Architect and PhD candidate, Faculty of Architecture and Town Planning, Technion – Israel Institute of Technology, Israel
12.05	**Panel discussion**
12.30–14.00	**LUNCH, EXHIBITION & POSTER GALLERY**
12.40–13.55	**WORKSHOP: Building the Long Term Plan: prevention and wellness, place and community** Organised by: **Sir Robert McALPINE** **For the full abstract and details of the panel, please go to page 16**

SESSION 13
Hospital in the city: design evaluation
Chair: Peter Fröst, Chalmers, Sweden,

14.00	**Putting Cleveland Clinic in place: findings and implications from mixed-methods research for place-based health** Nicholas Watkins PhD, Manager of performance analytics, Gensler Research Institute, Gensler, USA Travis Tyson, Director of architecture and planning, Center for Design, Cleveland Clinic, USA Michelle Gandolf, Director of market research and insights, Cleveland Clinic, USA James Crispino, Global director of healthcare, health and wellness, Gensler, USA Richard Tyson, Intelligent places strategy director, Gensler, USA
14.20	**On-stage vs off-stage design challenges and solutions: a study at the University College London Hospitals NHS Foundation Trust** Keith Millay, Managing director, Steffian Bradley Architects, UK
14.40	**Transition management of combined health services and infrastructural change: lessons learned in a Dutch case upon relocation into a new facility** Liesbeth van Heel, Senior policy advisor and PhD student, Program Integrated Buildings, Erasmus University Medical Center, Netherlands
15.00	**Panel discussion**
15.30–16.00	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 14
Design quality in cancer care
Chair: Karin Imoberdorf, Lead Consultants, Switzerland

16.00	**Quality and design in cancer care: what does good practice look like?** Guy Barlow, Joint managing director, architecture, The Manser Practice, UK Elizabeth Devas, Cancer environments design lead, cancer support operations, Macmillan Cancer Support, UK
16.20	**A therapeutic environment for cancer patients: a case study of the oncology pavilion in Aranda de Duero, Spain** Angela Elisabeth Müller, Consultant and architect, Parra-Müller, Spain Marta Parra Casado, Architect and consultant, Parra-Müller, Spain Juan Manuel Herranz Molina, Architect, Virai Arquitectos, Spain
16.40–17.00	**Panel discussion**

Stream 4 will be brought to a close at 17.00, whereupon delegates are invited to return to the Wolfson Theatre for the day's closing plenary session (17.00–18.00).

08.00	REGISTRATION OPENS

SESSION 15
Opening plenary
Chair: John Cooper, Architects for Health, UK

08.55	**Welcome and introduction** John Cooper, Programme chair, EHD2019, Architects for Health, UK
09.00	**Keynote: The work of the Rockefeller Foundation-Lancet Commission on Planetary Health** Sir Andy Haines, Professor of Public Health and Primary Care, London School of Hygiene & Tropical Medicine, UK
09.30	**Panel discussion: designing for sustainable development and health**
10.15–10.45	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 16
Residential design for health
Chair: Ruzica Bozovic-Stamenovic, National University of Singapore, Singapore

10.45	**Designing healthy multi-generational environments** Paul Bell, Partner, Ryder Architecture, UK
11.05	**Towards healthful, ageing-friendly and enabling design: a multisensorial study of housing neighbourhoods in Singapore** Zdravko Trivic, Assistant professor, Department of Architecture, School of Design and Environment, National University of Singapore, Singapore
11.20	**Reimagining the boundaries – towards integrated and assimilated nursing homes in Singapore** Ruzica Bozovic-Stamenovic, Associate professor, Department of Architecture, School of Design and Environment, National University of Singapore, Singapore
11.35	**Reconciling LEED with salutogenic affordances in long-term care environments for the aged: a call for inclusive assessment metrics** Stephen Verderber, Professor/Architect, John H Daniels Faculty of Architecture, Landscape and Design / Dalla Lana School of Public Health, University of Toronto, Canada Terri Peters, Assistant professor, Architecture, Ryerson University, Canada
11.55	**A final move to your own house** Femke Feenstra, Board architect, Gortemaker Algra Feenstra Architects, Netherlands
12.15	**Panel discussion**
12.30–14.00	**LUNCH, EXHIBITION & POSTER GALLERY**

SESSION 17
Designing for resilience
Chair: Paul Bell, Ryder Architecture, UK

14.00	**Examining the role of the hospital through the dimensions of environmental, economic and social sustainability** David Stavros, Senior design principal, executive vice-president, Asia, Principal architecture, B+H Architects, China Stephanie Costelloe, Director of healthcare, Asia, B+H Architects, Hong Kong
14.20	**Greybase Hospital case study: resilient, multi-use design in one of the most challenging locations on earth** Kris Noiseux, Technical principal, building services, WSP, New Zealand Adam Flowers, Director, CCM Architects, New Zealand Mark Newsome, Facilities development director, West Coast District Health Board NZ, New Zealand
14.40	**Context as a driver for sustainable healthcare design** Ronald Hicks, Principal, national director, health, Australia, HDR, Australia Alessandro Filippi, Director, health, HDR, Australia
15.00	**Panel discussion**
15.30– 16.00	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 18
Place-based health in low-income countries
Chair: Hank Adams, HDR, USA

16.00	**Design 4 Others and Construction for Change – lessons learned from place-based health, education and community building** Jason-Emery Groen, Design director, HDR, Canada Tim Hickory, Director of Operations, Construction for Change, USA
16.20	**Developing an eco-system of place-based healthcare infrastructure in developing markets** Jabulile Nhlapo, Mechanical engineer (associate), property and buildings, Africa, WSP, South Africa
16.40– 17.00	**Panel discussion**

SESSION 19
Closing plenary and awards
Chair: John Cooper, Architects for Health, UK

17.00	**European Healthcare Design Awards 2019** Supported by lead sponsor: IHP Integrated Health Projects by VINCI Sir Robert McAlpine
17.45– 18.00	**Closing address** John Cooper, Programme chair, EHD2019, Architects for Health, UK
18.30– 22.00	**GARDEN PARTY AND LIVE MUSIC** Supported by sponsor: BDP.

