





# **Connecting Big Data in Environment & Health**

26<sup>th</sup> June 2014: Biographies



**Professor Lora Fleming** | Director, European Centre for Environment & Human Health

Professor Fleming is a board certified occupational and environmental health physician and epidemiologist with over 3 decades of experience and expertise in a wider range of environment and occupational exposures and human health. She is currently a Professor, Director of the European Centre of Environment and Human Health (www.ecehh.org), and Chair of Oceans, Epidemiology and Human Health at the University of Exeter Medical School (Truro, Cornwall, UK); and Professor Emerita in both the Miller School of Medicine and the Rosenstiel School of Marine and Atmospheric Sciences of the University of Miami (Miami, FL USA) where she was Co Director of the NSF NIEHS Oceans and Human Health Centre. After years of working with large datasets such as NHANES and NHIS around occupational issues and directing the Florida Cancer Registry, with current MRC NERC and NIHR Funding, she is involved in large interdisciplinary data mashup projects in environment and human health. L.E.Fleming@exeter.ac.uk



**Professor Angela Shore** is the inaugural Vice-Dean Research for the University of Exeter Medical School, and was previously Interim Vice-Dean Research for the Peninsula College of Medicine and Dentistry since 2009. She is the Scientific Director of the NIHR Exeter Clinical Research Facility for Experimental Medicine and Associate Director for Experimental Medicine for the UKCRN diabetes research network. Professor Shore graduated in Physiology from the University of Newcastle and was awarded her PhD for an investigation of the vascular mechanisms underlying fluid homeostasis in patients with Liver Disease. Following postdoctoral positions at the University of London where she expanded her research into the vascular aspects of hypertension, Professor Shore moved to the Postgraduate Medical School Exeter in 1987 to establish the clinical microvascular research unit funded by the Wellcome Trust. Currently Professor Shore's work which is funded by the British Heart Foundation, Diabetes UK, European Union IMI JU and NIHR investigates novel approaches to the identification of early vascular complications and patient stratification for cardiovascular risk. She was appointed Professor of Cardiovascular Science in 2000. Professor Shore is committed to interdisciplinary research and was instrumental in the establishment of the University of Exeter Science Strategy Theme "Translational Medicine, Personalised Medicine and Public Health" to drive forward this approach. A.C.Shore@exeter.ac.uk











#### Professor Anthony Kessel - Public Health England

Professor Anthony Kessel is a public health physician and medical ethicist. Anthony is Director of Public Health Strategy, Director of Research and Development (R&D), and Deputy Medical Director. Previously Anthony has been Director of Public Health at Camden Primary Care Trust in London, and also a general practitioner.

At the HPA Anthony was the executive director responsible for issues of national public health strategy, and oversees areas including global health, health security and bioterrorism, research and development (R&D), healthcare associated infections, clinical governance, professional development, medical microbiology and health protection trainees, and the HPA's field epidemiology training. His research interests are in public health ethics, public health policy, and environmental health. Anthony has published articles, reports and book chapters in areas such as public health ethics, clinical ethics, research ethics, HIV and environmental health. He is sole author of a book published in 2006 by Cambridge University Press entitled Air, the Environment and Public Health, reprinted in paperback in 2011.



## Professor Dame Julia Slingo, OBE: Met Office

As Chief Scientist Julia is responsible for providing scientific and technical strategy; ensuring the organisation adheres to good scientific and technical standards, and directing and managing research and development with the Met Office. She also represents the office, on science and technology, across government. She became Met Office Chief Scientist in February 2009. Before joining the Met Office she was the Director of Climate Research in NERC's National Centre for Atmospheric Science, at the University of Reading, where she is still a Professor of Meteorology. In 2006 she founded the Walker Institute for Climate System Research at Reading, aimed at addressing the cross disciplinary challenges of climate change and its impacts. She has had a long-term career in climate modelling and research, working at the Met Office, ECMWF and NCAR in the USA. Her personal research addresses problems in tropical climate variability - its influence on the global climate; its role in seasonal to decadal climate prediction, and its response to climate change. Increasingly her research considers the multi-disciplinary aspects of the impacts of climate variability and change on crops and water resources, and the need to improve the representation of weather systems and rainfall distributions in climate prediction models. Julia.slingo@metoffice.gov.uk



