

cht
2023

child health technology
CONFERENCE
08 - 09 NOVEMBER 2023

BUILDING A GLOBAL CHILD HEALTH
TECHNOLOGY COMMUNITY



FULL PROGRAMME

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WELCOME



It is my great pleasure to welcome you to the 3rd Child Health Technology Conference, CHT 2023. Last year's conference was hugely successful in fulfilling our aim of building a Global Child Health Technology Community. Over the last two conferences we have welcomed delegates and speakers from 27 countries and across multiple continents to speak about the amazing innovation and technology development to improve the health and healthcare of children and young people. To ensure we maintain the opportunity for our global community to attend we have continued to deliver our conference on a virtual platform.

This year we aim to build on our global community in child health technology, with a focus on key areas we have chosen from feedback from delegates. These include the hugely important topic of inclusion of children and their families in technology development, and a focus on developing low cost

and high impact technologies to ensure that we can meet the demands of international healthcare systems. Additionally, we will delve into the integration of physical and mental health priorities in child health technologies, explore pathways for effective commercialisation, and showcase technologies that have already transformed paediatric care.

Our two-day conference will host keynote presentations from international leaders in the field, informative seminars grounded in our conference themes, practical demonstrations showcasing cutting-edge technologies, and our immensely popular innovation panel discussion.

The pace at which the world and global healthcare are evolving is unprecedented. The resurgence of interest in artificial intelligence is propelling a data revolution that will profoundly influence the future of healthcare. It is incumbent upon us to collaborate and ensure that child health innovation and technology development are not left behind. Together, we can ensure that the children and young people we care for receive the very best healthcare across the globe.

A stylized, handwritten signature in black ink, appearing to be 'P. Dimitri'.

Professor Paul Dimitri
Founder of the Child Health
Technology conference

WEDNESDAY 8TH NOVEMBER

ON DEMAND CONTENT

Global CHT Centres of Expertise, Posters, Sponsors and Networking Padlet are available any time.

LIVESTREAM CONTENT

TIME (GMT)	SESSION	DETAILS
08:40 - 08:45	Welcome	Professor Paul Dimitri Director, <i>NIHR Children & Young People MedTech Co-operative, UK</i>
08:45 - 09:25	Breakfast Seminar	Pediatric Moonshot Dr Timothy Chou Founder, <i>Bevelcloud, USA</i> Empowering children & young people with the potential of digital health Liz Ashall-Payne Founding CEO, <i>Orcha Health, UK</i>
09:25 - 09:30		BREAK
09:30 - 09:35	Welcome	Professor Paul Dimitri Director, <i>NIHR Children & Young People MedTech Co-operative, UK</i>
09:35 - 10:05	Keynote	Towards personalised preventative pathways for children's mental health Dr Anna Moore Assistant Professor in Child Psychiatry and Medical Informatics, <i>University of Cambridge, UK</i>
10:05 - 10:50	Seminar	An overview of regulatory requirements for medical technologies Dr Clare Lankester Regulatory Expert in Residence, <i>University of Sheffield, UK</i> A practical introduction to key standards Emma Glass University Partnerships Manager for Healthcare Technologies, <i>British Standards Institution, UK</i>
10:50 - 11:00		BREAK

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WEDNESDAY 8TH NOVEMBER

LIVESTREAM CONTENT *continued*

TIME (GMT)	SESSION	DETAILS
11:00 – 11:45	Seminar (Sponsored by Merck)	Engaging & supporting children and young people through digital health Professor Paul Dimitri Director, <i>NIHR Children & Young People MedTech Co-operative, UK</i> Case studies of growth hormone deficiency in children Dr Antonio de Arriba Muñoz Paediatric Endocrinologist, <i>Miguel Servet Hospital, Spain</i> AI innovation opportunities for children Dr Diana Ferro PhD Research and Data Scientist, <i>Bambino Gesù Children Hospital, Italy</i>
11:45 – 11:55	Abstract	Parental experiences of paediatric surgery: What challenges do families face, and how the Little Journey app addresses them Phoebe Chatfield <i>University College London, UK</i>
11:55 – 12:05	Abstract	Technology as a helping hand: Impacts of assistive devices for young people with JIA Ursula Ankeny Design researcher & PhD student, <i>Sheffield Hallam University, UK</i>
12:05 – 12:15	Abstract	Critical review of socially assistive robots in autism spectrum disorder screening and diagnosis: Preliminary results Roberto Vagnetti <i>Nottingham Trent University, UK</i>
12:15 – 12:35	Technology Demonstration	Soft Prosthetics: A new approach to children's prosthetics Nate Macabuag Founder, <i>Koalaa, UK</i>
12:35 – 13:15		BREAK
13:15 – 13:20	Welcome	David Cole, MBA Co-Founder, <i>Thinking of Oscar</i> , Director, <i>TOO Futures Ltd, UK</i>

