

## The Healthcare Group

# 'The Impact of the Covid Pandemic on Healthcare Innovation'

6<sup>th</sup> December 2021

This SIG is championed by Leila Ali of Digital Health Cambridge, Peter Ferguson of Arm, Siddhi Trivedi of Beyond Identity, Nigel Whittle of Plextek and Paul Winter of TTP plc

AGENDA	
11:30	CW welcome, introduction to topic and Healthcare group by <b>Nigel Whittle, Healthcare SIG Champion and VP, Medical and Healthcare, Plextek</b>
11:35	Session chaired by Nigel Whittle, Healthcare SIG champion
	'Healthcare innovation in a post-Covid world' Professor James Barlow, Professor of Technology and Innovation Management (Healthcare), Imperial College Business School James will discuss the ways in which the pandemic has stimulated innovation, whether this will endure, and what the new innovation challenges will be.
11:50	Q & A
11:55	Session chaired by Nigel Whittle, Healthcare SIG champion
	'Industrial Engineering in Healthcare: Covid-19 Pandemic Experiences' Professor Duncan McFarlane, Professor of Industrial Information Engineering, Institute for Manufacturing, Cambridge University Engineering Dept Duncan will cover the way in which the Institute for Manufacturing has been using Industrial / Manufacturing Engineering tools, techniques, digital solutions, research in healthcare since March 2020 both in terms of their work with hospitals, but also in coordinating covid testing across the university.
12:10	Q & A
12:15	Session chaired by Peter Ferguson, Healthcare SIG champion
	'How innovation in advanced screening technology could transform diagnostics as a defence and strengthen health security.'  Keiko Yata, Life Science Consultant, TTP  Keiko will talk about TTP CoTest, the covid diagnostic solution and how adding connectivity from day1 of laboratory development resulted in some unforeseen and significant benefits.
12:30	Q & A
12:35	Wrap-up by Nigel Whittle, Healthcare SIG Champion
12:40	Event closes

With the permission of the speakers, presentations will be loaded to the CW website the week following the event

## **Profile of organisers**

#### **Cambridge Wireless (CW)**

CW is the leading international community for companies involved in the research, development and application of wireless and mobile, internet, semiconductor and software technologies. With over 400 members from major network operators and device manufacturers to innovative start-ups and universities, CW stimulates debate and collaboration, harnesses and shares knowledge, and helps to build connections between academia and industry. CW's 19 Special Interest Groups (SIGs) provide its members with a dynamic forum where they can network with their peers, track the latest technology trends and business developments and position their organisations in key market sectors. CW also organises major conferences and start-up competitions along with other high-quality

industry networking events and dinners. With headquarters at the heart of Cambridge, UK, CW partners with other international industry clusters and organisations to extend its reach and remain at the forefront of global developments and business opportunities. <a href="https://www.cambridgewireless.co.uk">www.cambridgewireless.co.uk</a>

## **Profile of SIG Champions**

#### Leila Ali, Digital Health Cambridge

Leila is passionate about applying innovative approaches in bridging the worlds between health and technology. She has worked in the health sector for over 10 years and has a deep understanding of the importance of identifying opportunities of engagement and the evolving needs of patients. During Covid-19 she has been exploring digital health solutions at Addenbrooke's Hospital on safely connecting patients to families. Leila is the founder and organiser of Digital Health Cambridge, a meet-up group that brings together various stakeholders, clinicians, investors and startups in Cambridge to foster a multi - stakeholder partnership. She is currently an eHospital support link at Cambridge University Hospitals NHS Foundation Trust, where she trains and supports colleagues regarding best practice using Epic (electronic patient record system). A digital strategy which enables clinicians to use the latest in computer technology to help them to consistently provide high quality patient care.

www.cambridgedigitalhealth.co.uk

### Peter Ferguson, Arm

Peter is director for healthcare technologies at Arm and has been actively involved in the delivery of mobile and healthcare solutions since starting his Medical Electronics PhD in 1994. Based in Cambridge, UK, Peter is responsible for driving Arm's health strategies in Medical Sensors and Genomics. His remit is helping the healthcare industry to utilize Arm's high efficiency technology in developing new products and services. Peter has more than 20 years' experience working in the healthcare, mobile tech and pharmaceutical technology market and has been instrumental in delivering innovative mobile health solutions including wearable ECG, Mobile Devices, Adverse Event Systems and Portal Hospital solutions in the UK and China. <a href="https://www.arm.com">www.arm.com</a>

#### Siddhi Trivedi, Beyond Identity

Siddhi's ambition is to build an inclusive community with a focus on social innovation through the intersection between emerging technologies and creative minds. Siddhi specialises in strategic, operational and technology-enabled business transformation. She founded Beyond Identity, to implement digital tools through the application of IOT, AI and blockchain enabled solutions. She has deep insight into developing apps and platforms, and regularly speaks about innovations within the healthcare sector at international conferences. Since the advent of COVID-19, she has been working with medical clinicians within Oxfordshire to develop an app to empower patients to manage their health. She is a healthcare SIG champion for Cambridge Wireless and a lead organiser for Tech London Advocates Blockchain Group a think tank and repository for knowledge sharing and to position London as a global leader in blockchain advocacy. As a champion for women and girls in tech, Siddhi founded project BIBA, a platform designed to connect girls and women with live projects with tech companies who are keen to bridge the gender gap in their organisations. This project has been supported and born out London Tech week in September 2020 and will officially launch at London Tech Week in September 2021. <a href="https://www.beyondidentity.io">www.beyondidentity.io</a>

