Joint event by:

Knowledge Transfer Network — ICT

Special Interest Group — Digital Health

Knowledge Transfer Network — HealthTech and Medicines

Delivered by:

CW CAMBRIDGE WIRELESS

# ICT KTN and HealthTech & Medicines KTN
## *'Big Data in Health'*
### 12th March 2014

## Venue – The Møller Centre, Storeys Way, Cambridge, CB3 0DE

## AGENDA

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| **9:00** | Registration, Coffee and Networking |
| **9:45** | **Introduction and Agenda** from **Sue Dunkerton, HealthTech & Medicines KTN** and **Eddie Townsend, ICT KTN** |
| **10:00** | *'Challenges facing 21st Century Health Care Delivery in the UK'* <br> **Dr Robert Winter MD FRCP OBE, Managing Director, EAHSN** |
| **10:20** | *'Healthcare in the Information Age'* <br> **Prof. Andrew Morris, FRSE FMedSci, Scotland's Chief Scientist, Professor of Medicine, Dean, College of Medicine, University of Dundee** |
| **11:05** | *'Healthcare Data - simply a matter of engineering?'* <br> **John Ainsworth, Senior Research Fellow, Centre for Health Informatics, University of Manchester** |
| **11:30** | Coffee Break & Networking |
| **12:00** | *'Building the Knowledge Base'* <br> **Professor Jeremy Wyatt DM FRCP ACMI Fellow, Leadership Chair in eHealth Research, University of Leeds** |
| **12:25** | *'Research and Big Data'* <br> **John Parkinson, Clinical Practice Research, Datalink** |
| **12.50** | *'Horizon 2020 - Investing in Big Data'* <br> **Gisele Roesems, Deputy Head of Unit, European Commission** |
| **13:10** | Lunch and Networking |
| **13:50** | *Cross Sector Collaboration – Peter van Manen – 'How can Formula 1 racing help ... babies?' – Video Presentation* |
| **14:00** | *'Computational challenges for ELIXIR and other Life Sciences Research Infrastructures'* <br> **Dr Alvis Brazma, European Bioinformatics Institute** |
| **14:20** | Networking over coffee/tea |
| **14:40** | *'UK Technology Opportunities'* & *'Digital Health with TSB'* <br> **Sue Dunkerton, HealthTech & Medicines KTN and Tom Fiddian, TSB** |
| **15:05** | *'The impact of Big Data on the future of Healthcare in a Digitally Connected Economy'* <br> **Mark Wall, CDEC Architect in Big Data, Catapult** |

| 15:30 | **SME Case Study - '*Advanced Natural Language Processing for Electronic Health Records*'** |
| | **Simon Beaulah, Linguamatics** |
| 15:55 | Panel Session with all speakers, chaired by **Eddie Townsend, ICT KTN** |
| 16:20 | **Event Closes** |

*With permission of the speakers, presentations will be loaded to the Cambridge Wireless website on the day following the event*

## Profile of Organisers

### HealthTech & Medicines KTN

The Health KTN provides a single front door through which members can find the expertise and support they need across the innovation chain, from first idea, finding academic and industrial partners for product development and manufacturing scale up and understanding access to market. The Health KTN is dedicated to accelerating innovation and technology exploitation in the health industries sector. This includes medical biotechnology, medical technology, diagnostics and pharmaceutical industries and those sectors supporting or moving into health. We will help you connect with other organisations to catalyse innovation, through events and workshops for practitioners and innovation leaders in its priority areas and raising awareness of funding vehicles at the public-private sector interface.  The Health KTN has been responsible for leading the Knowledge Transfer Technology Strategy Board's Assisted Living and Stratified Medicine Innovation Platforms and now heads up the Digital Health Special Interest Group. For further information please visit: www.**healthktn**.org