DAY 2, STREAM 6: ART, DESIGN AND TECHNOLOGY
18 June 2019 Council Chamber

Stream 6 begins at 10.45 in the Council Chamber, after the day's opening plenary session (08.55–10.15).

SESSION 20
Designing for mental health
Chair: Alex Caruso, ACA+I, UK

10.45	**Design for mental and behavioural health** Mardelle McCuskey Shepley, Professor/Chair, Department of Design & Environmental Analysis, Cornell University, USA Naomi A Sachs, Post-doctoral associate, Department of Design & Environmental Analysis, Cornell University, USA
11.05	**Blurring the boundaries in the built environment to minimise stress and aggression and support healing. Case study: Mental Health Hospital in Vejle, Denmark** Birgitte Gade Ernst, Partner, Arkitema Health, Arkitema Architects, Denmark
11.25	**Cross-border recognition: maintaining dignity and engagement through the design of the psychiatric emergency department** Gavin McLachlan, Senior associate, Montgomery Sisam Architects, Canada
11.45	**Changing the fundamentals of mental health provision in the community by design** Erin Sharp Newton, Project architect, NK Architects, USA Ben P Lee, CFO and principal, NK Architects, USA
12.05	**Panel discussion**
12.30–14.00	**LUNCH, EXHIBITION & POSTER GALLERY**
12.40–13.50	**WORKSHOP: Hospice design for a new era of patient and family needs** Organised by: Ryder **For the full abstract and details of the panel, please go to page 16**

SESSION 21
Designing for children's health
Chair: Stephanie Williamson, GOSH, UK

14.00	**A healing environment maintaining life quality for children with cancer achieved by an interdisciplinary approach** Thomas Bögl, Partner and architect, LIAG Architects, Netherlands
14.20	**A new children's hospital of Helsinki: children's rights in focus** Mikko Sinervo, Architect, Architect Group Reino Koivula, Finland Riitta Pikkuhookana, Interior architect, Master of Culture and Arts (IMIAD), Architect Group Reino Koivula, Finland
14.40	**Engaging waiting spaces – creating opportunities to engage with science at the Zayed Centre for Research into Rare Disease in Children** Helena Copsey, Arts manager, Great Ormond Street Hospital for Children NHS Foundation Trust, UK Eleanor Richardson, Healthcare planner, Great Ormond Street Hospital for Children NHS Foundation Trust, UK Daniel Sutton, Director, Designmap, UK
14.55	**Providing spaces for prayer and reflection in hospitals: what is the right approach?** Crispin Walkling-Lea, Head of healthcare planning, Great Ormond Street Hospital for Children NHS Foundation Trust, UK James Linthicum, Lead chaplain, Great Ormond Street Hospital for Children NHS Foundation Trust, UK
15.10	**Panel discussion**
15.30–16.00	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 22
Designing for cancer care
Chair: Tye Farrow, Farrow Partners, Canada

16.00	**Designing for cancer research: personalised treatment in personalised places** Ged Couser, Principal, architecture, Manchester Studio, BDP, UK
16.20	**Scandion – building architecture, art and high-tech treatment around the patient** Anna Rolf, architect, Link Architecture, Sweden Li Liljeberg, architect, Link Architecture, Sweden
16.40–17.00	**Panel discussion**

Stream 6 will be brought to a close at 17.00, whereupon delegates are invited to return to the Wolfson Theatre for the day's closing plenary session (17.00–17.45).

Stream 7 begins at 10.45 in the Linacre and Sloane Room, after the day's opening plenary session (08.55–10.15).

SESSION 23
The intersection of medicine and architecture
Co-chairs: **Eve A Edelstein,** Clinicians for Design & HxLab Perkins+Will, USA

Emma F Stockton, Great Ormond Street Hospital, UK

09.00– 12.30	**DESIGN WORKSHOP: Designing from the clinician's perspective**

Organised by:

For the full abstract and details of the panel, please go to page 15

10.15– 10.45	**COFFEE, EXHIBITION & POSTER GALLERY**
12.30– 14.00	**LUNCH, EXHIBITION & POSTER GALLERY**

SESSION 24
Engaging the clinician
Chair: **Ganesh Suntharalingam,** Intensive Care Society, UK

14.00	**Physician engagement and perspective in the Lean facility design process** Benjamin Bassin MD, EDAC, Director of critical care operations, associate service chief, Dept of Emergency Medicine, University of Michigan (U-M) Health System, USA Cemal Sozener MD, EDAC, Medical director, Comprehensive Stroke Center; Attending physician, Dept of Emergency Medicine, U-M Health System, USA Diana Anderson MD, March, Internist, fellow, Center for Bioethics, Harvard Medical School, USA
14.20	**Engaging clinicians in the design process through simulation-based mock-up evaluations to support the design of human-centred healthcare environments** Anjali Joseph, Director, Center for Health Facilities Design and Testing, Clemson University, USA Deborah Wingler, Research Assistant Professor, Architecture + Health, Clemson University, USA David Allison, Alumni Distinguished Professor, Architecture + Health, Clemson University, USA
14.40	**Hospital design for older people with cognitive impairments: a review of evidence-based design to support inpatients and accompanying persons** Tom Grey, Research fellow, School of Engineering, TrinityHaus Research Centre, Trinity College Dublin, Ireland Richard Fleming, Executive director, Dementia Training Australia, University of Wollongong, Australia Desmond O'Neill, Consultant physician, geriatric and stroke medicine; professor in medical gerontology, Tallaght University Hospital and Trinity College Dublin, Ireland
15.00	**Panel discussion**
15.30– 16.00	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 25
Designing for translational research
Chair: **Jim Chapman,** Manchester School of Architecture, UK

