# ROYAL COLLEGE OF PHYSICIANS LONDON 10-12 JUNE 2024 EUROPEAN **HEALTHCARE DESIGN**

**RESEARCH • POLICY • PRACTICE** 

# **PRELIMINARY PROGRAMME** NATURAL INTELLIGENCE

**CREATING SELF-LEARNING HEALTH SYSTEMS** 

**Register at** europeanhealthcaredesign.eu | info@europeanhealthcaredesign.eu @EHDCongress #EHD2024

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## TIMETABLE OF EVENTS

#### 14 March 2024

Launch of the Preliminary Programme and online registration

### 25 April 2024

Deadline for early-bird and speaker registration

#### **18 May 2024** Deadline for written papers/manuscripts

#### Monday 10 June 2024

08.00–18.00: EHD2024 Congress & Exhibition 18.00–20.30 Welcome Drinks Reception

#### Tuesday 11 June 2024

07.30–17.00: EHD2024 Congress & Exhibition 17.00–18.00 EHD2024 Awards 18.30–22.00: Garden Party

#### Wednesday 12 June 2024

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

Cover credits (clockwise from top left): Clock View Hospital, UK, designed by Medical Architecture; Campbelltown Hospital Redevelopment, Australia, designed by Billard Leece Partnership; Cleveland Clinic London, UK, designed by PLP Architecture with HKS, built by Sir Robert McAlpine; Radboudumc Main Building, Netherlands, designed by EGM architects

Page 2-3 credits (left to right): Dumfries and Galloway Royal Infirmary, UK, designed by Ryder Architecture and NBBJ; The Pears Building, Institute of Immunity and Transplantation, UK, designed by Hopkins Architects

Back cover credits (left to right): Radboudumc Main Building, Netherlands, designed by EGM architects; Cleveland Clinic London, UK, designed by PLP Architecture with HKS, built by Sir Robert McAlpine

# **NATURAL INTELLIGENCE** CREATING SELF-LEARNING HEALTH SYSTEMS



Faced with the challenges of implementing climate-smart healthcare systems, delivering new service and asset models that strengthen resilience, and creating humanistic environments that promote wellbeing, how do we create self-learning health systems?

The most successful organisations also tend to be the best at learning. They are able to build collective intelligence, continuously refresh it, and make it readily accessible. Ideally, every action adds to existing pools of knowledge and skills, and learning becomes embedded in ways of thinking and doing. Conversely, we know that institutional amnesia is wasteful and costly, leading to unnecessary re-invention and repetition of past mistakes.

Celebrating a decade at the vanguard of professional development and bridging the gap between research, policy and practice, the 10th European Healthcare Design Congress will once again welcome the healthcare design community to gather, share insights and learn from one another: learning from practice, from history, from experiments, from accidents, from success – and perhaps, most importantly, from failure.

At a time when everyone is talking about the need for system change, yet few are able to articulate the path to realising it, our proposition is that when real learning is embedded, systems naturally change for the better. Therefore, we invite stories of learning in healthcare, with examples of all scale and type, in ways of doing things organisationally, physically, clinically, and socially – seen through the lens of healthcare design.

#### Interconnectedness and artificial intelligence

As we approach the start of this century's second quarter, two factors compel an increased focus on learning. Firstly, we're now acutely aware of the interconnectedness of things. We now think of human beings as composed of billions of organisms, the health of which, or sometimes the lingering presence of which, is critical to general health. Intelligence, learning and communication are at the heart of understanding this interconnectedness.

The second factor is the rapidly evolving story of artificial intelligence. Al has been on the edge of debate in healthcare design for many years; for example, through its connection with enabling personalised medicine. Now, Al has embedded itself into our collective consciousness in a new way, with greater focus on both the risks and opportunities it presents for improving health outcomes.

One thing is certain – Al will not succumb to amnesia. But in healthcare, as well as more widely, can we deploy natural intelligence to be as good at learning and remembering? Do we need to rapidly develop better NI to deal with AI? Not to mention other areas in which learning is urgently needed to address colossal challenges – from delivering climate-smart healthcare systems and net-zero carbon strategies, to delivering new service models that promote quality improvement and strengthen health system resilience, to creating humanistic environments that promote wellbeing and accelerate recovery while supporting patient identity and dignity.

Some progressive healthcare systems are engaging in the meticulous collection and deployment of data to address specific health challenges through better design – a clear example at the micro scale. Meanwhile, at the larger scale, wide adoption of digital technology is throwing up examples of innovative capture of user behaviour to inform patient experience and journeys.

One of the most established methods of learning in the built environment is post-occupancy evaluations (PoEs) – the systematic evaluation of a building's performance after it has been occupied. However, while there is general agreement about the value of PoEs, the healthcare industry has been sluggish in adopting them as the norm. Should they become a more regular part of our arsenal in creating self-learning health systems?



The current focus on modern methods of construction highlights many aspects of learning. If buildings are assembled comprising large numbers of repeatable parts, it's essential to optimise each component. Yet the construction industry does not follow the prototype-based model that has distinguished manufacturing – a model geared to learning from failure. In the case of health systems, the balance of investment between primary and acute care, and the preferred pathways to and through them, remain curiously indeterminate.

#### A springboard to inspire

EHD2024 will explore a wide interpretation of the theme: examples of how lessons from previous projects have been used to inform and improve healthcare designs in a replicable way; how organisational systems can ensure accumulated knowledge is not lost but made more accessible; how safe space is created so that fear of failure does not inhibit experiment and innovation; how cross-disciplinary and multidisciplinary working and learning increase capability; and how human judgment and intuition interface with AI.

The Congress features two days of insightful, provocative and entertaining talks, workshops and panel discussions. Days one and two will open with keynote plenary sessions, before splitting into four streams. And the final session of day two will be devoted to a ceremony to present the EHD2024 Awards, supported by lead sponsor IHP. All sessions will be streamed virtually for delegates unable to attend in person.

The Congress will also host a video + poster gallery of innovative research and design projects (pp17-19), an exhibition of design and technology solutions, a Welcome Reception, a Garden Party, and study tours (pp22-23).

For details about online registration and sponsorship opportunities, please go to pages 25-26. Please note that all times in the programme are British Summer Time (BST).



Organised by:

#### SUNAND PRASAD

EHD Programme Director; Architects for Health



MARC SANSOM Director, SALUS Global Knowledge Exchange



# **KEYNOTE SPEAKERS**



**PROFESSOR SHAFI** AHMED Surgeon and chief executive officer. Medical

Realities, UK



MARIOS THEMISTOCLEOUS Deputy Minister of Health, Hellenic Ministry of Health, Greece





**RAFFAELLA PARODI** Associate, architect, Renzo Piano Building Workshop, Italy

**ELIANNA KONIALIS** Global Health Initiative grant manager, Stavros Niarchos Foundation, Greece



MARK CARROLL Partner/director. architect. Renzo Piano Building Workshop, Italy



#### MARIANA SVIRCHUK

Chief executive director. First Medical Union in Lviv; head of project management, UNBROKEN, Ukraine

PANOS PAPOULIAS Chief operating officer, Stavros Niarchos Foundation, Greece

## DESIGNING CLIMATE-RESILIENT HEALTH SYSTEMS AND INFRASTRUCTURE

- · Decarbonising the healthcare estate
- · Circular economy to safeguard planetary resources
- Global exemplars of sustainable hospital projects
- $\cdot$  Designing sustainable service transformation
- Nature-based solutions and strategies
- Meeting Net Zero Building Standards
- Building performance and energy reduction
- · Social impacts on creating healthy communities
- · Application of bio-based materials
- Whole-life carbon impacts

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Speaker enquiries: info@europeanhealthcaredesign.eu

# SUSTAINABLE HEALTHCARE BY DESIGN

## **INTERNATIONAL SYMPOSIUM**

THE KING'S FUND, LONDON | 19 SEPTEMBER 2024

The climate crisis is an existential threat to human health. How can global health investment in system transformation and infrastructure be coupled with meeting Net Zero targets to radically reduce the sector's climate footprint?

Gold Design Leaders

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# THE PROGRAMME COMMITTEE



#### Sunand Prasad OBE PPRIBA EHD2024 programme director; AfH; Chair, UK Green Building Council; Principal, Perkins&Will, UK



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



Nirit Pilosof PhD Head of research in innovation and transformation, Sheba Medical Centre;

faculty member, Tel Aviv University, Israel



**Davide Ruzzon** Architect, director, TA Office, Italy



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



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

Tina Nolan BArch, MBA

John Cole CBE

Honorary professor, Queen's University Belfast, UK

Managing director, director of healthcare strategy

+ planning, Lexica; Health Planning Academy, UK

Tom Best MBE. MD

King's College Hospital, UK

Clinical director / intensivist.



