



childhealthtechnology

CONFERENCE

VIRTUAL

2-5 MARCH 2021

WHERE RESEARCH, INNOVATION, AND COLLABORATION  
LEAD TO A BRIGHTER FUTURE



FULL PROGRAMME

**NIHR** | Children and Young People  
MedTech Co-operative

Marketing  
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# WELCOME

I am very excited to bring you the first Child Health Technology Conference, Child Health Technology 2021 (CHT2021).

CHT2021 will bring together healthcare professionals, industry experts, engineers, designers, academics, and patient representatives around one of the most exciting and fast moving fields in healthcare today.

Join us for inspirational keynote talks from leading experts, seminars on a wide range of topics, latest research findings in child health technology from academic teams around the globe, live Q&A, and technology demonstrations.

As the Director of NIHR Children and Young People MedTech Co-operative, Professor of Child Health, and Director of Research and Innovation at Sheffield Children's NHS Foundation Trust, I have led on national technology networks that focus on the development and adoption of technology for paediatrics and child health through private and public sector collaboration.

It's an exciting time to be part of our journey and I hope you can join us and help shape the future of child health technology.



A stylized, handwritten signature in black ink, consisting of a large, bold letter 'P' followed by a series of fluid, sweeping lines that extend to the right.

**Professor Paul Dimitri**  
CHT2021 Founder

# DAY ONE TUESDAY 02 MARCH

## ON DEMAND CONTENT

**12.00 - 18.00:** Innovation Partnership Zone, Posters and Sponsors are available any time.

## LIVESTREAM PROGRAMME

Time	Session	Details
12.00 - 12.05	<b>Welcome</b>	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>
12.05 - 12.50	<b>Lunchtime Seminar</b>	<b>'Supporting children and young people's mental health in the internet age, at the time of a pandemic, and beyond'</b> Dr James Woollard National Specialty Advisor for Digital Mental Health, <i>NHS England</i>
12.50 - 13.00	<b>BREAK</b>	
13.00 - 13.15	<b>Welcome to the Conference</b>	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>
13.15 - 13.45	<b>Keynote</b>	<b>'Advancing the future of paediatric healthcare'</b> Professor Russell Viner President, <i>Royal College of Paediatrics and Child Health</i>
13.45 - 14.25	<b>Seminar</b> Digital child health: Data and app technology	<b>'Digital Child Health Embracing Digital Health Apps'</b> Liz Ashall Payne Co-Founder and CEO, <i>ORCHA</i>
		<b>'Real world issues for implementing advanced analytics and healthtech'</b> Professor Neil Sebire Professor of Pathology and Director of the Digital Research, Informatics and Virtual Environments Unit, <i>UCL Great Ormond Street Hospital Institute of Child Health</i>

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# DAY ONE TUESDAY 02 MARCH

## LIVESTREAM PROGRAMME, continued

Time	Session	Details
14.25 - 14.35	<b>BREAK</b>	
14.35 - 15.15	<b>Seminar</b>	<b>'Design for child health technology'</b> Jim Dawton Director, <i>Impeller Ventures</i>
15.15 - 15.45	<b>Technology Demonstration</b>	<b>Virtual reality for upper limb injury</b> Ivan Phelan Director of the Impact VR Lab and Research Associate in Games and App Development, <i>Sheffield Hallam University</i>
15.45 - 15.55	<b>BREAK</b>	
15.55 - 16.25	<b>Abstract Presentations</b>	<p><b>'Robot Interaction Effects on Children Experiencing a Stressful Situation (RECESS)'</b> Katarzyna Kabacińska PhD Student, <i>University of British Columbia</i></p> <p><b>'Custom-made Masks for Non-Invasive Ventilation (NIV) for Children'</b> Professor Heather Elphick Professor of Paediatric Respiratory and Sleep Medicine, <i>Sheffield Children's NHS Foundation Trust</i></p> <p><b>'Neonatal wireless transmission system'</b> Dr Oliver Bonner Postdoctoral Research Associate, <i>University of Cambridge</i></p> <p><b>'Developing a child and young person centred mobile health rare disease application: the childhood uveitis passport'</b> Miss Ameenat Lola Solebo Consultant in Paediatric Ophthalmology, <i>Great Ormond Street Hospital for Children NHS Foundation Trust</i></p>