### ICT KTN

Creating a competitive advantage for the UK by facilitating knowledge exchange on Information and Communications Technologies and accelerating innovation. This new KTN has been formed from a merger by the Digital Communications and Digital Systems KTNs with the objective of bringing competitive advantage to the UK by facilitating the exchange of knowledge on ICT technologies and capabilities. We plan to do this by acting as a 'Network of Networks', organising a range of events and providing support throughout the UK in association with other communities of interest and centres of excellence. For further information please visit: www.**ictktn**.org.uk

### Cambridge Wireless

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 Speakers

### Eddie Townsend, ICT KTN

Eddie has worked with major corporate customers at all levels to negotiate and deliver high value contracts in complex environments. Eddie's focus is on the commercial exploitation of new technology that has impact in the market place. Eddie has formed extensive collaborative networks in industry, business and academia. Forming and managing consortia involving participants from a number of European countries to win R&D funding.  Since March 2009 Eddie Townsend has acted as Collaboration Delivery Manager for the Digital Communications Knowledge Transfer Network and subsequently ICT KTN. In this role Eddie has also acted as coordinator of the UK Future Internet Strategy Group and the Smart Energy Special Interest Group.led the formation of technology based consortia across Europe to win research projects funded by the European Commission. He has acted as project manager and has extensive experience in working with Brussels to achieve high levels of success and funding for partners. He has worked with a large number of academic and commercial organisations and has a wide network of collaborators. For more information please visit: www.**ictktn**.org.uk

**Sue Dunkerton,** BSc, CEng, FIMMM**, HealthTech & Medicines KTN**

Sue Dunkerton is Co-Director of the HealthTech and Medicines Knowledge Transfer Network (sponsored by the Technology Strategy Board), established to support and accelerate innovation in the life sciences sector for human health.

Sue has a background in materials engineering and, following a career spanning aerospace and electronics, moved into the medical sector around 1990. She has worked in the medical devices and technologies area predominantly, with specialism in the KTN spanning medical technologies, assisted/independent living, stratified medicine and more recently digital health. Sue is also well connected at European level, working with groups and platforms devoted to health, materials and manufacturing.

Sue works closely with UK government and particularly the Technology Strategy Board, to help represent business input to future technology and innovation strategy. Recent programmes have addressed care in the community/assisted living; living with long term conditions and how technology and particularly digital technology can deliver improved health and social care. For further information please visit: www.**healthktn**.org

**Dr Robert Winter MD FRCP OBE, Managing Director, EAHSN**

Bio to follow shortly. For further information please visit: www.**eahsn**.org.uk

**Professor Andrew Morris FRSE FMedSci, Scotland's Chief Scientist, Professor of Medicine, Dean, College of Medicine, University of Dundee**

ANDREW MORRIS is Professor of Medicine and Dean of Medicine, University of Dundee, Scotland. He is seconded as Chief Scientist at the Scottish Government Health Directorate which supports and promotes high quality research aimed at improving the quality and cost-effectiveness of services offered by NHS Scotland and securing lasting improvements to the health of the people of Scotland. His research interests span informatics and chronic diseases. He is Director of the Farr Institute in Scotland funded by the MRC and nine other funders and convenor of the UK Health Informatics Research Network, representing a £39M investment in health informatics research.

Andrew's research interests relate to the application of informatics to study the epidemiological and molecular aetiological basis of diabetes and its complications. He has published over 290 original papers, attracted over £50million in grant funding and was the principal investigator of the Wellcome Trust United Kingdom Case Control Collection for Type 2 Diabetes that has recruited 20,000 individuals and Generation Scotland, a study of the genetic health in 50,000 Scots, and the Wellcome Trust funded Scottish Health Informatics Programme (SHIP).

He was awarded the RD Lawrence Award by Diabetes UK in 2003 and the Arnold Bloom Lecture 2013, the Saltire Society Scottish Science Award in 2005 and is a Fellow of the Royal Society of Edinburgh, Scotland's national academy of science and letters, and Fellow of the Academy of Medical Sciences. In 2007, he co-founded Aridhia Informatics that now employs >90 people in Scotland and uses high performance computing and analytics in health care, with deployments in the UK, Middle East and Australasia.