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



Harry van Goor MD, PhD Professor of surgical education, Radboudumc, Netherlands



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



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



**Christine Chadwick** Managing director. Archus, Canada



Cemal Sozener MD, EDAC Associate professor, University of Michigan Medical Center, USA



**Duane Passman FIHEEM, MIHSCM** Director. Percipio Consulting, UK



Ganesh Suntharalingam MB BChir Intensivist, London North West University Healthcare NHS Trust, UK



Director, Guidelines and Economists Network International (GENI), Australia



**Cristiana Caira MArch** Partner and board director. White Arkitekter, Sweden

#### **Organising Committee**

- Jaime Bishop, Co-chair, Architects for Health
- Richard Darch, Founder, Health Planning Academy
- Jonathan Erskine, Director, European Health Property Network
- Kate Copeland, Chair, Australian Health Design Council
- Jim Chapman, Emeritus professor, Manchester School of Architecture



**Rhonda Kerr PhD** 

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## 10 June 2024 Wolfson Theatre

#### 08.00 REGISTRATION OPENS



## SESSION 1

C.	Chair: Sunand Prasad, EHD programme director; Architects for Health, UK
08.45	Welcome and introduction
09.00	<b>Keynote: Innovation in the future hospital</b> Professor Shafi Ahmed, Surgeon and chief executive officer, Medical Realities, UK

 09.30 Keynote: UNBROKEN: Designing for physical, psychological, and psychosocial rehabilitation in a European war zone Mariana Svirchuk, Chief executive director, First Medical Union in Lviv; head of project management, UNBROKEN, Ukraine
 10.00 Panel discussion

10.15-	COFFEE, EXHIBITION & VIDEO+POSTER GALLERY
10.45	



SESSION 2 Delivering the New Hospital Programme Chair: Sasha Karakusevic, NHS Horizons, UK

10.45	<b>New Hospital Programme: A new approach to healthcare</b> Brian Kowalchuk, HDR, USA Saurabh Bhandari, programme director, New Hospital Programme, UK
11.15	A research-informed future Sarah Wallwork, Pollie Boyle, Mott MacDonald, UK Dr Rahul Chodhari, The Royal Free London NHS Foundation Trust; associate director medical innovation, New Hospital Programme, UK Caroline Lee-Davey, Bliss, UK
11.35	Clinical digital transformation: Designing the intelligent hospital Abhi Shekar, Sean Kearney, Mott MacDonald, UK
11.50	Hospital 2.0 – standardised design and technical assurance Steven Bentley, James Morris, Mott MacDonald, UK
12.05	Panel discussion
12.30- 14.00	LUNCH, EXHIBITION & VIDEO+POSTER GALLERY



Supported by:

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#### SESSION 3

Next-generation hospitals: Building on what we have learnt Chair: Jim Chapman, Emeritus professor, Manchester

Chair: Jim Chapman, Emeritus professor, Manchester School of Architecture, UK

- 14.00
   How can we expedite the capital business case development cycle and approvals process? Nicole Samuel, Samuel Rose, Joe Cruden, Nouha Zahiri, The PSC, UK

   14.20
   The future district general hospital: Harnessing the power of data science for resilient clinical service and space design at
- **the new Leighton Hospital Campus** Alison Sanders, Nicola Clemo, Archus, UK Clare Hammell, Mid Cheshire Hospitals NHS Foundation Trust, UK
- 14.40 Smart, safe and efficient use of clinical technology in hospital design Ruth Strickland, Maria Chiekhwafa, MTS Health, UK

15.00 Panel discussion

15.30-COFFEE, EXHIBITION & VIDEO+POSTER16.00GALLERY



### SESSION 4 Evaluating impact and value

Chair: Danny Gibson, MJ Medical, UK

- 16.00
   Social value in healthcare planning and design<br/>Alessandra Leach, Regina Kennedy, Lucy Symons-<br/>Jones, Lexica, UK

   16.15
   Post-occupancy evaluation of hospitals in<br/>Norway<br/>Unni Dahl, Lilian Leistad, Sykehusbygg HF, Norway

   16.30
   Post-occupancy evaluations in practice<br/>Gemma Ham, Kate Bradley, Katelyn Wells,<br/>MJ Medical, UK
- 16.45– Panel discussion 17.00



SESSION 5 Closing plenary: The big debate Chair: Sunand Prasad, EHD programme director; Architects for Health, UK

17.00 Al in healthcare – Utopia or Dystopia? Al has the potential to transform the future of healthcare, but what will be its impact on people, process and place. As global health systems struggle to cope with a tsunami of threats and challenges from ageing populations, rising levels of chronic disease, underfunded physical infrastructure and a workforce crisis, does artificial intelligence herald a new utopian era of personalised health, empowered patients and exciting new therapies or a dehumanised technological dystopia?

18.00-EXHIBITION, VIDEO+POSTER GALLERY &20.30WELCOME DRINKS RECEPTION





## DAY 1, STREAM 2: CLIMATE-SMART HEALTHCARE

## 10 June 2024 Seligman Theatre



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14.00

GALLERY

#### **SESSION 6**

Zero carbon and regenerative design Chair: Warren Percival, RSK Group, UK

10.45	<b>The future of healthcare design will be</b> <b>regenerative</b> Porus Antia, Vanessa Nelson, Dave Cubberly, Stantec, USA
11.05	A hospital in a health-food-park – RZ Tienen (Belgium) Tom Debacker, Stephane Vermeulen, VK Architects + Engineers   part of SWECO, Belgium
11.25	<b>Sustainable hospitals of the future</b> Jonathan Sylvester, Laura Harrop, Leeds Teaching Hospitals NHS Trust, UK
11.45	Designing the US' first all-electric hospital: Key considerations and benefits Gary Hamilton, WSP, USA
12.05	Panel discussion
12.30-	LUNCH, EXHIBITION & VIDEO+POSTER



SESSION 7 Embracing nature, balancing carbon Chair: Richard Mann, AECOM, UK

 14.00
 CIO – Nature at the heart of the hospital<br/>Erik Cooremans, archipelago architects, Belgium

 14.20
 The first all-mass timber hospital in North<br/>America – The Prince Edward County Memorial

Hospital Jason-Emery Groen, Jeff Mosher, HDR Architecture Associates, Canada

James Hildebrand, Quinte Health, Canada

- 14.40 Design through life: Humanistic environments for better health and wellbeing Andrew Tempany, Stephenson Halliday, RSK Group, UK Lynne Houlbrooke, Stephenson Halliday, RSK Group, Switzerland
   15.00 Panel discussion
- 15.30- COFFEE, EXHIBITION & VIDEO+POSTER 16.00 GALLERY



16.00

16.20

#### **SESSION 8**

ł	Modern methods for energy and construction Chair: Victoria Head, Archus, UK
	Passivhaus community healthcare: Lifetime operational savings for no additional cost Bob Wills, Medical Architecture, UK Mark Barry, Architype, UK
	Optimising solutions and bringing forward benefits – modular construction should be

considered at the outset of every significant healthcare building project

- Sarka Oldham, Vanguard Healthcare Solutions, UK
- 16.40- Panel discussion

17.00

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).

## DAY 1, STREAM 3: INTERSECTION OF CLINICAL MEDICINE AND DESIGN

## 10 June 2024 Council Chamber

	SESSION 9 Clinical engagement: Learning across expertise Chair: Ganesh Suntharalingam, London North West University Healthcare NHS Trust, UK
10.45	When clinical engagement becomes a necessity Clare Simcock, Emma Stockton, Lucy Waller, Great Ormond Street Hospital NHS Foundation Trust, UK
11.05	Monklands Replacement Project: An adaptive strategy for future healthcare delivery Fiona Cowan, Graeme Reid, Donna McHenry, NHS Lanarkshire, UK; Suzanne Tighe, Keppie Design, UK
11.25	Learnscape hospital: Fostering patient empowerment through knowledge and transparency Thomas Vraetz, Department of Paediatrics and Adolescent Medicine, Medical Center, University of Freiburg, Germany Charlotte M. Niemeyer, Eckhard Olschewski, Initiative für Unsere Kinder- und Jugendklinik, University of Freiburg, Germany Monika Purschke, AWZT Austria
11.45	Translational research – designing for bench to bedside clinical care. A case study of the Sydney Childrens' Hospital Stage 1 and Minderoo Children's Comprehensive Cancer Centre Tara Veldman, Billard Leece Partnership, Australia Kiri Collins, Children's Cancer Institute, Australia Tim Hoffman, Sydney Children's Hospital Network, Australia
12.05	Panel discussion
12.30- 14.00	LUNCH, EXHIBITION & VIDEO+POSTER GALLERY
12.45-	Workshop: Design innovation in healthcare