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# DAY ONE TUESDAY 02 MARCH

## LIVESTREAM PROGRAMME, continued

Time	Session	Details
16.25 - 16.55	Keynote	<b>'Innovation to transform the NHS'</b> Professor Tony Young National Clinical Lead for Innovation, <i>NHS England</i>
16.55 - 17.10	Seminar	<b>'Funding Industry-led Innovation in Child Health'</b> Richard Hebdon Interim Deputy Director of Health and Life Sciences, <i>Innovate UK</i>
17.10 - 17.15	Close	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>

# DAY TWO WEDNESDAY 03 MARCH

## ON DEMAND CONTENT

**12.00 - 18.00:** Innovation Partnership Zone, Posters and Sponsors are available any time.

## LIVESTREAM PROGRAMME

Time	Session	Details
12.00 - 12.45	<b>Lunchtime Seminar:</b> Participatory healthcare and multi-professional collaboration to guide technology outcomes for growth disorders	<b>'Use of Massive Online Open Courses to support digital health literacy. Development, Implementation and lessons learned'</b> Professor Shabbir Syed-Abdul Professor of Artificial Intelligence & Digital Health, <i>Taipei Medical University</i>
		<b>'Using multi step participatory design virtual workshops for development of eHealth framework for managing pediatric growth disorders and growth hormone therapy'</b> Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>
		<b>'Changing digital management of patients with GHD in the changing world. Where ehealth can help?'</b> Dr Quentin Le Masne Product Development Lead, <i>Connected Health and Devices Unit at Merck</i>
12.45 - 13.00	<b>BREAK</b>	
13.00 - 13.05	<b>Welcome</b>	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>
13.05 - 13.35	<b>Keynote:</b> A young person's experience of using child health technology	<b>'A young person's experience of using child health technology and hopes for the future'</b> Simon Stones <i>Patient Advocate and Consultant</i>

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# DAY TWO WEDNESDAY 03 MARCH

## LIVESTREAM PROGRAMME, continued

Time	Session	Details
	Keynote, <i>continued</i>	<b>'Young People Shaping Health Technology Research'</b> Benjamin James Duchenne Patient Advocate
13.35 - 14.05	Abstract Presentations	<b>'Development of Hacka Health 4 CF using a user centred design strategy'</b> Sarah Rand Research Lead, <i>Innerstrength Health Ltd</i>
		<b>'The impact of virtual reality on psychological and physiological variables in children receiving chemotherapy'</b> Dr Sándor Erdős PhD Fellow, <i>Semmelweis University</i>
		<b>'User-Led Evaluation of Application Technology to Support Youth Mental Health (ELEVATE-MH)'</b> Katarzyna Kabacińska PhD Student, <i>University of British Columbia</i>
		<b>'Predicting Long Length of Stay in a Paediatric Intensive Care Unit Using Machine Learning'</b> Abigail East PhD Student, <i>University College London</i>
14.05 - 14.15	BREAK	
14.15 - 14.45	Technology Demonstration	<b>Sheffield Robotics</b> Professor Tony Prescott & Dr Michael Szollosy Sheffield Robotics, <i>University of Sheffield</i>
14.45 - 15.15	Keynote	<b>'NIHR: Supporting user-centred technology research and development'</b> Dr Louise Wood CBE Director of Science, Research and Evidence, <i>Department of Health and Social Care</i>

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# DAY TWO WEDNESDAY 03 MARCH

## LIVESTREAM PROGRAMME, continued

Time	Session	Details
15.15 - 15.55	<b>Seminar:</b> Robotics for child healthcare	<b>'Robots for tissue repair and regeneration'</b> Dr Dana Damian Director, <i>Sheffield Biomedical Robotics Lab</i>
		<b>'The potential of robots for children with disabilities: how far are we and what is the future?'</b> Professor Luc de Witte Professor of Health Services Research, <i>University of Sheffield</i>
		<b>'Towards robot-assisted therapy with animal-like robots'</b> Professor Tony Prescott Professor of Cognitive Robotics and Director of Sheffield Robotics, <i>University of Sheffield</i>
15.55 - 16.05	<b>BREAK</b>	
16.05 - 16.45	<b>Seminar</b>	<b>'Digital child health: Transforming child health'</b> Leanne Summers Digital Ecosystem Lead, <i>NHSX</i>
16.45 - 17.15	<b>Keynote:</b> The SME journey through the NHS	Dom Raban Co-founder and CEO, <i>Xploro</i>
		Dr Elin Haf Davies Founder and CEO, <i>Aparito</i>
		Elodie Draperi Co-Founder and CEO, <i>GiveVision</i>
17.15 - 17.20	<b>Close</b>	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>

