

Joint User Experience & Wireless Healthcare SIG Event

'Do Patients Really Matter?'

20th March 2014

Sponsored and Hosted by Sagentia

Supported by EAHSN and Cambridge Biomedical Campus

The User Experience SIG is championed by **David Walker** of *Philips Research Laboratories*, **Allan MacLean** of *Amdeo*, **Geoff McCormick** of *Alloy*, **Giuliano Maciocci** of *Qualcomm Technologies Inc.*, and **Stefano Borini** of *Nokia Research Centre*.

The Wireless Healthcare SIG is championed by **Rob Blake** of *Philips Research Laboratories*, **Collette Johnson** of *Plextek Consulting*, **Tim Phipps** of *Cambridge Consultants*, **Paul Winter** of *TTP Group* and **Peter Ferguson** of *Accenture*.

Venue: Sagentia, Harston Mill, Harston, Cambridge, CB22 7GG

AGENDA

12:00 Registration / Networking over Lunch kindly sponsored by Sagentia

13:00 Introduction to the Cambridge Wireless Joint User Experience & Wireless Healthcare SIG by **David Walker** of **Philips Research Laboratories**

13:10 Welcome from our sponsor and host **Mick Withers**, **Managing Director** of **Sagentia**

Session chaired by SIG Champion, **David Walker** of **Philips Research Laboratories**

13:15 'When healthcare meets consumerism – a clash of cultures or an opportunity to change the game?'

Phil Gray, **Managing Director**, **Quadro Design Ltd**, **Part of Sagentia Group plc**

As more consumer goods companies move into the healthcare space, medical device companies are under pressure to deliver similar experiences to those delivered by the powerful brands. The days of pure functionality and them knowing best has gone. As self-administered care and independent living initiatives drive attempts to ease the cost of healthcare the convergence of medical and consumer goods will be heavily focused on delivering better user experiences as each sector seeks to win the high ground. Threat or opportunity... either as long as the patient is the winner.

13:35 Q&A

Session chaired by SIG Champion, **Allan MacLean** of **Amdeo**

13:40 'The changing role of design across the care continuum.'

Kurt Ward, **Design Manager**, **Philips Design**

In order to meet the grand challenges of healthcare, we have to team up with both public and private stakeholders and co-create across ecosystems.

14:00 Q&A

Session chaired by SIG Champion, **Allan MacLean** of **Amdeo**

14:05 'What are patients really like?'

Ian Hosking, **Senior Research Associate**, **Cambridge University Engineering Department**

The challenge of an ageing population is widely reported. However what impact does this have on the requirements for healthcare products and in particular making them usable? This talk discusses how ageing impacts people's functional capability and leads to a diverse set of needs. A design response to this diversity is outlined using the Inclusive Design Toolkit. The talk finishes with a case study of a new mobile service and device for the senior market.

14:25 Q&A

	Session chaired by SIG Champion, Rob Blake of Philips Research Laboratories
14:30	'Designing for compliance - Isn't it time we thought about the user first?' Andy Pidgeon, Group Leader, Cambridge Consultants Patient compliance with self-medication systems often has a sharp drop off after only a few months of use. For Asthma inhalers the level of long term compliance is lamentable, but even for many high criticality therapies it can be surprisingly poor. Why are patients so bad at taking their medication and how can we as designers help them? Andy explores ways in which innovative design can help patients use their medication to achieve better outcomes.
14:50	Q&A
14:55	Refreshment Break
	Session chaired by SIG Champion, Rob Blake of Philips Research Laboratories
15:30	'Contextual Design Methodology Applied to Healthcare' Leon Bovett, Principal User Experience Consultant, Accenture Leon will be talking about the application of contextual research and design methods to address specific healthcare challenges. This approach shifts the relationship between stakeholders, providing new ways of exploring and communicating requirements at the level of process and technology intervention.
15:50	Q&A
	Session chaired by SIG Champion, Tim Phipps of Cambridge Consultants
15:55	'App Development - User and Development as Ouroboros' Joshua Wies, Director, Agewell Biometrics Joshua will discuss his journey of app developer as the conduit between the users and technical team from his perspective as a clinician and entrepreneur.
16:15	Q&A
	Session chaired by SIG Champion, David Walker of Philips Research Laboratories
16:20	Bring & Share Session <ul style="list-style-type: none"> • Leo Poll, Director UK/Europe, Akendi UK • Paul McGhee, Director, Norfolk & Suffolk Node, Eastern Academic Health Science Network • Geoff McCormick, Director, Alloy • Jane Berezynskyj, Associate Director Change Projects, Cambridge and Peterborough NHS Foundation Trust • Dominic Stenning, Expert by Experience, Cambridge and Peterborough NHS Foundation Trust
	Session chaired by SIG Champion, Tim Phipps of Cambridge Consultants
16:55	Open Forum with all Speakers
17:25	Closing remarks and fill in evaluation forms
17:30	Event Closes