16.00	**Integrating science and care: empowering patients through translational medicine** David Martin, Vice-president, Stantec, UK
16.20	**Quadram Institute – next generation for food and health research** Nora Claudio Familiar, Senior associate – architecture NBBJ, UK Nick Goodwin, QI programme manager, Quadram Institute
16.40– 17.00	**Panel discussion**

Stream 7 will be brought to a close at 17.00, whereupon delegates are invited to return to the Wolfson Theatre for the day's closing plenary session (17.00–17.45).

Stream 8 begins at 10.45 in the Seligman Theatre and Platt Room, after the day's opening plenary session (08.55–10.15).

SESSION 26
Innovation in commerical design
Chair: Richard Darch, Archus, UK

10.45–12.30	**PLANNING WORKSHOP: Strategically planning successful health infrastructure**

Organised by:

A f H
ARCHITECTS FOR HEALTH

EuHPN | European Health Property Network

For the full abstract and details of the panel, please go to page 15

12.30–14.00	**LUNCH, EXHIBITION & POSTER GALLERY**
12.40–13.55	**DESIGN WORKSHOP: Design solutions for reducing multi-drug resistant healthcare-associated infection**

Organised by:

Armitage Shanks

For the full abstract and details of the panel, please go to page 16

SESSION 27
Strategic finance and capital planning
Chair: Jonathan Puddle, AECOM, UK

14.00	**The king is dead. Long live the king?** Burkhard Musselmann, Architect and managing principal, Stantec, UK Dean Kaardal, Alternative Project Delivery sector lead, Stantec, Canada Joel Martineau, Digital practice – business analyst, Stantec, UK
14:20	**The adaptable estate** Rupert Corbett, Operations director, Essentia Estates Development Team, Guy's & St Thomas' NHS Foundation Trust, UK Peter Ward, Director of healthcare, real estate development, Essentia, Guy's & St Thomas' NHS Foundation Trust, UK
14:40	**Transforming healthcare: form follows finance** Rhonda Kerr, Health facilities planner, Hames Sharley Architects; PhD candidate, Health Economics, Curtin University, Western Australia; Director, GENI (Guidelines and Economists Network International), Australia
15.30–16.00	**COFFEE, EXHIBITION & POSTER GALLERY**

SESSION 28
The business case for flexibility
Chair: Jonathan Erskine, European Health Property Network, UK

16.00	**FleXX** Upali Nanda, Director of research, HKS, USA Michelle Ossmann, Director of healthcare, Steelcase, USA
16.20	**Collaborative approach to healthcare design** Martina Cardi, Associate architect, Bryden Wood, UK Fiona Costello, Strategic projects manager, Circle Health, UK Paul O'Neill, Director, Bryden Wood, UK
16.40–17.00	**Panel discussion**

Stream 8 will be brought to a close at 17.00, whereupon delegates are invited to return to the Wolfson Theatre for the day's closing plenary session (17.00–17.45).

DESIGN AND PLANNING WORKSHOPS

18 JUNE, SESSION 23

09.00–12.30	**Designing from a clinician's perspective** Room: Linacre and Sloane Room

Organised by:

While clinicians are often involved in elements of the design process, how much do they understand about the overall process and their ability to influence it? The impact of hospital design on clinical staff has an influence on patient outcomes, but this often escapes evaluation until post-occupancy.

International network Clinicians for Design has been gathering insights from specialists representing anaesthesia, radiology, cardiology, neurosurgery, infection control and other settings. Studies demonstrate new methods to map the distribution of clinical equipment sounds, which may interfere with speech intelligibility and increase the risk of medication error. The findings also reveal that some design conditions – including module layout, circulation and room design – can not only impede staff's ability to perform but may also influence clinician health, wellbeing and burnout. Proposed methods for the integration of clinical-design champions to new solutions that enhance the quality of care by design will be discussed.

In the UK, a recent study identified concerns with the understanding and expectations placed on clinicians during the design process. This identified that while clinicians are frequently asked for input into projects, they often lack understanding of the process and are unable to become fully engaged in the interdisciplinary design of clinical services and environments. The study led to development of a course called 'Building blocks for clinicians', aimed at assisting clinicians in understanding the NHS project and design processes, and empowering them to maximise their input.

This workshop and panel session, organised by Clinicians for Design in collaboration with Building Blocks for Clinicians, will explore the challenges clinicians face across multiple specialisms and in different countries. Participants will develop an understanding of the complexities of designing clinical services and environments, and appreciate the clinician's importance in contributing to a fully interdisciplinary design process.

Panel: Eve A Edelstein, Clinicians for Design & HxLab Perkins+Will, USA

Emma F Stockton, Great Ormond Street Hospital, UK

Diana Anderson, Steffian Bradley Architects, USA

Elizabeth Whelan, University of Greenwich, UK

Jennifer Whinnett, Essentia, UK

Kate Bradley, MJ Medical, UK

18 JUNE, SESSION 26

10.45–12.30	**Strategically planning successful health infrastructure** Room: Seligman Theatre and Platt Room

Organised by:

As health systems shift towards a population health-based model and become more accountable to outcomes within an evermore restrained financial climate, the commissioning, planning, procuring, building and operating of healthcare facilities are becoming increasingly complex and risky.