- 13.50 furniture
  - Organised by:

mimedical

For the full abstract and details of the panel, please go to page 21



**SESSION 10** Emergency care: Designing in agility and resilience Chair: Tom Best, King's College London, UK 14.00 SEM headquarters: Transformative agility in healthcare infrastructure Eric Trillo, AECOM, Spain TBC, CatSalut, Spain 14.20 Keeping the machine running: Optimising resource allocation during phased construction Alex Griffin, Adrienne Erdman, EwingCole, USA 14.40 Environmental barriers to safe and effective care for children with mental and behavioural health conditions in the emergency department Anjali Joseph, Meera Narasimhan, Clemson University, USA

- 15.00 Panel discussion
- 15.30-**COFFEE, EXHIBITION & VIDEO+POSTER** 16.00 GALLERY



### **SESSION 11**

Design evaluation in the ICU and OR

Chair: Harry van	Goor, Radboudumc,	Netherlands
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16.00	Rethinking UK adult intensive care unit design and services
	Hina Lad, Priyanka Suryawanshi, Imperial College
	Healthcare NHS Trust, UK
	James Kincross, Imperial College London, UK
16.20	Problems and potential solutions for operating room environments in the USA
	Zhipeng Lu, Shilpa Bhardwaj, Texas A&M
	University, USA
	Neda Norouzi, University of Texas San Antonio, USA
	Haeoak Park, Page Southerland Page, USA
16.40-	Panel discussion
17.00	

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: TERTIARY CARE

10 June 2024 Linacre and Sloane Room

CECCION 12





<ul> <li>oncology environment Sapna Bhat, Perkins&amp;Will, USA</li> <li>11.25 Making the most of what we have: Fox Chase Cancer Center's transformation Haley Driscoll, NORR, USA Joel Helmke, Temple University Health System, USA</li> <li>11.45 The Christie Paterson Laboratories redevelopment in Manchester – a connected approach to cancer services Matthew Hird, BDP, UK James Chimeura, Arup, UK Stuart Pepper, CRUK, UK</li> <li>12.05 Panel discussion</li> <li>12.30- LUNCH, EXHIBITION &amp; VIDEO+POSTER</li> </ul>		SESSION 12 Curing cancer by design Chair: John Cooper, JCA, UK
<ul> <li>vault design and the evolution of the radiation oncology environment Sapna Bhat, Perkins&amp;Will, USA</li> <li>11.25 Making the most of what we have: Fox Chase Cancer Center's transformation Haley Driscoll, NORR, USA Joel Helmke, Temple University Health System, USA</li> <li>11.45 The Christie Paterson Laboratories redevelopment in Manchester – a connected approach to cancer services Matthew Hird, BDP, UK James Chimeura, Arup, UK Stuart Pepper, CRUK, UK</li> <li>12.05 Panel discussion</li> <li>12.30- LUNCH, EXHIBITION &amp; VIDEO+POSTER</li> </ul>	10.45	<b>approach</b> Catherine Zeliotis, Stantec, UK
Cancer Center's transformation         Haley Driscoll, NORR, USA         Joel Helmke, Temple University Health System, USA         11.45         The Christie Paterson Laboratories         redevelopment in Manchester – a connected         approach to cancer services         Matthew Hird, BDP, UK         James Chimeura, Arup, UK         Stuart Pepper, CRUK, UK         12.05         Panel discussion         12.30-         LUNCH, EXHIBITION & VIDEO+POSTER	11.05	vault design and the evolution of the radiation oncology environment
redevelopment in Manchester – a connected approach to cancer services Matthew Hird, BDP, UK James Chimeura, Arup, UK Stuart Pepper, CRUK, UK12.05Panel discussion12.30-LUNCH, EXHIBITION & VIDEO+POSTER	11.25	Cancer Center's transformation Haley Driscoll, NORR, USA
12.30- LUNCH, EXHIBITION & VIDEO+POSTER	11.45	<b>redevelopment in Manchester – a connected</b> <b>approach to cancer services</b> Matthew Hird, BDP, UK James Chimeura, Arup, UK
	12.05	Panel discussion
14.00 GALLERY	12.30- 14.00	LUNCH, EXHIBITION & VIDEO+POSTER GALLERY



16.00

GALLERY

3	Humanising mental health environments Chair: Brenda Bush-Moline, Stantec, USA
14.00	A shift in safety: Danish insights for shaping the future of mental and behavioural health design Madilyn DuBois, HKS, USA David Allison, Clemson University, USA Hanne Kristiansen, Psykiatrien i Region Syddanmark, Denmark
14.20	Designing for mental health – the second wave of deinstitutionalisation Judith Hemsworth, Department of Health Victoria, Australia Codey Lyon, AECOM, Australia Nick Bourns, Neel Charitra, NTC Architects, Australia
14.40	Designing hope: Learning from neuroscience to address the behavioural health crisis David Lewis, NBBJ, UK
15.00	Panel discussion
15.30-	<b>COFFEE, EXHIBITION &amp; VIDEO+POSTER</b>



## SESSION 14 Evaluating mental health design

	Chair: Lianne Knotts, Medical Architecture, UK
16.00	A retrospective view of mental health design: What works, what doesn't and why? Teva Hesse, 4D Studio, UK
16.20	Small is beautiful: A flexible and empowering specialist eating disorders unit
	Rosemary Jenssen, Jenssen Architecture, UK
	Laura Delgado, Medical Architecture, UK
	Paul Williams, Dorset HealthCare University NHS

16.40-Panel discussion 17.00

Foundation Trust, UK

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).



## 11 June 2024 Wolfson Theatre



#### 08.00 REGISTRATION OPENS



#### **SESSION 15**

Opening plenary, day two Chair: Sunand Prasad, EHD programme director; Architects for Health, UK

#### 08.45 Welcome and introduction

#### 09.00 A different kind of public-private partnership in the health sector For over twenty-five years, the Stavros Niarchos Foundation's (SNF) approach to empowering humanity has guided over 5,400 grants totaling \$3.7 billion to nonprofit organizations in 134 countries.

At the heart of SNF's grantmaking is its \$1 billion Global Health Initiative (GHI), which aims to improve access to quality healthcare for all and empower frontline providers. Since 2017, the GHI has grown to encompass more than fifty projects in Greece and worldwide, ranging from the design, construction, and outfitting of three new hospitals in Greece, to new medical training programs, procurement of state-of-the-art equipment, pioneering mental health initiatives, and a suite of collaborations that leverage international expertise to strengthen healthcare infrastructure and capacity across the world.

Delivered through private philanthropy in a unique public-private partnership underpinned by a common vision shared with Renzo Piano Building Workshop and the Hellenic Republic, three new state-of-the-art public hospitals are being built in geographic peripheries of Greece and will offer equitable quality medical care for all. The three hospitals seek to help establish a new standard in public health care, one baked into their design and clinical and operational planning. This keynote session will present the story of SNF's GHI and the role that philanthropy can play in future health projects.

Panel: Panos Papoulias, Chief operating officer, Stavros Niarchos Foundation, Greece Elianna Konialis, SNF Health Initiative, Grant manager, Stavros Niarchos Foundation, Greece Marios Themistocleous, Deputy Minister of Health, Hellenic Ministry of Health, Greece Mark Carroll, Architect, partner; Raffaella Parodi, Architect, associate, RPBW, Italy

10.15- COFFEE, EXHIBITION & VIDEO+POSTER GALLERY 10.45



#### SESSION 16 Innovation in hospital design: Lessons of scale Chair: Tina Nolan, Lexica, UK

<ul> <li>A Community of Community</li> </ul>	
10.45	Ageing populations, pandemic preparedness, and construction standardisation: Three innovations from the Alexandra Hospital project, Singapore Matthew Holmes, Jacobs, Singapore
11.05	The AIIMS, New Delhi, redevelopment mega-project: Pioneering new solutions in healthcare design Curtis Laitinen, AECOM, India Dr Randeep Guleria, Institute of Internal Medicine, Respiratory & Sleep Medicine, India
11.25	<b>The healing power of place – New Footscray Hospital</b> Paul Curry, Patrick Ness, Cox Architecture, Australia
11.45	Building a naturally smart healing environment: Lessons from a pandemic era Stuart Elgie, DIALOG, Canada Ian McDermott, University Health Network, Canada
12.05	Panel discussion
12.30- 14.00	LUNCH, EXHIBITION & VIDEO+POSTER GALLERY



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## SESSION 17

Hospital functions and architectural form Chair: Jaime Bishop, Architects for Health, UK

 14.00
 Holistic healing and the hospital as city

 Alfonso Miguel Caballero, Herzog & de Meuron, USA

 14.20
 The SNF Global Health Initiative – the role of

 the SNF hospitals in Greece's healthcare sector

 Moritz Spellenberg, Llewelyn Davies, UK

Deirdre Foley-Woods, Lexica, UK

14.40 Embracing the circle: Realising functional efficiencies in contemporary hospital design Mungo Smith, MAAP Architects, Australia Paul Yeomans, Medical Architecture, UK