With the permission of the speakers, presentations will be loaded to the Cambridge Wireless website on the day 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 & mobile, internet, semiconductor and software technologies. With 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 20 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 the annual Future of Wireless International Conference and Discovering Start-ups competition 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. For more information, please visit www.cambridgewireless.co.uk

Profile of Supporters

The Eastern Academic Health Science Network

The Eastern Academic Health Science Network (EAHSN) is one of 15 new Academic Health Science Networks, licensed in May 2013 to deliver the coalition Government's objectives set out in 'Innovation, Health and Wealth' and 'A Strategy for UK Life Sciences'. Serving a population of 4.8 million people in four established clinical and biomedical communities (Cambridgeshire and Peterborough, Norfolk and Suffolk, Bedfordshire and Hertfordshire, and Essex), the EAHSN has clear plans to develop and commercialise research and innovation, thereby driving economic benefit and improving health outcomes. The EAHSN will work with NHS, academic and industry partners to open doors to the NHS for SMEs as well as larger companies in med-tech, bioscience, informatics and the pharmaceutical industries. As part of this programme the EAHSN will be hosting eight Small Business Research Initiative (SBRI) competitions in 2013/2014, bridging the vital gap between research and innovation and high quality clinical care. For further information, please visit www.eahsn.org.uk

Cambridge Biomedical Campus

The Cambridge Biomedical Campus is a world-class centre of excellence dedicated to biomedical research, patient care and education. Current occupiers include Cambridge University Hospitals NHS Foundation Trust, the Cancer Research UK Cambridge Research Institute, the Hutchison/MRC Research Centre, the Medical Research Council Laboratory of Molecular Biology and the University of Cambridge, School of Clinical Medicine. Unlike traditional science parks, the Campus is not just a real estate solution for research-led organisations. It is a community of like-minded individuals, many of whom are world-leaders in their field, working in successful partnerships both with one another and with industry in order to bring new and improved treatments and care to patients. In the past, space constraints have meant that accommodation on the Campus was restricted to the current occupiers. This is no longer the case however and the Campus is currently undergoing a major expansion. The development team is now inviting companies that can contribute to achieving the goals of the vibrant research community to consider locating alongside them on the Campus. Laboratory and office accommodation will be provided in state-of-the-art shared occupancy buildings with bespoke "design and build" options also available. For further information, please visit cambridge-biomedical.com

Profile of Host

Sagentia

Sagentia Group is a global technology advisory and product development company. We provide outsourced R&D consultancy services to start ups through to global market leaders in the medical, industrial, oil & gas and consumer sectors. With global headquarters in Cambridge, UK, and offices in London, Boston, Houston and Dubai, Sagentia works with clients from technology strategy and opportunity discovery through to concept generation and full product development. We excel in R&D strategy and technology innovation and work with clients to ensure that their R&D programmes deliver commercial value and market advantage. For further information, please visit www.sagentia.com

Profile of the User Experience SIG Champions

Stefano Borini, Principal Researcher Nokia Research Center

Stefano Borini is a Principal Researcher at Nokia Research Centre in Cambridge, working at the development of new materials and technologies for future mobile devices and sensors. Previously he was a researcher at the Italian National Institute for Metrological Research, studying nanodevices for metrological applications. His expertise covers the areas of nanotechnology, semiconductors, sensors, electrical and optical devices. Stefano holds a Master degree in Physics from University of Turin and a PhD in Materials Science and Technology from Polytechnic of Turin. For more information, please visit research.nokia.com

Giuliano Maciocci, Qualcomm Technologies Inc.

Giuliano leads the User Experience team for Qualcomm's Cambridge-based R&D office. As an Interaction Design specialist, Giuliano's extensive portfolio encompasses web, mobile application and embedded software interfaces for a variety of market leaders in the wireless industry, from Europe's first 3G wireless service to today's growing mobile application space. His current focus is championing user-centred innovation within Qualcomm's technology research, steering the evolution of today's technologies towards tomorrow's user experiences. For more information please visit www.qualcomm.com

Allan MacLean, Amdeo

Amdeo specialises in the development and exploitation of high tech innovations. Amdeo principal, Allan MacLean, has worked in research and management roles at the leading edge of Information and Communication Technologies for over 25 years. He was a founder member of Xerox's European Research Centre in the 80's and was a major contributor to building it into one of the world's leading centres of expertise in the user centred design of innovative technologies. In 2002, he co-founded Image Semantics, which he helped lead to become a global provider of innovative mobile applications and services. Allan has frequently advised on funding programmes in the UK, Europe and North America to help improve the fit between technologies and human needs and improve the exploitation of government funded research. For more information, please visit www.amdeo.com