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WEDNESDAY 8TH NOVEMBER

LIVESTREAM CONTENT *continued*

TIME (GMT)	SESSION	DETAILS
13:20 - 14:00	Seminar	Using augmented reality and gamification to reduce anxiety for young patients Dominic Raban (Presenter) CEO, <i>Xploro Inc, USA</i> Dr Stefan Agamanolis (Live Q&A) Chief Strategy Officer, <i>Xploro Inc, USA</i>
14:00 - 14:30	Keynote	The virtual skin biopsy: transforming the treatment of skin diseases in children Professor Michael Cork Consultant Dermatologist and Head of Sheffield Dermatology Research, <i>Sheffield Children's Hospital and University of Sheffield, UK</i>
14:30 - 14:55	Technology Demonstration	Hibi: Smart care management tools and AI-driven personalised guidance Uzay Macar (Presenter) Co-Founder and CTO, <i>Hibi Health Ltd, UK</i> Sam Milliken-Smith (Live Q&A) Co-Founder and CEO, <i>Hibi Health Ltd, UK</i>
14:55 - 15:05	BREAK	
15:05 - 15:15	Abstract	A hands-free neonatal doppler to determine the heart rate immediately after birth David Hutchon <i>Sheffield Hallam University, UK; Sheffield Children's Hospital NHS Foundation Trust, UK</i>
15:15 - 15:25	Abstract	'Cystic fibrosis you decide': Co-designing an online resource to support understanding of newborn screening advances Rachael Hughson-Gill PhD researcher, <i>ICC Research Centre for Arts, Memory and Communities (AMC), Coventry University, UK</i>
15:25 - 15:35	Abstract	MIROR: Automatic brain tumour diagnosis with functional imaging and machine learning Dr Dadi Zhao <i>Children's Brain Tumour Research Team, University of Birmingham, UK</i>

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WEDNESDAY 8TH NOVEMBER

LIVESTREAM CONTENT *continued*

TIME (GMT)	SESSION	DETAILS
15:35 - 16:15	Seminar	<p>Insigneo Professor Jim Wild Professor of Magnetic Resonance Physics; Executive Director, <i>Insigneo Institute for in-silico Medicine, UK</i></p> <p>The South Yorkshire Digital Health Hub Professor Tim Chico Professor of Cardiovascular Medicine & Hon. Consultant Cardiologist, <i>University of Sheffield, UK</i>; Director, <i>EPSRC South Yorkshire Digital Health Hub, UK</i></p> <p>Technology to transform paediatric healthcare: Unlimited potential and big obstacles Dr James Taylor Clinical Research Scientist, <i>Google</i>; Professor Emeritus, <i>University of Washington, USA</i></p>
16:15 - 17:00	Panel Discussion	<p>Conditions for Innovation Live recording of the 'Not Mini Adults' podcast Chaired by David Cole, MBA Co-Founder, <i>Thinking of Oscar</i>; Director, <i>TOO Futures Ltd</i> Panel guests: Pilar Puig-Sàrries, Leanne West, Dr Jason Berman</p>
17:00 - 17:05		CLOSE

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THURSDAY 9TH NOVEMBER

ON DEMAND CONTENT

Global CHT Centres of Expertise, Posters, Sponsors and Networking Padlet are available any time.

LIVESTREAM CONTENT

TIME (GMT)	SESSION	DETAILS
08:40 - 08:45	Welcome	Professor Wendy Tindale OBE Scientific Director, <i>Sheffield Teaching Hospitals</i> , Director, <i>NIHR Devices for Dignity MedTech Co-operative, UK</i>
08:45 - 09:25	Breakfast Seminar	Innovating to reach Net Zero Kathy Scott Deputy CEO, <i>Health Innovation Yorkshire & Humber, UK</i> Fuelling a thriving health ecosystem for health & economic growth Neville Young Director of Enterprise & Innovation, <i>Health Innovation Yorkshire & Humber, UK</i>
09:25 - 09:30	BREAK	
09:30 - 09:35	Welcome	Professor Wendy Tindale OBE Scientific Director, <i>Sheffield Teaching Hospitals</i> , Director, <i>NIHR Devices for Dignity MedTech Co-operative, UK</i>
09:35 - 10:20	Seminar	Digital exclusion: Minimum digital living standards and household wellbeing Professor Simeon Yates Professor of Digital Culture Communication and Media, <i>University of Liverpool, UK</i>
10:20 - 10:50	Keynote	Improving the mental health of children and young people – HealthTech’s impact, barriers and opportunities Nicky Runeckles Digital Health Consultant and Managing Director, <i>Monticola, UK</i>