# DAY THREE THURSDAY 04 MARCH

## ON DEMAND CONTENT

**12.00 - 18.00:** Innovation Partnership Zone, Posters and Sponsors are available any time.

## LIVESTREAM PROGRAMME

Time	Session	Details
12.00 - 12.45	Lunchtime Seminar: Technology for child and young person mental health	<b>'Designing digital services with and for vulnerable teens'</b> Dr Victoria Betton Chief Innovation Officer at <i>Mindwave</i> and Managing Director of <i>PeopleDotcom</i>
		<b>'The use of technology to support mental health in schools'</b> Dr Katherine Easton Lecturer in Psychology, School of Education, <i>The University of Sheffield</i>
		<b>'Kooth: A Case Study for Online Mental Health Support: Impact of and Response to Covid'</b> Aaron Sefi Chief Research Officer, <i>Kooth</i>
12.45 - 13.00	BREAK	
13.00 - 13.05	Welcome	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>
13.05 - 13.35	Keynote	<b>'The adoption and spread of child health technology'</b> Richard Stubbs CEO, <i>Yorkshire and Humber Academic Health Science Network</i>
13.35 - 14.15	Seminar	<b>'Involving children and young people in health technology development: collaboration &amp; co-design'</b> Jennifer Preston Senior Patient and Public Involvement Lead, <i>University of Liverpool</i>

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# DAY THREE THURSDAY 04 MARCH

## LIVESTREAM PROGRAMME, continued

Time	Session	Details
14.15 - 14.25	<b>BREAK</b>	
14.25 - 15.05	<b>Seminar</b>	<p><b>'Intellectual property for child health technology development'</b>            Vanessa Stainthorpe            Partner, <i>HGF</i></p>
15.05 - 15.35	<b>Technology Demonstration</b>	<p><b>Sheffield Biomedical Robotics Lab</b>            Dr Dana Damian            Director, <i>Sheffield Biomedical Robotics Lab</i></p>
15.35 - 16.05	<b>Abstract Presentations</b>	<p><b>'BRIGHT trial: Brushing Reminder 4 Good oral Health: The acceptability of text messages'</b>            Professor Zoe Marshman            Professor and Honorary Consultant in Dental Public Health, <i>University of Sheffield</i></p> <hr/> <p><b>'Digitalisation of MyEyes, the childhood vision related patient reported outcome measures'</b>            Dr Alexandra Robertson            Honorary Research Fellow, <i>UCL Great Ormond Street Hospital Institute of Child Health</i></p> <hr/> <p><b>'Powered mobility: Evidence based practice as a basis of healthcare policy change in Israel'</b>            Naomi Gefen            Deputy Director General, <i>ALYN Hospital Pediatric and Adolescent Rehabilitation Centre</i></p> <hr/> <p><b>'Autonomous Classification of Sleep Disorder Patterns with Oximetry and ECG Data'</b>            Dr Zhenglin Li            Research Associate, <i>University of Sheffield</i></p>

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# DAY THREE THURSDAY 04 MARCH

## LIVESTREAM PROGRAMME, continued

Time	Session	Details
16.05 - 16.15	BREAK	
16.15 - 16.45	<b>Keynote:</b> Why we need to be innovative if we want to improve children's oral health	Dr Claire Stevens CBE Consultant in Paediatric Dentistry, <i>University Dental Hospital of Manchester</i> ..... Dr Ben Underwood Dentist, Founder and CEO, <i>Brush DJ Ltd</i>
16.45 - 17.15	<b>Seminar</b>	<b>'Digital inclusion in child health technology'</b> Peter Nuckley Deputy Director, <i>mHabitat</i>
17.15 - 17.20	<b>Close</b>	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>