Geoff McCormick, Director, TheAlloy

Geoff has worked as a business consultant in the design industry for over 10 years. In that time he has worked with some of the world's most famous and successful designers, where his role was to help designers, companies and brands to try and maximise the commercial effectiveness of design. His experience covers every populated continent and a diverse range of sectors, including developing a mobile petrol retail station, an interior design system for VIP aircraft, hydrogen powered vehicles, packaging strategies for FMCG brands and innovation programmes utilising Asian sourcing. It is this breadth of experience that he values most. Common across all of his clients and projects is the desire to create truly unique experiences that occupy a space in peoples' hearts and minds. For more information, please visit www.thealloy.com

David Walker, Philips Research Laboratories

David is a Senior Scientist with Philips Research Labs. David has worked on a variety of projects beginning over 25 years ago with expert systems for compact disc based multimedia systems. He went on to work on projects for Philips Consumer Communications and first generation internet browsers for cell phones. This included the development of novel mobile applications for education and entertainment. More recently David has worked on home healthcare and developed next generation telehealth and telecare systems. And all these interests are now brought together with participation in projects in mobile health monitoring. Throughout his career David has pushed for user centred design and delivered systems that are sensitive to the needs and abilities of the end user. He is especially interested in novel technologies that can improve the user experience and is currently exploring use case scenarios for NFC (Near Field Communications). For more information, please visit www.research.philips.com

Profile of the Wireless Healthcare SIG Champions

Rob Blake, Philips Research Laboratories

Robert Blake is a Senior Scientist at Philips Research, Cambridge. Philips has recently established their UK Research presence in the town, showing a commitment to Research, the UK and Cambridge. At Philips, Robert has worked on mobile and wireless applications, focussing on usability and acceptability issues relating to the technology. Initially he worked on location and context aware applications, using mobile phones and Bluetooth to deliver services to users. Robert was involved in the early days of Near Field Communications (NFC) where he worked on applications for this new technology and built some of the first NFC-enabled mobile phone prototypes. A major focus of the work was building and promoting novel contactless applications, including using NFC to establish a Bluetooth connection. More recently he has been investigating the application of mobile and wireless technology for home healthcare and wellbeing. One of the projects he is working on is SAPHE (Smart and Aware Pervasive Health Environment), aiming to provide a next generation telecare system for improving the quality of people's lives. Robert holds a MEng in Software Engineering from Imperial College London and is fluent in German. In his spare time he enjoys photography and is a keen cyclist. For more information, please visit www.research.philips.com

Peter Ferguson, Accenture

Peter is a Programme Manager in Accenture, Cambridge. Peter has lived in Cambridge for 15 years. He has an MSc and PhD in Medical electronics. Peter has held key Technical and management responsibility for development projects including the world's first Self-Adhesive Physiological monitor and the delivery of over 20 Global Smartphones. In his 2 years as an Accenture Mobility Health delivery lead, he has provided mobile technology consulting for the NHS, UK Health research and government hospitals in China (Shanghai). As a Champion of the Cambridge Wireless Healthcare SIG Peter's objective is to demonstrate and present Global Mobility Health Innovation. For more information, please visit www.accenture.com

Collette Johnson, Plextek Consulting

Collette works for Plextek Consulting in medical business development, helping companies with their strategic positioning relating to product development. Previous to working at Plextek she worked at NHS innovations with a lead role in bringing together industry and clinical organisations for product adoption and also was the programme lead for the national SBRI healthcare programme, whilst in this role she focussed on the mHealth and telehealth space and developed a network bringing together, industry, clinical and academic stakeholders. She also worked in a strategic role in healthcare at Cambridge Consultants for world leading corporate organisations and highly innovative start-ups. For more information, please visit www.plextek.com

Tim Phipps, Cambridge Consultants

For 50 years, Cambridge Consultants has led the way in innovative product development. We are the development partner of choice to many of the world's leading blue chips as well as the virtual development team for ambitious start-up companies. Tim is responsible for Wireless Business Development at Cambridge Consultants and has a long track record of working on leading edge wireless technology development and creating new business of strategic importance for product manufacturers. Over his career he's worked to introduce innovative new technologies at the earliest stage of their market development such as mobile phone operating systems, EDGE, GSM, Bluetooth and WiFi. As Champion of the Cambridge Wireless Healthcare SIG, Tim's objective is to create commercial discussions that further the interests of society. For more information, please visit www.cambridgeconsultants.com

Paul Winter, TTP Group

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 Invacom 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 Master's 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 Chartered Engineer. For more information please visit www.ttpgroup.com