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THURSDAY 9TH NOVEMBER

LIVESTREAM CONTENT *continued*

TIME (GMT)	SESSION	DETAILS
10:50 - 11:15	Technology Demonstration	Envisionit Deep AI: A holistic approach to AI Dr Jaishree Naidoo CEO, <i>Envisionit Deep AI Ltd, South Africa</i>
11:15 - 11:25		BREAK
11:25 - 11:50	Keynote	Driving remote digital care transformation in paediatric ophthalmology Dr Damien Yeo Consultant Paediatric Ophthalmologist, <i>Alder Hey Children's NHS Foundation Trust, UK</i>
11:50 - 12:00	Abstract	James Lind Alliance Priority Setting Partnership: Digital Technology for Adolescents and Young Persons with IBD Jacob Branchflower Project Manager, <i>NIHR Children & Young People MedTech Co-operative, UK</i>
12:00 - 12:10	Abstract	Soundfields: A virtual reality home-based intervention for auditory hypersensitivity Amelia Taylor & Sophie Schumann <i>Child Oriented Mental Health Innovation Collaborative (COMIC) and Leeds and York Partnership NHS Foundation Trust, UK</i>
12:10 - 12:20	Abstract	3D-designed custom-made modular headgear for children using non-invasive ventilation [the "comfort" project] Professor Heather Elphick Consultant in Paediatric Respiratory and Sleep Medicine, <i>Sheffield Children's Hospital, UK</i>
12:20 - 13:00	Seminar	Using predictive analytics to improve access to healthcare and optimise elective activity Anne Marie Davies Innovation & Inequalities Programme Manager, <i>Alder Hey Children's Hospital and Children's Hospital Alliance, UK</i> David Cole, MBA Co-Founder, <i>Thinking of Oscar</i> , Director, <i>TOO Futures Ltd, UK</i>
13:00 - 13:40		BREAK

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THURSDAY 9TH NOVEMBER

LIVESTREAM CONTENT *continued*

TIME (GMT)	SESSION	DETAILS
13:40 - 13:45	Welcome	Professor Paul Dimitri Director, <i>NIHR Children & Young People MedTech Co-operative, UK</i>
13:45 - 13:50	ANNOUNCEMENT OF NIFTY FOX AWARD WINNER	
13:50 - 14:05	Technology Demonstration	Optimising sensory environment for sick preterm babies in NICUs Professor Dr Merle Fairhurst (Presenter) Junior Professor in Cognitive Neuroscience, <i>CeTI, Technische Universität Dresden, Germany</i> Dr Zeshan Qureshi (Live Q&A) Paediatrician, <i>NHS, Tendertouch, UK</i> Wenhan Sun (Live Q&A) Empirical Philosopher, <i>TenderTouch, UK</i>
14:05 - 14:40	Keynote	AI technology into the future: What is our role as paediatricians? Dr Sandra LJ Johnson Developmental Paediatrician and Clinical Academic, <i>University of Sydney Faculty of Medicine and Health Science, Australia</i>
14:40 - 15:20	Seminar	'Proof of Concept' projects in child mental health Canopie Dr Anita D'Urso (Presenter) Consultant Clinical Psychologist and Lead Psychologist, <i>East Midlands Neonatal ODN, UK</i> Dr Ruth Butterworth (Live Q&A) Consultant Clinical Psychologist and Network Psychology Lead, <i>North West Neonatal ODN, UK</i> Nell and the Neonatal Unit Dr Ria Evans Fry Neonatal Sub Specialty Trainee, <i>Birmingham Women's and Children's NHS Trust, Child Health Innovations, UK</i> Dr Jacinta Cordwell Consultant Clinical Psychologist, <i>Thames Valley and Wessex Neonatal ODN, Child Health Innovations, UK</i> Educate Diabetes Lee Paxman-Clarke Co-Founder and Director, <i>HEAL.med CIC, UK</i>

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THURSDAY 9TH NOVEMBER

LIVESTREAM CONTENT *continued*

TIME (GMT)	SESSION	DETAILS
15:20 - 15:30		BREAK
15:30 - 15:50	Spotlight Talk	Experiences and advice from young people involved in health research Chaired by Rosie Sobieraj Senior Communications Officer, <i>Sheffield Children's Hospital, UK</i> Ember, Rebecca, Dylane and Rebekah Sheffield Children's Hospital Youth Forum, <i>Sheffield Children's Hospital NHS Foundation Trust, UK</i>
15:50 - 16:10	Spotlight Talk	Luckie Tech: Technologies for life Joel de Oliveira Jr Founder, <i>Luckie Tech, Portugal</i>
16:10 - 16:20	Abstract	The Rebel Hand Project Matthew Dyson <i>Rebel Hand Bionics, UK</i>
16:20 - 16:30	Abstract	Advancing and disentangling PPIE in medtech innovations through design-led methodologies: The ICER Framework Cara Shaw, Farnaz Nickpour <i>University of Liverpool, UK</i>
16:30 - 16:40	Abstract	Progressing dynamic diagnosis of inducible laryngeal obstruction in children Dr Nicki Barker Advanced Physiotherapist and Principal Clinical Researcher, <i>Sheffield Children's NHS Foundation Trust, UK</i>
16:40 - 17:10	Keynote	Pediatric Health Technology Innovation - Lessons from US Dr James Wall Associate Professor of Surgery (Pediatric Surgery), <i>Stanford University, USA</i>
17:10 - 17:20		CLOSE

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