In the UK, navigating the funding, policy and planning challenges of transforming the healthcare estate, through implementation of the Naylor Review and sustainability and transformation plans, are not only a significant national test but also reflect some of the universal health issues faced around the world. These include:

- power, decision-making and effective project governance structures;
- planning to get the best from your estate assets;
- advice on working with the wider health economy;
- selecting the right consultants and advisors;
- navigating through project turbulence; and
- commissioning and transition to a successful operating environment.

This session will take a practical look at the some of the key challenges in strategic planning in the UK's NHS to provide a sound project platform, and the tactics needed to deliver capital investment in a changing context, while inviting international exchange on common issues and shared problems.

Panel: John Cole, Independent client advisor, UK

David Powell, Alder Hey Children's Hospital, UK

Marte Lauvsnes, Sykehusbygg, Norway

Matt Tulley, Great Ormond Street Hospital for Children, UK

Susan Grant, NHS National Services Scotland, UK

John Cooper, Architects for Health, UK

DESIGN AND PLANNING LUNCHTIME WORKSHOPS

17 JUNE

12.40–13.55	**How future-ready is your city to deliver healthcare? The challenges and opportunities** Room: Council Chamber	Organised by: WSP

Factors such as climate change, population growth and urban migration are placing ever-greater stresses on health systems around the world, while science, technology and innovation create exciting new opportunities. With over half the world's population now living in urban spaces and forecasted to be nearly 70 per cent by 2050, cities are the new frontline in the provision of healthcare that is equitable, accessible, effective, affordable and qualitative. WSP and the Helen Hamlyn Centre for Design, Royal College of Art, in collaboration with SALUS Global Knowledge Exchange, have designed a global index to compare the response and preparedness of cities to meet health challenges, focusing on their future readiness to meet the emerging healthcare needs of their populations – identifying emerging trends concerning priority issues such as ageing populations, technological advancement, risk of pandemics and climate change. It therefore seeks to encourage change in healthcare provision to ensure it meets the needs of communities.

Following successful workshops at the European Healthcare Design and Healthy City Design Congresses in 2018, conducted to support the design development of the Index, the project is nearing completion. Nevertheless, in a rapidly changing social, economic, political environment, the dialogue continues and the way cities and healthcare providers jointly plan and prepare for changes in system design, service delivery, technology and infrastructure needs must respond.

Panel: Nolan Rome, WSP, USA | Prof Jeremy Myerson, RCA, UK | Gerard Briscoe, RCA, UK | Simon Kydd, WSP, UK

12.40–13.55	**Building the Long Term Plan: prevention and wellness, place and community** Room: Platt Room	Organised by: Sir Robert McALPINE

The newly published NHS Long Term Plan aims to "finally dissolve the historic divide between primary and community health services". Over the next ten years, policy will intensify the strategic focus on personalised care, prevention and the mainstream adoption of digitally enabled services.

To date, models of community care have been evolving around two key ideas:

- integrated care – dissolving the traditional boundaries between health, mental health and social care, and providing these under one roof where possible; and
- place-based care – co-locating clusters of relevant services within specific communities.

These models have spawned new building typologies that aim to harness principles of health and wellness within shared flexible space to promote multi-agency collaboration and improved space utilisation.

This interactive workshop will explore the extent to which community-based assets can help dissolve the barriers to truly integrated care, while also considering the challenges. We will encourage participants to consider how the built environment and integrated technology can drive new community-centric innovative service models, supported by experiences and lessons from diverse exemplar projects and programmes.

18 JUNE

12.40–13.55	**Hospice design for a new era of patient and family needs** Room: Council Chamber	Organised by: Ryder

The future of palliative care faces a new era of challenges, including ageing population, multi morbidity, fluctuating trajectories, and treatment later into the course of illness.

How can we ensure palliative care continues to enable people to live well, alongside providing end-of-life care against an uncertain backdrop? Through exploratory research across Europe and a collaborative approach to palliative care design, the Prince & Princess of Wales Hospice (PPWH) in Scotland has realised a world-class facility to deliver 21st-century hospice care. The PPWH has taken this major step forward through a pioneering approach to the intersection of palliative care and architecture.

This interactive workshop will introduce short presentations from leading palliative research, design and client perspectives, followed by discussion and engagement with the panel exploring a wide range of influencing factors, such as models of care, key design lessons, technologies, as well as clinical and academic integration.

Panel: Alastair Forbes, Ryder, UK | Rhona Ballie, CEO, Prince & Princess of Wales Hospice, UK | Ivor Williams, Institute of Global Health Innovation, UK | Marte Lauvsnes, Sykehusbygg, Norway

12.40–13.55	**Design solutions for reducing multi-drug resistant healthcare-associated infection** Room: Platt Room	Organised by: Armitage Shanks

Healthcare-associated infections are the most frequent adverse event in healthcare delivery worldwide, with the prevalence of hospital-acquired infection (HAI) in developed countries varying from 3.5 to 12 per cent. As multi-drug resistant (MDR) bacteria become an ever-greater global threat to human health, the World Health Organisation (WHO) has developed an action plan with a number of strategic objectives, one of which is to reduce the incidence of infection through effective sanitation, hygiene and infection-prevention measures.