#### Nigel Whittle, Plextek

Nigel is Head of Medical & Healthcare at Plextek, spearheading engagement with a range of clients in the medical device sector, helping them develop innovative technology around sensors, data collection, communications and related areas. Nigel has over 25 years' experience in the global life science industry, in a wide range of senior scientific, commercial and managerial roles. He conducted research work at Genentech and Celltech, then at Cantab Pharmaceuticals he was responsible for all company product development, taking proprietary products into late-stage Clinical Trials. With the IP Group he established a programme of technology commercialisation from Kings College London, including start up and flotation of companies. Later, working for UK Trade & Investment, Nigel worked with a portfolio of overseas pharmaceutical companies to secure high-level investment into the UK's R&D capabilities. More recently he has worked as a business consultant both as an independent and at Sagentia. His current interests include the development of wearable technology to support clinical studies, and the use of monitoring systems for assisted living.

www.plextek.com

#### Paul Winter, TTP plc

Paul Winter is a programme manager and RF engineer in the Communications and Wireless group at TTP. He has led numerous projects in commercial, industrial and healthcare sectors developing connected devices and precision instrumentation. Paul has a heritage in developing products integrating multiple wireless standards including GPS, GPRS, Wi-Fi, Bluetooth and proprietary ISM band radios, deployed within multi-sensor systems for in-home and on-body applications, often coupled to 'Cloud' based analysis and visualisation services. In healthcare Paul has applied aspects of wireless, antennas and electronics to a number of medical devices including inhalers, glucose testing and point of care diagnostic instruments. Paul has also led several incubation projects for TTP's Carbon Trust Incubator, covering a wide range of cutting edge technologies. Paul joined TTP in 2006; prior to this he worked as a radio engineer for Global Communications developing high volume consumer in-home satellite and digital TV distribution equipment, as well as portable equipment for the 'on-location' broadcasting industry. Paul has a Masters degree in Electrical & Electronic Engineering from the University of Wales, Cardiff. He is a member of the Institute of Engineering and Technology, the Royal Academy of Engineering and is a Charted Engineer. <a href="https://www.ttp.com">www.ttp.com</a>

### **Profile of speakers**

### James Barlow, Imperial College Business School

James is a Professor of Technology and Innovation Management (Healthcare) at Imperial College Business School and a member of School's Centre for Health Economics and Policy Innovation. He is also a Carl Bennet Visiting Professor at Halmstad University (Centre for Innovation, Entrepreneurship and Learning), Sweden, and an Honorary Professor at University College London (Bartlett Real Estate Institute). James has worked on healthcare innovation issues for 25 years, and on innovation in the built environment sectors. He is particularly interested in the challenges companies and healthcare organisations face in ensuring their innovations become embedded in everyday practice, and in the policy and other mechanisms to facilitate this. He has led many research projects in UK and abroad. He advises and consults for government, healthcare services and companies from the health technology and construction sectors. James is an associate director of research for Imperial College Health Partners and a member of the management team for the NIHR Policy Innovation and Evaluation Research Unit. He also sits on several advisory boards, including AGE-WELL Canada, Deloitte Healthcare Innovation Observatory, and the International Academy for Design and Health. He has published widely in leading journals and his latest book is Managing Innovation in Healthcare. www.imperial.ac.uk

## Duncan McFarlane, Institute for Manufacturing, Cambridge University Engineering Dept

Duncan McFarlane is Professor of Industrial Information Engineering at the University of Cambridge, Head of Distributed Information & Automation Lab, fellow of St John's College and a visiting Professor at University of Melbourne. He began his career as an engineering cadet with BHP in Melbourne and has worked in the industrial automation area for over 25 years joining Cambridge in 1995. He was Research Director of the Auto ID Centre in 2000-3 and subsequently co-founder and Chairman of RedBite Solutions Ltd - an industrial RFID/IoT based asset management solutions company. He is Founder and Principal Investigator of the Digital Manufacturing on a Shoestring programme. The programme is developing low cost digital solutions for small manufacturers with recent spin-outs into construction, logistics and medical systems. Between March and September 2020 he led a team which won the RAE President's Award for providing Industrial Engineering support to local hospitals managing the Covid-19 Epidemic and from September 2020 to July 2021 was Operations Logistics lead at Cambridge University for its Asymptomatic Covid-19 Student Testing Programme.

### Keiko Yata, TTP

Keiko is a Life Science Consultant in the Diagnostics group at TTP, an independent technology and product development company. Keiko leads the development of CoTest, a new pooled screening technology for Covid-19. During the Covid-19 pandemic, Keiko has also been leading the biology development of point-of-care diagnostic devices. Prior to joining TTP, Keiko carried out research in biosensor development and Molecular Cell Oncology at the University of Cambridge and completed her PhD in Biochemistry at the University of Oxford. <a href="https://www.ttp.com">www.ttp.com</a>