#### 15.00 Panel discussion

15.30-COFFEE, EXHIBITION & VIDEO+POSTER16.00GALLERY

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24	Chair

#### SESSION 18 System transformation by design

Chair: Nicola Bertrand, Asklepios, Germany

16.00 Innovative vision to transform healthcare in Jordan

 Rachelle McDade, Currie & Brown, UK
 Oana Gavriliu, Perkins&Will, UK
 Eiad Haddadin, Reine Chaccour, DAR, Jordan
 Dr Mahmoud Sarhan, Professor, oncology and stem cell transplantation, Jordan

 16.20 A building designed as a chapter in a lifelong patient relationship: Mercy Center for Performance Medicine and Specialty Care

#### **Performance Medicine and Specialty Care** Michael Pukszta, CannonDesign, USA Charis Trost, Mercy, USA

16.40– Panel discussion 17.00

### **SESSION 19**

Closing plenary and awards Chair: Jaime Bishop, Architects for Health, UK

17.00 European Healthcare Design Awards 2024 Supported by lead sponsor:



17.45- 18.00	Closing address Sunand Prasad, EHD programme director; Architects for Health, UK

18.30- GARDEN PARTY AND LIVE MUSIC 22.00



## DAY 2, STREAM 6: ART AND ARCHITECTURE

## 11 June 2024 Seligman Theatre





	SESSION 20 The art and science of design Chair: Paul Bell, Ryder Architecture, UK	6	SESSION 21 Workforce and wellbeing Chair: Cristiana Caira, White Arkitekter, Sweden		SESSION 22 Transforming healthcare environments through the arts Chair: Vivienne Reiss, Arts consultant, UK
10.45	Obstacles to research translation: Piloting a new method to advance Healthcare environments research Rebecca McLaughlan, The University of Sydney,	14.00	Nurse burnout: A social listening study investigating the environmental factors contributing to the nursing crisis Deborah Wingler, Rutali Joshi, HKS, USA	16.00	Art in healthcare environments: A comprehensive review of methodologies and patient perspectives Daryia Palityka, Evangelia Chrysikou, Niamh Murtagh,
11.05	Australia The space kit approach: Ensuring evidence- based design knowledge uptake in large-scale complex building programmes	14.20	Healthcare design education for medical directors: Mitigating communication gaps between stakeholders Nirit Pilosof, Yuval Bloch, Tel Aviv University, Israel	16.20	University College London, UK Children's day surgery: Transforming a daunting journey into the happiest of memories
	Peter-Willem Vermeersch, archipelago architects and KU Leuven, Belgium Kris Loix, archipelago architects, Belgium	14.40	Structurally embedding spaces for emotive conversations in hospital setting: Lessons from the Three Little Pigs		Peter Shenai, Louisa Williams, Art in Site, UK Liz O'Sullivan, Guy's & St Thomas' NHS Foundation Trust, UK
11.25	Patterns for wellbeing Roddy Langmuir, Cullinan Studio, UK	15.00	Gareth Drake, Great Ormond Street Hospital, UK Panel discussion	16.40- 17.00	Panel discussion
11.45	Case studies of experiential design: Supporting the mind before the body to stimulate the healing process Hala El Khorazaty, Amy Sickeler, Perkins&Will, USA	15.30- 16.00	COFFEE, EXHIBITION & VIDEO+POSTER GALLERY		
12.05	Panel discussion				
12.30- 14.00	LUNCH, EXHIBITION & VIDEO+POSTER GALLERY				

## DAY 2, STREAM 7: POPULATION HEALTH

## 11 June 2024 Council Chamber

Design for remote and rural communities





07.30-Workshop: Transformative military healthcare design – operating for military readiness 08.45 For the full abstract and details of the panel, please go to page 21



SESSION 24 Cross-generational design Chair: David Allison, Clemson University, USA		SESSION 25 Delivering integrated care Chair: Alice Green, Arcadis, UK
Ageing Right Care(fully): A comparative study of ageing in place and hospital care at home in the Netherlands, Israel, and Sweden Jodi Sturge, University of Twente, Netherlands Susanna Nordin, University of Dalarna, Sweden	16.00	Improved quality of life: The positive impact of a pioneering integrated care centre Paul Yeomans, Medical Architecture, UK Erica Daley, Humber and North Yorkshire Integrated Care Board, UK
Nirit Pilosof, Tel Aviv University, Israel "oase.kleinbasel": A cross-generational care site combining hospice care for children and adolescents with dementia care	16.20	Castleford Integrated Health Hub – a catalyst for regeneration and Integrated local health system Patrick Kelly, Phil Bentley, P+HS Architects, UK
Minou Afzali, Swiss Center for Design and Health, Switzerland Sabrina Gröble, Bern University of Applied Sciences,	16.40- 17.00	Panel discussion

	Chair: Jason-Emery Groen, HDR, Canada
10.45	A new standard for Aboriginal primary healthcare: Post-occupancy data and experience from PAMS Healthcare Hub Newman David Kaunitz, Kaunitz Yeung Architecture, Australia Robby Chibawe, Puntukurnu Aboriginal Medical Service, Australia
11.05	<b>Designing with Country</b> Julian Ashton, Kirstie Irwin, Neil Logan, Stephanie Costelloe, BVN, Australia
11.25	Reconciliation and a net-zero carbon future: The new Cowichan District Hospital aims to give back to the people and the land it will serve Cameron Shantz, Shane Czypyha, Parkin Architects, Canada Meagan Webb, H.H. Angus & Associates, Canada
11.45	Redesign of adult health and social care services in Caithness Charlie McQuilkin, NORR, UK

SESSION 23

12.05 Panel discussion

- 12.30-LUNCH. EXHIBITION & VIDEO+POSTER 14.00 GALLERY
- 12.45-Workshop: Design standardisation vs 13.50 innovation: Finding the right balance Organised by:

## Jacobs

For the full abstract and details of the panel, please go to page 21

14.20 "oase.kleinbasel": A cross site combining hospice ca adolescents with dementi Minou Afzali. Swiss Center for Switzerland Sabrina Gröble, Bern University of Applied Sciences, Switzerland 14.40 Health House: Case study of Rijnstate Hospital in Elst Femke Feenstra, Gortemaker Algra Feenstra, Netherlands 15.00 Panel discussion

14.00

15.30-**COFFEE, EXHIBITION & POSTER GALLERY** 16.00

#### 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 (17.00-18.00).

## DAY 2, STREAM 8: SCIENCE, TECHNOLOGY AND DIGITAL TRANSFORMATION

## 11 June 2024 Linacre and Sloane Room



#### **SESSION 26**

Design innovation in a living lab Chair: Göran Lindahl, Chalmers University, Sweden

10.45 One health systems journey of creating a culture of innovation: A living lab initiative for implementation an extensive prototyping and testing process

 Deborah Wingler, HKS, USA
 Sumandeep Singh, David Huang, HKS, Singapore

 11.05 Outcomes from the NOVELL method: A living lab for rethinking rehabilitation design and services

 Ruby Lipson-Smith, MARCS Institute of Brain, Behaviour and Development, Western Sydney

Behaviour and Development, Western Sydney University; The Florey Insititute of Neuroscience and Mental Health, Melbourne, Australia Mark Lam, School of Architecture and Design, Swinburne University of Technology; The University of

Melbourne, Australia

Marcus White, Spatio-Temporal Research Urban Design and Architecture Lab; CDI School of Design; Swinburne University of Technology, Australia On behalf of the NOVELL Redesign Collaboration

- 11.25From VR to digital twin reality: Pioneering a<br/>human and experience-centric approach to<br/>healthcare architecture design<br/>Mohammed Ayoub, HDR, USA<br/>Sarah AlNashwan, Almoosa Specialist Hospital, Saudi<br/>Arabia11.45Maximising end-user design for digitally<br/>advanced hospitals<br/>Jon Reeve, Kevin Sureshkumar, Spanswick, UK12.05Panel discussion12.30-LUNCH, EXHIBITION & VIDEO+POSTER
- 14.00 GALLERY



#### SESSION 27 Robotics in healthcare

Chair: Jonathan Erskine, European Health Property Network, UK

14.00	Logistic robots: Workforce shortage relief? Patrick Kershaw, Kate Bradley, MJ Medical, UK
14.20	Home-based smart technology for improving gait in people with Parkinson's Disease in domestic space: A case study for domestic assistive smart technology Noemi Bitterman, Technion, Israel
14.40	How robot interventions could support people with frailty in overcoming physical barriers in their homes Evangelia Chrysikou, Jane Biddulph, University College London, UK Amy Dennis-Jones, Hobbs Rehabilitation Intensive Neurotherapy Centre, UK Fernando Loizides, Cardiff University, UK Eleftheria Savvopoulou, SynThesis Architects, Greece Nathan Jones, Cardiff University, UK
15.00	Panel discussion
15.30- 16.00	COFFEE, EXHIBITION & VIDEO+POSTER GALLERY



#### SESSION 28 Al-powered healthcare

Chair: Nirit Pilosof PhD, Sheba Medical Centre; Tel Aviv University, Israel

16.00	<b>The robot will see you now: Reimagining AI in the healthcare landscape</b> Kevin Sureshkumar, Spanswick, UK Sophie Lansbury, Lexica, UK
16.20	Al-driven cancer detection and care: Bridging the Al learning gap for rural communities towards the equity of access to healthcare Christine Chadwick, Archus, Canada Daniel Zikovitz, GE Healthcare, Canada
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 (17.00–18.00).