This workshop will explore the potential to reduce the incidence of healthcare-associated infections through the application of technological solutions and several design concepts. Examples of in situ designs that are capable of allowing spread of MDR bacteria (even though they comply with healthcare guidelines) will also be discussed, with consideration given to the role of human factors, from installation through to final use.

WHO requires that better sanitation, hand washing, and food and water safety must be core components of infectious disease prevention. Many MDR bacteria are harboured in hospital drainage systems, potentially compromising these activities. This may occur due to incorrect specification and/or installation of clinical sanitaryware, or poor workflow design. Consideration will also be given to: ergonomics around the correct disposal of patient fluid; keeping water clean by easy and effective cleaning of tap components; activity space and minimising splashing from wash hand basins; and fixtures and fittings that can inhibit the growth of harmful bacteria.

Panel: Elise Maynard, Elise Maynard Associates / Water Safety Forum, UK | Noemi Bitterman, Technion University, Israel | Tony Rheinberg, Armitage Shanks, UK

POSTER PRESENTATIONS

P01 **Supporting the design of place-based initiatives and systems of care within aged-care workspace environments using principles-focused evaluations**
Lucio Naccarella (Australia)

P02 **Integration of clinical service is not enough**
Calum MacCalman (UK)

P03 **Safety at home – an integrated approach between wellbeing and safety**
Heidi Huuskonen (Finland),
Jouni Koivuniemi (Finland),
Kristiina Kapulainen (Finland),
Pentti Itkonen (Finland)

P04 **Realised community health by embracing the care continuum**
Brenda Bush-Moline (USA)

P05 **The unlikely and rewarding partnership between design and transition**
Alice Wainwright (USA), Velma Jackman (USA),
Jim Curran (USA)

P06 **Exploring a health-led approach to infrastructure and place-based investment**
Paul Simkins (UK)

P07 **How will healthcare design in China be impacted by social and health policies, and demographic and population health trends?**
Sophie Crocker (UK), Upali Nanda (USA)

P08 **Attention! The link between aesthetic features of the built environment and their restorative properties**
Richard Jedon (Czech Republic),
Nour Tawil (Lebanon)

P09 **Visualising a global index of future-readiness for healthcare challenges**
Gerard Briscoe (UK), Gail Ramster (UK),
Nicola Evans (UK)

P10 **Enabling transformative health and social care delivery models through high-quality design**
Jonathan Turner (UK), Nicola Clemo (UK)

P11 **Lessons from a new paradigm of designing with community, for community**
Tama Duffy Day (USA), Michael Crawford (USA)

P12 **The co-working wellness hub – a comprehensive functional model to reconnect, regenerate, recreate and remember**
Maria Romeea Ionescu (Singapore)

P13 **The evolving role of the hospital as a community anchor and social activator**
Chris McQuillan (Canada)

P14 **Integrating health and social care for the elderly**
Paul Yeomans (UK)

P15 **Joining the dots – addressing inequity with unequal care in the first 1000 days**
Dr Nick Baker (New Zealand)

P16 **Engagement, placemaking, stewardship: a three-pronged approach to shaping healthy future places**
Simon Boundy (UK), Christine Fatania (UK),
Ian Tipton (UK)

P17 **Our changing communities – designing for integrated healthcare**
Suzanne MacCormick (UK)

P18 **Socio-spatial dynamics in psychiatric wards: small-scale institutions in the community**
Dr Evangelia Chrysikou (UK)

P19 **Carrefour santé d'Orléans – a gathering place for health**
Jason-Emery Groen (Canada),
Mélanie Potvin-Simon (Canada)

P20 **Designing accessible and affordable place-based healthcare in the US**
Erin Sharp Newton (USA), Ben P Lee (USA)

P21 **Should healthcare planning be accredited as a standalone profession?**
Paul Sheldon (UK)

P22 **Comparison of two evidence-based and salutogenic methods in architectural design of healthcare spaces**
Mohammad Anvar Adibhesami (Iran),
Ahmad Ekhlassi (Iran),
Ali Mohammad Mosadeghrad (Iran),
Arezoo Zianali (Iran)

P23 **Variations in hospitalised mothers' point of views in maternity wards regarding optimised design factors**
Mehrasa Pourfalah (Iran), Sanaz Litkouhi (Iran),
Ahmad Ekhlassi (Iran)

P24 **Room with a view: how staff engagement led to a shared vision of the future**
Gabryela Feldman (USA), Lisa Dutterer (USA),
Helene Burns (USA), Mark Palmer (USA)

P25 **Medical architecture innovation: an evidence-based healthcare design moved to homes for management of long-term chronic inflammatory conditions**
Eva Hernández-García (Spain)

P26 **Childbirth environment and health: improving spaces in maternity care**
Nicoletta Setola (Italy), Eletta Naldi (Italy),
Grazia Giulia Cocina (Italy), Alessia Macchi (Italy)

POSTER PRESENTATIONS

P27 **Improving architecture in maternity care: the cases of Reggio Emilia and Grosseto Birth Centers**

Nicoletta Setola (Italy), Eletta Naldi (Italy), Alessia Macchi (Italy), Elena Bellini (Italy)

P28 **Building blocks for clinicians**

Kate Bradley (UK), Emma Stockton (UK), Elizabeth Whelan (UK), Jennifer Whinnett (UK)

P29 **How are existing outpatient waiting areas in China used, occupied and functioning? A pilot study**

Sophie Crocker (UK), Upali Nanda (USA)

P30 **Wellbeing in crisis: patient-centred journey for mental health patients in the emergency department**

William Pang Chuan Wang (UK), Barbara Cleaver (UK), Vincent Law (UK)