#### Jeremy Nettle, Oracle

Jeremy Nettle, European Director for Oracle Corporation Healthcare
Mr. Nettle provides clinical expertise to the UK public sector team and focused solutions to
meet the requirement of a changing and demanding and integrated Healthcare Market across
the UK and Europe. His special interests include medication management, patient safety and
long term conditions. He is the Oracle lead investigating the role of assisted technology to
supports patients with chronic disease and he is a member of the Intellect Health Council, the
UK hi-tech industry trade association. His previous experience includes business development
manager, lead for the public sector within Lockheed Martin UK. His responsibilities included
health care opportunities in both the NHS and MoD. He has 25 years experience in healthcare,
in both the UK NHS Trusts and in Scandinavia, 15 years of which were in Clinical IT systems, as
well as general manager for Radiology, Pathology and Genetics. Prior to leaving the National
Health Service Jeremy was Chief Information officer for a district general hospital. He holds a
masters degree in business information technology, a bachelors degree in information systems
and diplomas in management and radiography. Jeremy is the 744th mayor of New Sarum,
England.

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#### Kathryn Woolf, Sea Communications

Kathryn is Director of Sea Communications – a service design agency with a social objective. Sea create products, services and experiences that combine digital innovation, design excellence and creativity. Over the last 10 years Kathryn has forged an excellent reputation for socially motivated collaborations, combining strategic thinking with creative delivery. She is a design ambassador for the Design Council and has led a number of service design projects that address social challenges such as youth unemployment, human trafficking and adult social care.

In 2011, Kathryn designed an award winning website for a community design challenge in Cornwall. Her subsequent work with Cornwall Council on <a href="www.shapedbyus.org">www.shapedbyus.org</a> has spearheaded Sea's technical development of their new crowd-pledging, data mapping and social networking platform – Made Open.

More recently Kathryn has been working with the European Centre of Environment and Human Health on the development of a web application which enables citizens to contribute personal data for the purposes of scientific research. "Health In Habitat" enables citizens to keep to record of locations visited, upload photos and answer questions about their environment, their health and wellbeing. kathryn@sea-communications.co.uk



# **Professor David Ford, Swansea University**

His research interests are in the field of Health Services Research and he specialises in the secondary use of routinely collected data to support and conduct research. He has been involved in a wide range of large-scale, multi-centre studies of complex interventions and evaluations of policy and service initiatives. He is joint lead of the Health Information Research Unit for Wales (HIRU), which develops new ways of harnessing the potential of routinely collected information collected in health and other settings. HIRU's main product is the SAIL Databank, an internationally recognised data linkage resource formed from a wide variety of routinely collected data from across Wales. He is also Director of the eHealth Industries Innovation (ehi2) Centre, developing links between academia, the NHS, and business within the UK and internationally. He is also University Director of NHS Wales Informatics Research Laboratories, created through a collaboration between the College of Medicine, Swansea University and NHS Wales Informatics Service, the national programme for NHS IT for Wales. The Research Laboratories provide state-of-the-art facilities to design, prototype, test and evaluate innovative new information technologies for use in improving health and healthcare. d.v.ford@swansea.ac.uk



**Dr. Alberto Arribas** leads the Met Office teams responsible for the research and implementation of operational forecasting systems for monthly-to-seasonal prediction and the development of applications for end-users. Prior to working at the Met Office Alberto was a visiting scientist at the Experimental Climate Prediction Centre at the Scripps Institution of Oceanography (University of California, San Diego) and obtained a PhD in Physics at the Universidad Complutense (Madrid, Spain) on the impact of land degradation and greenhouse-gases increase on the climate of the Iberian Peninsula.

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# Dr Anna Cichowska, Public Health England

Dr Anna Cichowska is a Consultant in Public Health Strategy at Public Health England providing strategic leadership for two national programmes: Sustainability (including health effects climate change and extreme events) and Antimicrobial Resistance. She is a co-PI on the MED MI research project and is responsible for PHE's contribution to to the project. Anna has been trained as a medical doctor in the Netherlands and completed her public health specialist training in Scotland. She has clinical and public health work experience in South Africa, Australia and WHO Geneva.



## Dr Stefano Casalegno, University of Exeter

Stefano is an ecologist at Exeter's Environment & Sustainability Institute in Cornwall, with a focus on plant science and spatial ecology. He develops regional-scale models to assess the consequences of future environmental changes for the provision of ecosystem services, using Cornwall as a case study. Since 2008 he has been teaching spatial ecology in different European universities and research centres, and prior to joining the University of Exeter he was based at the European Commission's Joint Research Centre in Ispra, Northern Italy.