## VIDEO+POSTER GALLERY

**Dorchester Library** 

P21

homes

Supported by:

BIJ ONS Method – creating 'home' in nursing

# ΑΞϹΟΜ

- P01Engaging clinical stakeholders during the<br/>design process using simulation-based<br/>evaluation: A multi-phase evaluation of the<br/>patient room bathroomAnjali Joseph; David Allison, Clemson University, USA;<br/>Christi R Cornelius, Indiana University Health, USA;<br/>Teresa K Gibbs, Indiana University Health, USA
- P02 The needs of transgender people for care Armin Saam, Healthcare Design, Norway; Mozhgan Sadat Sanieenezhad, University of Bergen, Norway
- P03 The development of healthcare facilities in rapidly urbanising cities: A case study of Shenzhen YingYing Gan, TU Delft, Netherlands
- P04 Dual-purpose emergency department: Cairns South Health Facility, Queensland Rebecca Johnston, Peddle Thorp, Australia
- P05 Prototype for a rural primary healthcare centre in Paraguay Maria Virginia Matiauda Schneider, healthcare architect, independent, Paraguay
- P06 Energy garden improving the microbiome of urban health by using the healthcare estate as educational gardens of health, wellbeing and sustainable development Agamemnon Otero, Energy Garden, UK
- P07 Nurturing nature: A biophilic approach to healing environments in high-dependency units Christina Andersen, Guy's & St Thomas' NHS Foundation Trust, UK
- P08 'Reduce unwanted variability to improve delivery' – The New Hospital Programme Industrialisation Journey Phill Bates, Mott MacDonald, UK
- P09 The impact of medical equipment on net zero carbon Ruth Strickland, Maria Chiekhwafa, MTS Health, UK
- P10 Patient safety by design Lauren Morgan, Morgan Human Systems, UK

- P11 How can new hospital programmes learn from national clinical transformation programmes to balance bottom-up and top-down transformation, and deliver locally owned, nationally supported improvement? Nicole Samuel, Samuel Rose, Joe Cruden, Chris Bradley, The PSC, UK
- P12 Redefining the future-proofing narrative in hospital building design Sanaz Memari, University of Sydney, Australia
- P13 Applying and measuring design for staff wellbeing Sophie Crocker, Michael Woodford, White Arkitekter, UK
- P14 A 'clean room' approach to operating room design: A case study in the Netherlands Remko Noor, Maximuse, Netherlands
- P15 Digital hospitals enabling designs that enhance patient care Jonathan Sylvester; Laura Harrop, Leeds Teaching Hospitals NHS Trust, UK
- P16 Design and optimisation of facilities for radioligand therapy – a 'game-changer' for cancer treatment Ziad Ben El Kadhi, NUVIA, France; Jason Gibbins, IHP VINCI Building, UK; David Price, NUVIA, UK
- P17 The supportive environment theory in action: Typologies of healing gardens effective in stress recovery in healthcare settings Sanaz Memari, University of Sydney, Australia
- P18 Health Hub Vienna: Vienna as a healthy and smart city Albert Wimmer, Semir Zubcevic, AWZT, Austria
- P19
   Designing a habilitation centre a multidisciplinary collaboration

   Oana Dumitrache, Jennie Bergman, Catherine

   Hugosson, Caeser Malin, Liljewall Arkitekter, Sweden
- P20 Zierik7 research Femke Feenstra, Gortemaker Algra Feenstra, Netherlands

- Femke Feenstra, Gortemaker Algra Feenstra, Netherlands
   P22 Assessing the role of the hospital built environment in supporting psychosocial wellbeing: A post-occupancy evaluation tool for hospital design Ghaydaa Hemaidah, University of Manchester, UK
   P23 Owning your own destiny – capturing the
  - James Philipps, Murphy Philipps Architects, UK; Melanie Banks, Bedfordshire Hospitals NHS Foundation Trust, UK

P24 The Live Well Campus concept Katherine Mathew, East Riding of Yorkshire Council, UK; Phil Bentley, P+HS Architects, UK

- P25 Designing efficient healthcare facilities caring about the people who live and work within it Ulrika Olsson, Arjo Sverige, Sweden Hans Lingegård, Arjo, Sweden
- P26 Maternity wards smART delivery Martha MacKinnon, Martin Anderson, P+HS Architects, UK
- P27 Healing before. How can the built environment promote mental wellbeing in young adults? Keli Kadriu, Università IUAV di Venezia, Chalmers University of Technology, Italy
- P28 Protected elective treatment a design to reduce the waiting backlog Derek Shepherd, Sharon Cook, P+HS Architects, UK
- P29 An architectural validated tool for measuring institutionalisation in psychiatric wards and cross-country comparison results Evangelia Chrysikou, University College London, UK

## VIDEO+POSTER GALLERY Dorchester Library



P30	Multisensory wayfinding strategies for stroke rehabilitation Mehrnoush Latifi, Marcus White, Tianyi Yang, Swinburne University of Technology, Australia; NOVELL Redesign Collaboration, Australia; Ruby Lipson-Smith, Western Sydney University, Australia
P31	Healing architecture with a children's perspective Jens Axelsson, White Arkitekter, Sweden
P32	An improved framework for inclusive public patient involvement in healthcare infrastructure planning Clare Fitzgerald, Caroline Ivory, Deborah Hutton, Archus, Ireland
P33	<b>Equipment planning: Business as usual</b> Jill Baker, MJ Medical, UK
P34	Synthesising stories of a multi-cultural community – empowering consumers to co-create healthcare environments that are meaningful to all Mark Mitchell, Tonya Hinde, Billard Leece Partnership, Australia; Julia Beckinsdale, Victorian Health Building Authority, Australia
P35	Simulation-based hospital design testing through extended reality Minou Afzali, Jan Eckert, Rahel Inauen, David Wollschlegel, Swiss Center for Design and Health, Switzerland
P36	<b>Climate smart: Case study of Rijnstate Hosptial in Elst</b> Femke Feenstra, Gortemaker Algra Feenstra, Netherlands
P37	Rethinking operating theatre suite design to reduce energy and achieve net zero carbon Anne Symons, Ian Eames, University College London, UK: Jonathan Groome. The Royal London Hospital

P38 The Ageing Well Village - A holistic approach for healthy communities Katie Shepherd, Sharon Cook, P+HS Architects, UK

UK; Remko Noor, Maximuse, Netherlands

- P39 Experimental design as an approach to teaching evidence-based design in healthcare to architecture students Milica Vujovic, University of Technology Vienna (TU Wien), Austria; Djordje Stojanovic, The University of Melbourne, Australia
- P40 Self-learning healthcare system: A design diagnostic research approach Sophia Hami, Jane Ho, HKS, UK
- P41 "The patient room of the future": A client study of a patient room with custom product solutions, interactive mockups and embedded technology Hala El Khorazaty, Amy Sickeler, Perkins&Will, USA
- P42 Te Rau Kawakawa, Buller Health: Design and implementation of integrated family health centres as spokes in New Zealand's health system renewal and the replacement of Buller Hospital Jonathan Rae, Warren and Mahoney, New Zealand
- P43 Human emotional response to threedimensional forms and materials, and the application within a healthcare environment Jason Condliffe, Kirstie Andrews, Thomas Allen, Manchester Metropolitan University, UK
- P44 May the art be with you an art space hospital Monika Purschke, AWZT, Austria; Richard Klinger, Architects Collective, Austria
- P45 The benefits of reflective practice (learning from nursing theory) Ellie Richardson, Guy's & St Thomas' NHS Foundation Trust, UK
- P46 Indigenous engagement as a self-learning system Tracy Lord, Billard Leece Partnership, Australia; Liam

Tracy Lord, Billard Leece Partnership, Australia; Liam Harte, GIRA, Australia

P47 Urgent design for emergency care Tom Potter, P+HS Architects, UK Jug Johal, Northern Lincolnshire and Goole NHS Foundation Trust, UK The beauty and challenges of AI tech in healthcare design
 Hala EI Khorazaty, Kalpana Kuttaiah, Amy Sickeler, Perkins&Will, USA
 Optimising environments and spaces to support clinical service planning strategies
 Lara Kaiser, Perkins&Will, Brazil
 Evidence-based research on hospital medical processes optimisation driven by multiple-source data
 Deijan Peng, Jun Guo, Guangdong Architectural Design & Research Institute, China; Die'in Wu, Guangzhou Panyu Central Hospital, China