Profile of Speakers

Mick Withers, Managing Director, Sagentia

Mick is Managing Director of Sagentia Product & Technology Development with responsibility for all of Sagentia's technology and outsourced R&D activities across the medical, consumer, industrial and oil & gas sectors. He initially joined Sagentia in 2006 to run and successfully grow the Diagnostics business and has been a champion of usability in medical devices within the business. With over 20 years' experience in medtech R&D and extensive involvement in product design and development, Mick understands the complexities involved in successfully developing devices for optimum patient and user experience. Prior to joining Sagentia, Mick spent 5 years at TeraView in charge of all Engineering activities, taking a wide range of concepts through to production status in this Cambridge based start-up company and 11 years at The Technology Partnership, developing scientific laboratory equipment with an emphasis on liquid handling and assays, as well as special purpose machines for the pharmaceutical sector. For information, please visit www.sagentia.com

Phil Gray, Managing Director, Quadro Design Ltd, Part of Sagentia Group plc

Phil Gray is Managing Director of Quadro Design, a specialist industrial design agency blending process and design delivery to create great user experiences. Phil works with clients to provide a bridge between consumers, marketing, development and manufacturing to help improve business performance through the effective use of innovation strategies, industrial design and design thinking. With a consultancy career spanning 43 years Phil has worked in a wide variety of industries but healthcare and medical devices has been a particular focus during the last 10 years as the importance of human factors, usability and industrial design have moved from being 'nice to have' to becoming critical disciplines necessary for success. Phil is Visiting Professor in the School of Engineering and Information Sciences at Middlesex University and a National Board Director of BIDA (British Design Innovation Association). For information, please visit www.quadrodesign.com

Kurt Ward, Design Manager, Philips Design

Kurt Ward is a senior design director at Philips who is responsible for strategic alliances and collaborations across businesses and partners to stimulate, inspire and explore new value spaces and innovation opportunities. He is based at Philips in the Netherlands and has led global design teams for over fourteen years. He was previously the Director of research at Westwood One/CBS networks in New York.

Philips design is one of the largest design organizations in the world with seven studios in Europe, Asia and North America. Their people centric approach combines deep insights from consumer propositions, lighting experiences and clinical settings. They have a creative force of over 600 professionals, representing over 35 different nationalities. For information, please visit www.design.philips.com

Ian Hosking, Senior Research Associate, Cambridge University Department of Engineering

Ian has over 20 years of experience of working in Industry with a focus on the effective application of technology through understanding people's needs. His career in mobile started in developing mobile data solutions (PMR) for field engineers. Other projects included developing Samsung's GSM entry strategy and latterly working for the

GSMA on MMS and voice hubbing. He led the project that performed the first exclusion audit on mobile phones for Vodafone which quantified the level proportion of people who could not use voice and text services.

He has been involved in the initiation and development of the Inclusive Design Toolkit, which aims to provide resources for designing inclusively. This has been adopted by various companies and to date has been accessed from over 160 countries. Ian joined the Engineering Design Centre at Cambridge University in 2009 and was responsible for promoting inclusive design in the UK as part of the KT-EQUAL programme. This work led to the Designing Our Tomorrow (DOT) initiative that has seen the development of educational resources for teaching inclusive design at Key Stage 3. His interests include the convergence of inclusive and sustainable design. He is also a Fellow of the RSA .For information, please visit www.inclusivedesigntoolkit.com

Andy Pidgeon, Group Leader, Cambridge Consultants

Andy leads the Industrial Design and Human Factors team at Cambridge Consultants in the UK. His mission has been to put the user at the centre of technologically led innovation and to create designs that are intuitive to use. Andy has worked as a designer for nearly thirty years, for the last 9 years concentrating on medical products mainly in the fields of drug delivery and diagnostics. As part of this work he has interviewed hundreds of patients and health care professionals and gained a fascinating insight into the murky world of self-medication device usability. For information, please visit www.cambridgeconsultants.com

Leon Bovett, Principle Consultant, Accenture

Leon Bovett is a Principal Consultant in Accenture Digital. Based in the Accenture Cambridge office, he leads teams of user experience architects, visual designers, and mobile platform technical architects, to design and build cross-platform, cross-channel, responsive, scalable solutions for customers. He provides consultancy around deployment strategy, application architecture, solution design, and interaction design. For information, please visit www.accenture.com

Joshua Wies, Director, Agewell Biometrics

Joshua Wies has been a chartered physiotherapist for 21 years and now runs a start-up company, Agewell Biometrics, which is developing a platform-based analytics service for improving health and wellbeing in the elderly, focusing on predictive algorithms for falls prevention. The service seeks to improve clinical outcomes and reduce health costs associated with aging. Joshua has been a member of Cambridge Wireless since winning the Discovering Start-ups Competition in 2011 and is currently raising seed capital for his venture. For information, please visit www.agewellbiometrics.com