Andrew is a Governor of the Health Foundation, a leading UK charity that supports quality improvement in health care. For further information please visit: medicine.**dundee**.ac.uk

**John Ainsworth, Senior Research Fellow, Centre for Health Informatics, University of Manchester**

John Ainsworth is a Senior Research Fellow at the University of Manchester where he is also Deputy Director of the Centre for Health Informatics. He is the Deputy Director of the Farr Institute @ HeRC, and chairs the Farr Institute eInfrastructure working group. He is involved in numerous research projects, but with one common aim – how can we use computing and information technology to improve the health of the population. His current research focuses on the mobile health technologies and the use of routinely captured healthcare data for research. For further information please visit: www.**population-health.manchester**.ac.uk

**Professor Jeremy Wyatt DM FRCP ACMI Fellow, University of Leeds**

Bio to follow shortly. For further information please visit: medhealth.**leeds**.ac.uk

### John Parkinson, CPRD

John Parkinson is the Director of the all England, 53 million NHS observational data and interventional research service, the Clinical Practice Research Datalink (CPRD). CPRD combined the services of the GPRD and Research Capability Programme (RCP) and is jointly funded by the NHS National Institute for Health Research (NIHR) and the MHRA.

He has worked with healthcare data related to research for 18 years and has wide knowledge of healthcare data, coding, data quality issues, related IT, data linkage, data and system governance, genetic/data issues and of all the research areas in which the data may be used, including in clinical trials. For further information please visit: www.**cprd**.com

### Gisele Roesems, European Commission

Bio to follow shortly. For further information please visit: hec.**europa**.eu

### Dr Alvis Brazma, European Informatics Institute

Alvis Brazma studied mathematics at the University of Latvia, Riga, and obtained a PhD in computer science from the Moscow State University.

In 1997 he joined the European Bioinformatics Institute and in 1999 he founded the Microarray Gene Expression Data society and raised funding to start a microarray database at EBI – ArrayExpress, which is now one of the major international repositories for functional genomics data. His main research interests concern integrative data analysis to reveal patterns of gene and protein expression in normal and diseased state. He has over hundred scientific publications and is a principal investigator on several large collaborative genomics and biomedical projects, including the kidney cancer project of the International Cancer Genome Consortium.. For further information please visit: www.**ebi**.ac.uk

### Tom Fiddian, Lead Technologist – Digital, TSB

Tom is a Lead Technologist specialising in design at the Technology Strategy Board. He works in the Digital Team which manages a broad portfolio of funding and networking activities. Previously he worked at RNID where he led their technology programmes designing assistive products, software and services for people with hearing loss. Specialising in accessibility and inclusive design, he has been involved in a number of EU collaborative projects on the subject. He has also ran consultancies with industry and government regulators advising them on best practices for older people. Tom started his career working for a medical design consultancy and has over ten years experience in user testing.. For further information please visit: www.**innovateuk**.org

### Mark Wall, CDEC Architect in Big Data, Catapult

Mark is an Architect for the Connected Digital Economy having recently joined from Oracle where he was the Head of Big Data & Data Science in Asia Pacific. Mark has extensive experience of architecting new capabilities and innovations within large global organisations in the UK, Europe, Latin America and Asia that are built on business analytics, quantitative modelling, machine learning and big data. He holds a First class honours degree from University of Manchester. For further information please visit: www.**catapult**.org.uk

### Simon Beaulah, Linguamatics

Simon joined Linguamatics in 2013 to lead the strategy for Healthcare, which is a rapidly expanding market for the company. Simon has been working in life science and healthcare informatics for more than 20 years, initially in research and over the past 14 years for informatics vendors including Synomics, LION bioscience, BioWisdom, InforSense, and IDBS. Simon has degrees from Aston University and Cranfield Institute of Technology. For further information please visit: www.**linguamatics**.com