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P50

P51 Lightworks: Combining art and luminosity to improve patient sleep cycles, recovery and mood Peter Shenai, Martin Jones, Art in Site, UK

P52 Design for healthy and active ageing: Understanding physical activity, social activity, and fall prevention in long-term care facilities Xuemei Zhu, Seokyung Park, Hanwool Lee, Zhpeng Lu, Chanam Lee, Julian Benesch, Kaitlyn Higgins,

P53 Interruptions in trauma rooms during resuscitation: The role of the physical environment Sara Bayramzadeh, Mary Anthony, Kent State University, USA

Marcia Ory, Texas A&M University, USA

- P54 A bold art strategy for a hospital of the future Alec Musson, Leeds Teaching Hospitals NHS Trust, UK; Peter Shenai, Art in Site, UK
- P55 Elevating Maastricht University Medical Center as a self-learning healthcare system: A design diagnostic research approach Peyton Fort, Sophia Hami, Deborah Wingler, HKS, USA
- P56 Investigating the effectiveness of innovative operating room design in improving clinical performance Xiaobo Quan, University of Kansas, USA

## VIDEO+POSTER GALLERY

### **Dorchester Library**



# ΑΞϹΟΜ

- P57 Designing spaces for health celebration and gender-inclusive design Marta Czachorowska, m+design, Poland P58 Designing inclusive learning and P67 communication tools for paediatric critical care Rochus Hinkel, The University of Melbourne, Australia; Charles Larson, The Royal Children's Hospital, Australia P59 Plans are worthless, but planning is everything (Dwight D Eisenhower) Regina Kennedy, Lexica, UK; Peter Ward, Guy's and St Thomas' NHS Foundation Trust, UK P60 Transforming inpatient care: Addressing gaps in optimal mental health treatment through regional collaboration and investment Sandra Reading, Archus, UK; Mark Barriball, Devon Partnership Trust, UK; Anita White, Grainge, UK; Lee Edwards-Smith, Kier Construction, UK P61 How can the New Hospital Programme enable clinical reconfiguration to deliver sustainable services that meet population needs? Nicole Samuel, Ellie Lane, Sam Rose, The PSC, UK P62 A kaimahi-focused approach to laboratory redesign Natalie Parke, Iuliia Sankova, Nicola Ross, Auckland Hospital - Te Whatu Ora, New Zealand P63 Creating resilient, flexible and sustainable clinical casework fit for 21st-century healthcare Gerard Baxter, Hygenius, UK P64 Healthy indoor spaces – a holistic design P73 approach Josh Jones, Ruth Kelly Waskett, Phil Mann, Hoare Lea, UK P65 Examples of use of colours and materials in environments for dementia Ahmed Sabri, Eric Berteau, Gerflor, France Andy Gordon, Gerflor, UK
- P66 The contribution of patient experience design towards a more sustainable healthcare Eric Trillo, AECOM, Spain

7 NHS net zero: Assessing clinician engagement and quality improvement Lucy Taylor, King's College London, UK; Vikram Sinha, Charing Cross Hospital, UK; Pari Swarnkar, Aneurin Bevan University Health Board, UK; Roshan Vijayan, East & North Hertfordshire NHS Trust, UK

- P68 Stoke Mandeville Hospital: An artistic transformation of children's and women's services Peter Shenai, Martin Jones, Chloe Northover-Naylor, Art in Site, UK
- P69 Learning, collaborating, improving: The Altnagelvin Hospital Refurbishment – a new lease of life Gonzalo Vargas, TODD Architects, UK
- P70 Harmony in healing: A paradigm shift in approaching healthcare design Frank Panici, NORR Architects & Engineers, Canada; Siamak Hariri, HPA Architects, Canada
- P71 Enhancing CCU healing at St Thomas' Hospital Christina Andersen, Guy's & St Thomas' NHS Foundation Trust, UK Moritz Spellenberg, Llewelyn Davies, UK
- P72 The devil is in the details: Using data to inform healthcare estate configuration Anya Shah, Reece Philliskirk, Regina Kennedy, Lexica, UK
- 73 Neurodivergent design by default Gareth Banks, AHR Architects, UK; Martin Jones, Art in Site, UK; Karen Breese, Shrewsbury and Telford NHS Hospital Trust, UK
- P74 Improving value in healthcare: What truly matters Bernadette Bhakti, Regina Kennedy, Lexica, UK
- P75 You can't hurry love Philip Patrick Sun, Adept Organizational Logistics, USA

Enhancing spatial user experience at a supervised safe consumption site adopting a user-defined design strategy – speculative design theory approach Swati Katyarmal, SK Architects India; OCAD University, Canada; Gurjap Deol, ScribeCanada Healthcare, Canada; Rayhaan Yehiya, OCAD University, Canada; Anna Nowacki, University Health Network, Canada

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- P77 Healthcare technologies and space: Therapeutic built environment as a health technology according to the WHO definition Evangelia Chrysikou, University College London, UK
- P78 Reduce unwanted variability to improve delivery – The New Hospital Programme industrialisation journey Phill Bates, Mott MacDonald, UK
- P79 Proposal study to examine the influence of the built environment on mental health patients Marta Saval, Albert Vitaller, Vitaller Arquitectura, Spain
- P80 Lessons from developing an adaptable and future-proofed hospital estate Kieren Morgan, Daniel Gibson, MJ Medical, UK Ewan Graham, Hawkins/Brown, UK
- P81 What we need is a revolution! Redefining healthcare design: Embracing WELL standards and humanistic principles for societal wellness Rachel Vig, Sada Studio, UK
- P82 How we transformed a Covid-19 building to a neurological area? Laia Isern Meix, Albert Vitaller, Vitaller Arquitectura, Spain; German Romero, Hospital Universitari Bellvitge, Spain
- P83 Exploring visual connectivity in stroke rehabilitation through virtual reality Tianyi Yang; Marcus White; Mehrnoush Latifi, Swinburne University of Technology, Australia; Ruby Lipson-Smith, The Florey Institute of Neuroscience & Mental Health, Melbourne, Australia

# Art in Site

Join the Art in Site team during the Congress and get creative in the Art Room. Art in Site hosts a series of workshops and an interactive installation exploring the concept of the Sensory Hospital, along with an interactive installation.

#### Activity agenda

#### Monday 10 June | 14.00–15.00

#### Improving healthcare environments through person-centred design

In 2022-23, a working group of academics, architects, arts co-ordinators, and medical practitioners developed a toolkit entitled 'Improving Healthcare Environments: A Practical Guide to Person-Centred Design'. This is a research-led toolkit, which includes a number of practical tools, methods, and examples to help people understand and improve healthcare environments. The premise underpinning the guide is one of empowerment: with the right tools, anyone can make changes to and improve environments. It's also a resource for professionals and offers a number of compact 'step by step' guides to methods ranging from postcards to creative workshops. It has a focus on understanding sensory experiences and needs, and on inclusive design practices, and its development is funded by the UKRI project 'Sensing Spaces of Healthcare'.



Victoria Bates, University of Bristol, UK



#### Tuesday 11 June | 10.45–12.00 Sensory hospitals. Are they the future?

This session explores new ambitious projects and research at the intersection of integrated art, architecture, and technology, which are helping to transform hospitals from bland spaces into sensorially rich places. Neuroscientists now believe there may be anywhere between 22 and 33 senses – and each has a role to play in our sense of self and wellbeing in better hospital design. We'll see how digital artwork can stimulate patients' vision and activate their proprioception – allowing doctors to tune into diagnosis more playfully. We'll explore the benefits of texture, audio, and haptics in art and wayfinding schemes. We'll understand how research into multisensory environments and activities can boost recovery times and clinical outcomes. And we'll see extraordinary artworks at the intersection of lighting, coding, and sculpture, which are contributing to better sleep and, even, recovery times.





i, K Louisa Williams, Art in Site, UK



Martin Jones, Art in Site, UK

#### Tuesday 11 June | 14.00–15.00 National Arts in Hospitals Network

The National Arts in Hospitals network was established in 2019 to connect arts managers working in hospitals in what was an isolated, siloed career. The network currently has 50 members and offers opportunities to network, share ideas and resources, and be a voice for arts in hospitals in the UK and beyond. From 2024, the network is hosted by NHS Charities Together, working closely with national arts in health organisations to establish national guidelines, and to lobby for greater recognition of the proven value of the arts in healthcare services.