P31 **How architectural elements can influence subjective experience and emotional state of patients and therefore facilitate the healing process**

Nour Tawil (Lebanon), Richard Jedon (Czech Republic)

P32 **Pharmacogenetics: the patient-centric approach to situated and locationless medicine**

Emma Smyth (UK)

P33 **More storage and better snacks – have we reached peak stakeholder engagement in health facility planning?**

Tina Nolan (UK)

P34 **Multi-drug resistant pathogens in water systems – key risks and mitigation by design**

Elise Maynard (UK)

P35 **Design solutions for reducing healthcare-associated infections in healthcare facilities**

Noemi Bitterman (Israel)

P36 **Blurring the boundaries between medicine and research**

Graham Cossons (UK), Matthew Tulley (UK)

P37 **How digital and medical technology convergence is transforming health of developing countries**

Gary Hamilton (USA)

P38 **The digital divide: examining the use and access to e-health based technologies by millennials and older adults**

Delana Theiventhiran (Canada), Wally J Bartfay (Canada)

P39 **Designing surgical environments**

Hina Lad (UK)

P40 **Creating a second nurse – how can a truly smart hospital empower patients?**

Matthew Marson (UK)

P41 **Patient-centred materials selection for healthcare design**

Sarah Wilkes (UK)

P42 **The healthcare delivery in the 21st century and integration with the built environment**

David Pitman (UK)

P43 **Data-driven design / expanding the boundaries in validating and communicating complex design challenges**

Michael König (Germany)

P44 **Systems transcend place, people live it**

Tina Nolan (UK), John Kelly (UK), Regina Kennedy (UK)

P45 **Healthcare at home: designing for flexibility**

Mohammed Ul-Haq (UK), Neil Orpwood (UK)

P46 **Opportunity for improvement with BIM and Lean methodology in the Santa Caterina Hospital extension**

Laia Isern Meix (Spain), Albert Vitaller i Santiró (Spain), Eva Roense (Spain)

P47 **Strategic operations – doing more with less**

Karen Bullivant (UK), Sarah Holton (USA)

P48 **Healthcare delivery in the 21st century and integration with the built environment**

Vivienne Reiss (UK), Hannes Koch (UK), Mark Titchner (UK)

P49 **Healthcare logistics and its role in the design of effective and efficient hospitals**

Nina Modig (Sweden), Göran Lindahl (Sweden)

P50 **Risk management in NHS healthcare infrastructure projects**

Songyang Li (UK), Andrew Price (UK), Mohamed Osmani (UK)

P51 **Temporary beauty? Modular prefabrication – the quick fix and the long goodbye**

Kelsey Price (UK), Nathaniel Hobbs (UK), John Kelly (UK)

P52 **When does a chapel stop being a chapel? Celebrating the past and embracing the future during the redevelopment of the Royal Sussex County Hospital**

Anna Barnes (UK), Samantha Sharman (UK)

P53 **Building performance for people**

Eszter Gulacsy (UK), Michelle O'Neill (UK)

P54 **Design tools for social sustainability in Indian hospitals – a transdisciplinary approach**

P Meenakumari (India)

P55 **Resilience down under**

Darryl Haines (New Zealand), Darryl Carey (New Zealand)

THE PROGRAMME COMMITTEE

Emma Stockton, Consultant paediatric anaesthetist, Great Ormond Street Hospital for Children, UK
Emma is a consultant paediatric anaesthetist at Great Ormond Street Hospital. Her clinical interests include anaesthesia for cardio-thoracic surgery and interventional radiology. In 2016, she completed a Master in Planning Buildings for Health, identifying a lack of understanding of the building process as a barrier to clinical engagement.

Charlotte Ruben, Partner, White Arkitekter, Sweden
Charlotte began her career as an urban designer but has since specialised in healthcare design. Social commitment, wisdom and beauty are all drivers in her approach. As one of the lead architects behind the New Karolinska University Hospital, her team has attracted international acclaim and recognition for innovation.

Ganesh Suntharalingam MB BChir Medicine, President, Intensive Care Society, UK
Ganesh is an intensive care consultant with a specialist interest in leadership, service design and development. He is also president of the Intensive Care Society. Within his NHS trust he has been a design champion and design quality chair for a new-build PFI.

Organising Committee

Christopher Shaw,
Chairman, Architects for Health

Jonathan Erskine,
Director, European Health Property Network

Jim Chapman,
Visiting professor, Manchester School of Architecture

Stephanie Williamson,
Deputy director of development, Great Ormond Street Hospital for Children NHS Foundation Trust

Alessandro Caruso,
Director, Design in Mental Health Network

Claudia Bloom,
Executive board, Architects for Health

Peter Fröst, Professor in healthcare architecure, Chalmers University of Technology, Sweden
Peter has 30 years' experience as a practising architect. In 2010, he started up the Centre for Healthcare Architecture at Chalmers University of Technology in Sweden. As director of the Centre, he is responsible for extensive collaboration with its partners and funders.

Christine Chadwick, National senior director, infrastructure solutions, GE Healthcare, Canada
Christine has 25 years' experience in health services planning globally, with a specialty in oncology planning. She has worked on transformational projects, delivering ROI/feasability studies, functional programming, design, technology planning, procurement, and operations.

Diana Anderson MD, MArch, Dochitect; Principal and medical planner, Steffian Bradley Architects, USA
Diana is a board-certified healthcare architect with the American College of Healthcare Architects (ACHA) and a board-certified physician through the American Board of Internal Medicine (ABIM). Diana is also co-founder of Clinicians for Design.