# DAY FOUR FRIDAY 05 MARCH

## ON DEMAND CONTENT

**12.00 - 18.00:** Innovation Partnership Zone, Posters and Sponsors are available any time.

## LIVESTREAM PROGRAMME

Time	Session	Details
12.00 - 12.45	<b>Lunchtime Seminar:</b> ALYNnovation as a novel model of "open innovation": Blending multiple stakeholder design partnerships to create effective rehabilitation solutions	Arie Melamed-Yekel General Manager, <i>ALYNnovation ALYN Hospital</i>
		Professor Patrice L. (Tamar) Weiss Professor Emeritus, <i>University of Haifa</i>
12.45 - 13.00	<b>BREAK</b>	
13.00 - 13.05	<b>Welcome</b>	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>
13.05 - 13.35	<b>Keynote</b>	<b>'Artificial intelligence: Transforming the future of child health'</b> David Cole Head of Business Development and Innovation for Europe, the Middle East and Africa, <i>IBM Watson Health</i>
13.35 - 14.05	<b>Abstract Presentations</b>	<b>'How feasible is it to monitor young people with cystic fibrosis at home? Results of the CLIMB-CF study'</b> Dr Claire Edmondson Clinical Research Fellow, <i>Imperial College London</i>
		<b>'Neck Support for Children and Young People with Narcolepsy: The "Belt-Up!" Project'</b> Professor Heather Elphick Professor of Paediatric Respiratory and Sleep Medicine, <i>Sheffield Children's NHS Foundation Trust</i>

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# DAY FOUR FRIDAY 05 MARCH

## LIVESTREAM PROGRAMME, continued

Time	Session	Details
	<b>Abstract Presentations,</b> <i>continued</i>	<p><b>'Using technology to deepen phenotypes in hyperinsulinism'</b> Dr Chris Worth Research Fellow in Paediatric Endocrinology, <i>Manchester University NHS Foundation Trust</i></p> <hr/> <p><b>'DigiVis: a digital, home-based visual acuity test to support remote consultations and vision screening'</b> Arun Thirunavukarasu Ophthalmology Researcher, <i>Cambridge University Hospitals NHS Foundation Trust</i></p>
<b>14.05 - 14.15</b>	<b>BREAK</b>	
<b>14.15 - 14.45</b>	<b>Technology Demonstration</b>	<p><b>Alder Hey Innovation Hub</b> Mr Iain Hennessey Director of Innovation and Consultant Neonatal and Paediatric Surgeon, <i>Alder Hey Children's NHS Foundation Trust</i></p>
<b>14.45 - 15.15</b>	<b>Keynote</b>	<p><b>'Understanding the UK technology funding landscape'</b> Karen Livingstone CEO, <i>Newham Health Collaborative</i></p>
<b>15.15 - 15.55</b>	<b>Seminar:</b> NIHR MedTech and In Vitro Diagnostic Co-operatives: The journey so far	<p><b>'NIHR Children and Young People MedTech Co-operative'</b> Nathaniel Mills Programme Manager, <i>NIHR Children and Young People MedTech Co-operative</i></p> <hr/> <p><b>'NIHR Devices for Dignity MedTech Co-operative'</b> Liz Pryde Programme Manager, <i>NIHR Devices for Dignity MedTech Co-operative</i></p>

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# DAY FOUR FRIDAY 05 MARCH

## LIVESTREAM PROGRAMME, continued

Time	Session	Details
	<b>Seminar, <i>continued</i></b>	<b>'Point-of-care testing in acute childhood illness: the journey so far'</b> Dr Chris Bird Acute Paediatrics Lead, <i>NIHR Community Healthcare MedTech Co-operative</i>
<b>15.55 - 16.05</b>	<b>BREAK</b>	
<b>16.05 - 16.45</b>	<b>Seminar</b>	<b>'Virtual reality: Revolutionising child healthcare'</b> Ivan Phelan Director of the Impact VR Lab and Research Associate in Games and App Development, <i>Sheffield Hallam University</i>
<b>16.45 - 17.15</b>	<b>Keynote</b>	<b>'Children's health: From family to UN sustainable development goal 3'</b> Gareth Presch Founder and CEO, <i>World Health Innovation Summit</i>
<b>17.15 - 17.25</b>	<b>Close</b>	Professor Paul Dimitri Director, <i>NIHR Children and Young People MedTech Co-operative</i>

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Conference closes

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# 2021

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