Laura Waters, University Hospitals of Derby and Burton NHS FT, UK



## **BREAKFAST AND LUNCHTIME DESIGN WORKSHOPS**

**Council Chamber** 

Monday 10 June 12.45-13.50 Design innovation in healthcare furniture

### Organised by: mimedical

What will be the key future drivers for innovation in the design of healthcare furniture? How will new legislation and directives for meeting sustainability and net-zero requirements, as well as corporate social responsibility, impact on the marketplace to drive innovation in materials, aesthetics, eco-manufacturing processes, cost reduction and new features, from wireless charging points to seat height adjustment.

At EHD 2023, we explored in this workshop how furniture in clinical environments is often dated and drab, favouring low-cost functionality at the expense of well-designed, attractive alternatives, and perpetuating an institutional feeling in our healthcare buildings. In this year's session we'll explore in more depth the drivers and barriers for innovation that can raise the bar and set a new design standard, from procurement to greater clinical and patient engagement in the design process.

Is it time to reset the traditional "contract NHS chair" offering? How do we change the way furniture is procured to allow more innovative furniture to be tendered? How do we change a procurement culture that encourages suppliers to offer a low-cost, institutional, standard spec and discourages more innovative solutions?

Familiarity and cost are too often the driving factors when procuring furniture, so how do we embed a more patient-focused, life-cycle value proposition in the way hospitals procure? How do we also engage clinicians, users, and patients and their families in the design of healthcare furniture, and test their application? Can better feedback processes be established to support new design innovation?

We will also review the current processes for educating users about what furniture solutions are available on the market. Can we change/ improve the way we conduct furniture roadshows? Is the "village hall" option the right way to go? Could VR be used to demonstrate in real time how a piece of furniture looks in (virtual) situ, allowing the enduser to review multiple brands, models, colours schemes and finishes, negating the need for logistically challenging roadshows?

Panel: Rose Jago, Andrew Bertram, Matthew Hammond, MJ Medical, UK Tuesday 11 June 07.30-08.45 Transformative military healthcare design – operating for military readiness

Organised by:

Global military operations demand a resilient healthcare infrastructure. Many military hospitals across Europe and the globe are outdated, often designed during the Cold War era. Using several military medical facilities, including the Rhine Ordnance Barracks Medical Center Replacement (ROBMCR) in Landstuhl, Germany and the Brian D. Allgood Army Community Hospital at Camp Humphreys in Pyeongtaek, Korea as case studies, we'll explore how to navigate the intricate balance needed to accommodate modern military design requirements, overlapping building codes, and patient needs with adaptability, creativity, and resilience.

Focusing on the evolving healthcare infrastructure around the globe, the session examines how regulatory factors shaped the design and implementation of military medical facilities. This exploration not only sheds light on the design methodology but also unravels the tangible outcomes and broader implications of the facility, contributing valuable insights to the ongoing discourse on optimising military healthcare infrastructure worldwide.

Panel: Burkhard Musselmann, HDR, Germany Simon Trumble, HDR, USA David Kurten, HDR, USA Christopher Kiss, Defense Health Agency, USA Susana Erpestad, HDR, USA

#### Tuesday 11 June 12.45–13.50 Design standardisation vs innovation: Finding the right balance

Organised by:

# **Jacobs**

There is often a tension between standardisation and customisation/ innovation of healthcare design delivery processes. Standardised design can offer templates to enable theoretically lower design costs and faster approval times. The hope is for greater reliability, improved efficiency, and better outcomes. On the other hand, excessive standardisation may restrict customisation to geography, cultural factors, clinical practices, and operational specificities. The challenge is how to achieve the right balance.

The goal of this workshop will be to integrate existing data with stakeholder viewpoints and expertise in order to enrich the themes around standardisation and innovation. A health economist, clinician, healthcare architect, and operator/policymaker will provide subject matter expertise. Four domains will be explored: 1) challenge identification, 2) evidence, 3) resources, and 4) stakeholder engagement. Several subthemes within each domain will also be discussed, for example: What is the evidence for standardisation? How do we integrate a system of peer review / quality control prior to wide-scale implementation? What are the clinical costs and operational implications of a standardised approach? How do we preserve and foster innovation in a standardised approach to health buildings? Can a design standardisation process accommodate the needs, preferences, and circumstances of the individuals and local communities these buildings serve?

Parallels will be drawn to other industries – for example, in clinical medicine, which has seen a shift towards standardisation of clinical policies and care delivery. The outcomes from the workshop will integrate technically, logistically, and financially feasible options with known evidence, and consideration for value preferences in order to gain balanced stakeholder representation when considering innovation and design standardisation.

Chair: Matthew Holmes, Jacobs, Australia Panel: Stephen Farrington Bell, PA Consulting UK Jane McElroy, NBBJ, UK Dr Tom Best, King's College Hospital, UK Fiona Daly, NHS England, UK

# **STUDY TOURS**



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

Participants in the European Healthcare Design 2024 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: BRIGHTON (Maximum 20 participants)

#### Louisa Martindale Building (Brighton 3Ts Phase 1) (pictured right top and centre)

BDP's multidisciplinary team, in collaboration with Laing O'Rourke, has designed and delivered a major addition to the Royal Sussex County Hospital site in Brighton's Kemptown conservation area.

The £480m Teaching Trauma and Tertiary Care Centre (3Ts), now known as the Louisa Martindale Building, constitutes the first of three phases in the redevelopment of the southern half of the campus. The overall development will double the healthcare accommodation to 361 beds, (75 per cent single, en-suite rooms), while also providing a new HQ, university teaching / research facilities and 390 basement parking spaces. A campus-wide logistics and engineering strategy also includes a central FM hub and energy centre.

The strategic use of modular and off-site construction anticipated the current NHP drive for standardisation, reducing construction costs without compromising design quality or the projects' ability to respect and respond to the sensitive site context. Floors, columns, facades, bathrooms, service risers, and horizontal distribution are all pre-fabricated, improving site safety, construction quality and installation times.

BDP is also currently engaged in the detailed design of Phases 2 and 3 to relocate and expand the Sussex Cancer Centre and campus FM functions.

#### 18 Mole Business Park (pictured right bottom)

18 Mole Business Park (18 MBP) in Leatherhead is the latest in a network of nine community hubs to be opened since 2016 by Surrey and Borders Partnership NHS Foundation Trust (SABP) across Surrey and North East Hampshire. The programme supports most of the Trust's community mental health and learning disabilities services for people of all ages.

Following a full strip-out of the existing 1980s building back to its shell and core, the building reopened in June 2023. The central aim of this project was to provide a centrally located, modern and therapeutic clinical hub for people who use our services, their families, and carers, across central Surrey and to provide good-quality office accommodation for the Trust's corporate services.

Following the full strip-out, there was a Cat A office refurbishment, involving upgrading toilet cores and circulation areas, and the complete renewal of mechanical and electrical engineering services, including primary plant and equipment. Subsequently, a Cat B office refurbishment was also undertaken, which provided a variety of rooms and open-plan working environments, meeting rooms, breakout areas, staff rest and cafe areas, plus specialist training facilities, which are fully digitally enabled.



## STUDY TOUR 2: BATH (Maximum 20 participants)

#### Dyson Cancer Centre (pictured top)

IBI Group is the architect of the new Dyson Cancer Centre at the Royal United Hospital (RUH), in Bath.

The Royal United Hospitals Bath NHS Foundation Trust provides general acute and emergency care for around 500,000 people in Bath and the surrounding towns and villages. The Trust's vision calls for 'A new state-of-the-art facility for cancer diagnostics and treatment set within an enhanced greenspace for the campus. The new cancer buildings will house all elements of the cancer pathway under one roof, enabling the provision of holistic care and efficiencies in service pathway design'.

In 2010, IBI began developing the RUH's estates strategy and development control plan to orchestrate the renewal of the southwest and north of the estate. The site for the new Dyson Cancer Centre was partially occupied by the old therapies building and the existing cancer centre, so development has been phased to allow for gradual occupation and demolition, and the new cancer centre is the concluding part of that strategy.

#### Royal National Hospital for Rheumatic Diseases (pictured centre)

The new centre on the RUH Combe Park estate combines existing therapies services at the RUH with those of the Royal National Hospital for Rheumatic Diseases (RNHRD), affectionately known to many as 'The Min'.

Situated next to the main entrance of the RUH, and opposite the proposed new Dyson Cancer Centre, the building accommodates general therapies, hydrotherapy, rheumatology and pain management services. Different therapies required treatment spaces to be designed with quite different atmospheres. For example, a gym connects to a patients' courtyard where, weather permitting, patients are encouraged to exercise. These 'active' spaces contrast with more 'therapeutic' ones, such as the hydrotherapy pool hall, where bathers overlook a tranquil secret garden. This sensory approach benefits the overall wellbeing of patients, whereas the zoning supports the Trust's model of care.