Sylvia Wyatt MA AHSM, Advisor, AgeUK IW, UK
Sylvia is an advisor to AgeUK Isle of Wight and is a governor of University Hospital Southampton NHS FT, having previously set up and run the NHS Confederation's Future Health Care Network. She also worked for the Scottish Government, on shifting health and care towards early intervention and prevention.

Bas Molenaar, Emeritus professor, Technical University Eindhoven, Netherlands
Emeritus professor Bas Molenaar has taught Healthcare Architecture at Technical University Eindhoven for the past seven years. With his practice, EGM architects, he designed the OLVG in Amsterdam and the Tony Moleapaza Children's Hospital in Arequipa, Peru.

Karin Imoberdorf, architect, LEAD Consultants, Switzerland
Karin is a partner with Lead Consultants and the official representative for Switzerland in the Union of International Architects' Public Health Group. She also leads the interdisciplinary Master in Public Health course at the universities of Basel and Bern.

Prof Noemi Bitterman PhD, Academic director, Master in Industrial Design, Technion, Israel
Prof Noemi Bitterman is the founder and chair of Master in Industrial Design with a focus on medical and social design at the Technion, Israel. Her academic background includes a PhD in Medical Sciences and an MSc in Industrial Design, including a post-doctoral fellowship at the University of Pennsylvania, USA.

Marte Lauvsnes, Project and development hospital planning manager, Sykehusbygg, Norway
A trained intensive-care nurse, Marte is project and development hospital planning manager for Sykehusbygg, the Norwegian Hospital Construction Agency. Previously, she was hospital planner and research manager for the hospital planner group in SINTEF Health Research.

Sasha Karakusevic, Project director, NHS Horizons, UK
Sasha has worked in system design for more than 25 years and enjoyed a long period in Torbay and South Devon developing integrated care. He now works with NHS Horizons to support large-scale transformation in the health sector. He is interested in using design as a tool for organisational development and transformation.

John Cooper BA, Dip Arch Cantab ARB RIBA, Director, John Cooper Architecture (JCA), UK
John has been a principal in practice for 36 years. Having co-founded Avanti Architects in 1981, he set up JCA in 2009 and the practice has since designed hospitals in the UK, Ireland, South Africa, Iceland and Australia. He was chair of Architects for Health from 2009 to 2014.

John Cole CBE, Honorary professor, Queen's University Belfast, UK
John is honorary professor at the School of Planning, Architecture and Civil Engineering, Queen's University Belfast. Also a procurement champion for RIBA, he was previously deputy secretary at the Department of Health, Social Services and Public Safety in Northern Ireland.

Dr Evangelia Chrysikou DiplArch, MA MARU, PhD, Assistant professor and programme director, Bartlett Real Estate Institute, UK
Evangelia is a medical architect with a PhD in mental health and a former Marie Curie H2020 fellow. She is a co-ordinator of the D4 Action Group, European Innovation Partnership on Active and Healthy Ageing, European Commission.

VENUE & HOTEL ACCOMMODATION

THE VENUE: A MODERNIST MASTERPIECE

Founded in 1518, the Royal College of Physician's current headquarters is a Grade 1 listed building in Regent's Park, designed by architect Sir Denys Lasdun and opened in 1964. Considered a modernist masterpiece, it's one of London's most important post-war buildings In 1992, Sir Lasdun was awarded the Royal Institute of British Architects' Trustee Medal in recognition of his work at the RCP, considered to be "the best architecture of its time anywhere in the world".

Sir Lasdun won the competition to design the new headquarters in 1959. He was surprised at being asked to design for such a traditional body, given his modernist philosophy, and he made it clear that he would not create a classical-style building. Ultimately, he responded to the challenge with a skilful integration of centuries-old traditions and his own modernist vision. As an award-winning and highly versatile venue for conferences, meetings, banquets, training and outdoor events, the building has an atmosphere of space and light, with contemporary architecture and a selection of both old and new styles.

DISCOUNTED ROOM RATES FOR DELEGATES

The Melia White House Hotel remains a prime example of late 1930s architecture, offering an eclectic style where contemporary and classic design meet.

This four-star hotel has 581 rooms, 112 apartments, nine meeting rooms, two restaurants and a bar with a terrace, a fitness centre, and an executive lounge. The hotel benefits from a prime London location in Regent's Park, within close proximity of the city's main attractions and a few minutes' walk from the conference venue. The hotel is served by three underground stations – Warren Street, Great Portland Street and Regent's Park – and main train stations including King's Cross St Pancras and Euston Station.

• Room types available at the Melia White House hotel include: Classic Single room with breakfast; Classic King room with breakfast and Executive room with breakfast. Executive includes executive lounge access. Special conference rates will be available at www.europeanhealthcaredesign.eu shortly.
On receipt of your registration, a website link and code will be provided to enable you to book your accommodation at the above rates.

STUDY TOURS

Participants in the European Healthcare Design 2019 Congress will get the opportunity to join three unique study tours featuring some of the UK's latest benchmark healthcare projects and architectural landmarks. Places on each tour are limited, so please register early to avoid disappointment.

STUDY TOUR 1: LONDON (Maximum 24 participants)

University College London Hospitals (UCLH) (pictured top and centre left)

Delegates will hear presentations on the key learnings of innovative design and construction techniques applied to the 34,600m2 UCLH PBT (Proton Beam Therapy) Centre and Phase 4 Hospital. A tour of the facility, currently under construction by Bouygues UK, will follow. The centre has been designed by Scott Tallon Walker as architects, CampbellReith as structural engineers, and Arup as MEP engineers.