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#### **Toby Parkins, UK Netweb and Headforwards**

Founder and managing director of UKNetWeb and founding director of Headforwards, he combines technical knowledge with a highly driven, commercial perspective to produce the latest approach to a range of business activities. Starting out on the internet in the early 90s, he has a good understanding of a range of programming languages and an ability to identify technical opportunities that others would miss. He is responsible for concept development, top level project management, strategic consultancy and development. He is also founder of the Agile on the Beach conference and the Cornwall Digital Meetup Group, and also chairman of the Cornwall Chamber of Commerce. Specialties:Coding Languagues include PHP/MySQL/OOP/ASP/HTML/CSS/Javascript combined with clear understanding of Social Media, business commerciality and marketing communications. Technical knowledge applied to real business. <a href="mailto:toby.parkins@headforwards.com">toby.parkins@headforwards.com</a>



#### **Professor Clive Sabel, University of Bristol**

As Chair in Quantitative Geography the over-arching focus of his work is working with individual level data. This can mean working with point-pattern data (often residential location) to reveal epidemiological relationships to environmental exposures; building whole life-course exposures to social and environmental sources to, for example, understand wellbeing in urban areas; or data mining 'Big Data' such as twitter feeds for spatial-temporal trends. He completed his PhD in 1999 at Lancaster University, using an Exploratory Spatial Data Analysis approach to investigate Spatial and Temporal relationships between environmental exposure and health. Following postdocs at St Andrews University with Prof Paul Boyle and then at Karolinska University in Sweden, he accepted a lectureship at University of Canterbury, New Zealand in 2004. He returned to the UK in 2007 to join Imperial College London's Dept of Epidemiology and Public Health but came back to Geography's fold in 2009 to become Associate Prof (and then Prof) at University of Exeter. In Sept 2013, he joined Bristol University as Professor in Quantitative Geography.

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#### Dr. Ed Conley, SW AHSN

Dr. Ed Conley is an informatics analyst working for the South-West Academic Health Science Network (SW AHSN). He works with SW NHS Trusts to promote integrated care and improved cross-enterprise information sharing. He has a long-term interest in scalable distributed collaborative computing for research and works with major companies to implement supplier-neutral interoperability standards. Before working with the NHS he was PI for the Sintero project at Cardiff University funded by the Wellcome Trust Translational Fund whose outputs are now being developed in the SW. He contributes to BSI and ISO-affiliated work streams in electronic health records for clinical research, and in April 2014 organised an international interoperability summit at the British Computer Society. Ed is a co-founder of miConsent that specifies how patients can control information sharing across multiple systems. He is a member of the CIPHER eHIRC (eHealth Informatics Research Centre) at Swansea University, the Farr Institute for Health Informatics Research and the Advisory Board of MEDMI. email: ed.conley@btinternet.com



# **Professor Chris Little, Met Office**

Professor Chris Little is an IT Fellow in Operational Infrastructures at the Met Office, and is Co-Chair of the OGC Met-Ocean Domain Working Group. He is involved with various international projects to replace, update and upgrade the meteorological operational global infrastructure WIS (WMO Information System), including global telecommunications, interoperability standards and Open Source software such as OpenWIS and Geonetwork.

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#### Dr Charlotte Moger, University of Exeter

Charlotte is a Research Development Manager facing the Medical Research Council (MRC) and Wellcome Trust. This largely involves supporting academics with bringing together consortia for large, complex cross-college, inter-disciplinary bids into the MRC and Wellcome trust that may involve a number of partners. In addition to this Charlotte supports and manages institutional aspects of the University's relationship with key commercial contacts.

Charlotte has Masters degree from Exeter in Physics with Medical applications. She subsequently stayed on at Exeter to study for a PhD in Bio Physics. Her PhD investigated the Bone-Cartilage interface in osteoarthritis and osteoporosis. C.J.Moger@exeter.ac.uk



#### Andrea Sharpe, NERC

Andrea Sharpe is a Knowledge and Innovation Manager, working specifically on Environmental Data at the Natural Environment Research Council (NERC). NERC is the largest funder of environmental science in the UK. They invest £350 million each year in research, training and innovation through UK universities and research centres. Their scientists study and monitor the whole planet from pole to pole, from deep Earth and oceans to upper atmosphere and space. NERC holds data generated by long-term monitoring and cutting-edge research into critical environmental issues such as climate change, biodiversity loss and natural hazards.