The new building's interior design and arts strategy is inspired by the rich heritage of the RNHRD, which dates to 1738. Sustainable design features include optimised natural ventilation with rooftop wind catchers, photovoltaic arrays to generate electricity onsite, and a 'BluRoof' stormwater management system.

#### Dyson Neonatal Centre (pictured bottom)

The Dyson Centre for Neonatal Care has been transferred from a small, cramped facility into a pioneering new home. The project has resulted in a dramatically different and improved environment, in which the Royal United Hospital can care for the 500 premature and sick babies who arrive each year.

A holistic approach has generated a low-carbon building within which the careful use of materials, light, scale, and intimacy of spaces generates a calm and caring atmosphere, allowing staff to care for patients and enabling parents to be part of the process.

The Dyson Centre presented the rare opportunity to quantify the impact of a new building by collecting data sets in the old facility and repeating the exercise on completion of the new building. This research, funded by the Dyson Trust and undertaken by the RUH, has delivered compelling evidence that quality of environment has a direct impact on clinical outcomes.

## **STUDY TOUR 3: TO BE CONFIRMED SHORTLY**





By blending in-person participation with a fully immersive digital experience on SALUS TV, this year's Congress will build on last year's new and enhanced opportunities for knowledge exchange, professional development and networking.

The 10th European Healthcare Design 2024 Congress, Awards & Exhibition is returning to the prestigious Royal College of Physicians in London, UK.

The venue is expected to sell out quickly, as world-leading practitioners, researchers and policy thinkers from around the world will join the event in person as delegates and as speakers to give talks, present posters, and participate in panels and workshops.

But with a live conference stream on SALUS TV feeding into our fully integrated virtual event platform, delegates will have the choice, just like last year, of whether to participate in person or virtually, providing new opportunities to access talks and expert content from anywhere in the world.

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

#### INTUITIVE USER INTERFACE

#### Easy to engage in sessions no matter where you are

Our intuitive hybrid event platform is designed to highlight key events and enable attendees to drill down to sessions of specific interest. Virtual and in-person attendees can engage in sessions using engagement tools, such as live polls, chats and Q&A.

#### NATIVE MOBILE APP

#### A fully immersive experience

In-person and virtual attendees will be able to download a native, branded mobile application to browse session listings, connect and message other participants, both on-site and virtually, and view sponsors, partners, exhibitors and the programme agenda. The mobile application complements the day of in-person experience while enabling virtual attendees to engage on the move.

#### **ON-DEMAND CONTENT**

#### Choose when to view talks and sessions

All registered participants will also receive virtual access to both live streaming and video recordings of all sessions for on-demand viewing for three months after the event. So, as an in-person delegate, choosing one parallel session or stream no longer means you have to miss viewing the talks in the other streams.

#### **CONNECT WITH MORE PEOPLE**

#### Foster connections both online and offline

Connect and foster engagement with fellow attendees, virtually and in-person, throughout the event. Attendees have multiple options to connect and message other attendees in-person, or connect with each other virtually via 1-1 chats, video calls, rooms and lounges. All attendees can also enjoy our leaderboard, which ranks who is most active virtually during the Congress.



## **DELEGATE REGISTRATION**

A range of in-person tickets are available in three categories: Public Sector; Event Partner; and Commercial, with options to also book the garden party or study tours. Virtual tickets to view the live stream and recordings are also available. Registration is open now with Early Bird savings until 25 April. Visit **www.europeanhealthcaredesign.eu** to register today.

#### **Public Sector and Event Partner discounts**

Eligible event partner members include: Architects for Health, Australian Health Design Council, New Zealand Health Design Council, Health Planning Academy and European Health Property Network.

Please select the correct ticket type at **www.europeanhealthcaredesign.eu** 

#### Virtual group discounts

Virtual (2-day tickets only): Discounts for 3 (10%); 5 (15%) or 10 or more (25%) on application at info@europeanhealthcaredesign.eu

Please note: A discount code may only be used once by the same user. All ticket prices are exclusive of VAT.

#### In-person registration

Commercial Rate:

## Virtual registration

Early Bird rates (until 25 April):

Single Rate:

Early Bird rates (until 25 April):	2-day ticket: £645 1-day ticket: £445
Standard rates (from 26 April):	2-day ticket: £745 1-day ticket: £545
<b>Public Sector Rate:</b> Early Bird rates (until 25 April):	2-day ticket: £495 1-day ticket: £325
Standard rates (from 26 April):	2-day ticket: £595 1-day ticket: £425

### Event Partner Rate:

Early Bird rates (until 25 April):	2-day ticket: £595 1-day ticket: £395
Standard rates (from 26 April):	2-day ticket: £695 1-day ticket: £495

Standard rates (from 26 April):	2-day ticket: £225 1-day ticket: £135
Garden Party:	£135
Study Tour Rates: Study Tour 1:	£195
Study Tour 2:	£195
Study Tour 3:	To be advised



2-day ticket: £175 1-day ticket: £95



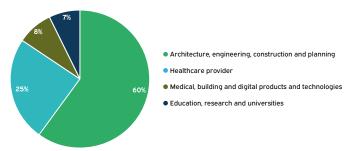


# **SPONSORSHIP AND EXHIBITION**

# By sponsoring or exhibiting at EHD2024, your organisation will be supporting in the creation and exchange of knowledge between 1000 of the world's leading health researchers, practitioners and policymakers.

A knowledge-led approach to sponsorship creates opportunities to build your thought leadership programme and align your brand with a range of content-focused offerings through both the in-person and live/ on-demand event broadcast, including: themed sessions and posters; workshops; study tours; and networking events, such as the Welcome Reception, the Garden Party, and lunchtime networking sessions.

These can be combined with other exciting branding opportunities to raise the visibility of your organisation, such as an exhibition stand (limited availability), conference bag and lanyard sponsorship, or advertising online or in the printed Final Programme.



Integrating your physical exhibition stand with your virtual stand in our virtual event platform enables you to reach delegates in-person and online, to promote and provide education on your latest technologies, products and projects before, during and up to three months after the event closes. In a truly immersive experience, on your virtual stand, you'll have the opportunity to feature:

- · videos, literature and product content;
- live chat and the ability to connect and message both in-person and virtual delegates;
- $\cdot$  ~ live video calls and product demos with virtual delegates;
- digital branding; and
- · contact information and social media links.

Each sponsorship and exhibition opportunity also includes in-person and virtual delegate passes to support your own team's professional



and business development, while you can also offer them to your healthcare clients and partners.

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

A range of sponsorship and exhibition packages are still available from £2500-£15,000 with discounts on purchases of two packages or more.

#### Awards sponsorship

By sponsoring the EHD2024 Awards, you can show your support and recognition of the outstanding performances of the award winners, aligning your brand in UK, European and international markets around the values of design excellence and innovation.

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

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

To view available packages, contact: Marc Sansom at marc@salus.global or visit: www.europeanhealthcaredesign.eu



## What our attendees say...

"Strengths of the Congress were the real world examples presented in framing a concept or theme that could then be debated. I enjoyed the opportunity to see the breadth of practice and thinking" Christopher Chiswell, Birmingham Women's and Children's NHS FT. UK

"The networking and learning about what was happening in health in different countries were excellent" **Clinton Greene, Turner and Townsend, UK** 

"Attending virtually meant I was able to attend all sessions either live or at a later time, and therefore I had a full experience of the presentations" Samantha Robinson, Oxford Health NHS FT, UK

## **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

We have agreements with the Holiday inn Regents Park for a limited number of discounted room rates for delegates at the Congress. Rooms are available to book until a provisional date of 12 May.

The hotel is within walking distance of the conference venue.

On receipt of your registration, a link/code will be provided to enable you to book your accommodation at the below rates. Please book early to avoid disappointment.

All room rates are VAT inclusive.

Regrettably, we have been unable to reach an agreement with the usual congress hotel, the Melia White House which is the closest hotel to the venue. Enquiries can however be made by contacting Maria Dominguez, associate director of sales at maria.dominguez@melia.com or on 07885 556347

We can also provide a list of alternative accommodation, please contact info@europeanhealthcaredesign.eu

Holiday Inn Regents Park Double room with breakfast £272



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AWARD CATEGORY PARTNERS



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For further enquiries on the event programme, sponsorship or exhibition opportunities, contact: SALUS Global Knowledge Exchange T: +44 (0)1277 634176 E: info@europeanhealthcaredesign.eu

Construction Specialties

www.europeanhealthcaredesign.eu

# ROYAL COLLEGE OF PHYSICIANS LONDON 10-12 JUNE 2024 **EUROPEAN HEALTHCARE DESIGN**

**RESEARCH • POLICY • PRACTICE** 



For online registration and fees, please visit www.europeanhealthcaredesign.eu **Extended Early Bird discounts are available** until 25 April for public-sector delegates or members of Architects for Health For exhibition and sponsorship enquiries, contact info@europeanhealthcaredesign.eu