The cyclotron to produce the beam, and the gantries to deliver it to patients, commenced installation in June 2018, with completion of the facility expected in 2020. This is one of only two NHS sites in the UK that will be offering this specialist radiotherapy for cancer patients, and it's thought to be only the second PBT centre in the world to be constructed underground with facilities above.

Located above the underground PBT centre will be a modern, purpose-built inpatient facility, which will include up to 135 inpatient beds for specialist care, as well as a complementary short-stay surgical centre. Imaging facilities and appropriate critical care support functions will also be available on site.

Chase Farm Hospital, redevelopment (pictured bottom left)

The £130m redevelopment of Chase Farm Hospital is said to be the largest projects delivered under the ProCure21+ national framework. The project was commissioned in 2014, shortly after the merger of the Royal Free London NHS Foundation Trust with Barnet and Chase Farm Hospitals NHS Trust, and completed in 2018.

Providing 23,000m^2 of new build delivered on a live hospital campus, this development replaces the outdated campus, much of which dated from Victorian times. The new design responds to campus sprawl through simplified, clear wayfinding. Landscaping forms part of the healing process with links to therapeutic gardens, sensory planting, natural sustainable urban drainage systems (SUDS), and green roofs.

Varying in height from two to five storeys, entry is via both ends of an airy double-height concourse, while the traditional reception is replaced by mobile help points. The outpatient department is broken into clusters to form a village with double-height waiting zones and countryside views. Each waiting zone has stairs to the first-floor outpatient departments, then on up to second-floor theatres and third-floor wards.

The design creates a series of small-scale finger blocks of two and three storeys, creating a scale that reflects the residential development.

STUDY TOUR 2: LONDON & READING (Maximum 25 participants)

Royal National Orthopaedic Hospital NHS Trust (pictured top left)

The RNOH is the UK's largest specialist orthopaedic hospital and part of the Royal National Orthopaedic Hospital NHS Trust. The trust has embarked on a programme to redevelop the entire Stanmore site over 12 phases, concentrating development in a central part of the site. The first phase saw the opening of The Stanmore Building (TSB) in December 2018, allowing patients to receive specialist orthopaedic care in a state-of-the-art and fit-for-purpose setting. The TSB is a 119-bed inpatient facility over four floors, accommodating: children and young people; adult acute (over two floors); and private care – with three therapy gyms embedded into the wards.

Architects BDP, along with Balfour Beatty, have delivered an HBN-compliant building that meets the RNOH's vision. Updated technology includes the introduction of a new nurse-call system, vocera, as well as Pepper the Robot. Funded by the trust's charity, the artwork installed throughout creates an inspiring, welcoming environment.

The Rutherford Cancer Centre, Thames Valley (pictured top right)

Rutherford Estates

The Rutherford Cancer Centre, Thames Valley provides the South East of the UK with its first high-energy proton beam healthcare facility. It was delivered by its sister firm, Rutherford Estates, and funded by the group company Proton Partners International.

The £38m centre, which opened in September 2018, offers CT, MRI, infusion therapy, high-precision radiotherapy, and proton beam therapy, featuring technology from Ion Beam Applications (IBA), Elekta and Philips. The IBA Proteus One is currently being commissioned to commence proton beam therapy this autumn. Internally, the experience is more akin to a health spa than a medical institution, carefully designed to make people feel relaxed. The configurations of the internal layouts were developed with clinical staff and equipment providers.

The two-storey scheme was delivered with design partners JDDK Architects, Desco MEP Engineering, Fairhurst structural, civil and planning engineers, and landscape designer Oobe. The main contractor was Graham Construction working with Pravida Bau, a specialist Bavarian construction firm, which created the radiation vaults. Veritas delivered the Linear Accelerator rooms with Smartvue windows to allow natural light into the vaults.

STUDY TOUR 3: CAMBRIDGE (Maximum 25 participants)

Royal Papworth Hospital, Cambridge (pictured top left)

Designed by HOK, the new Royal Papworth Hospital is a state-of-the-art cardiothoracic facility on the Cambridge Biomedical Campus. The holistic design concept embraces the NHS Foundation Trust's ambition to thrive as a centre of excellence in cardiothoracic services for the East of England.

The new 310-bed hospital is in a beautiful park-like setting, and will provide a comfortable, easy-to-navigate environment. Meeting places for patients, family and staff in the main atrium, gardens and restaurant will enhance communication and collaboration across the campus.

The hospital layout creates separate zones for outpatient care, emergency services, and diagnostic and treatment functions. Each inpatient floor incorporates two nursing units. An elliptical double-corridor design results in a compact, accessible layout.

Abcam, Cambridge Biomedical Campus (pictured top left)

Abcam's new state-of-the-art global headquarters is located on the Cambridge Biomedical Campus (CBC), a leading hub of healthcare, science and medical research. Designed by NBBJ, the new 100,000 sq ft life sciences laboratory and office facility forms part of the second phase of CBC's new global healthcare village.

The new building, which is now home to over 450 Abcam staff, including R&D, laboratory, logistics, corporate and commercial departments, provides 75% more space, features fully flexible laboratory configurations, and has new instrumentation and technology for enhanced scientific capabilities. It has also been designed to support agile working and provide introvert and extrovert workspaces. In addition, the building has been developed to meet global sustainability standards, enhance employee wellbeing and help protect natural resources in the environment. The campus' natural biodiversity is enhanced through indigenous planting, bird boxes, and landscape rainwater management using bioswales.

Agendas for study tours may be subject to change, owing to issues beyond the organisers' control. For the most up-to-date information, please visit www.europeanhealthcaredesign.eu

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