



COMMUNICATING
CLIMATE CHANGE

:VISUALISATION

**May 20-21st , 2014 at Bedruthan Steps Hotel,
Mawgan Porth, Cornwall, UK**



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

Professor Fleming is a board certified occupational and environmental health physician and epidemiologist with over 2 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.



Dr Will Stahl Timmins is a specialist in the visual presentation of data and information, using information graphics, interactive media, and visual communication to promote understanding. His current research involves assessing the effects of differing information presentations on knowledge transfer, memory, and behaviour.

Dr Stahl-Timmins's PhD centred on the evaluation of information graphics in the field of health policy making. His core research fits within the following themes:

- Information Graphics
- Data visualisation
- Evaluation of graphical tools

Dr Stahl-Timmins is a trained graphic designer, with a BA in graphic design and MA in design research from the University of Wales, Newport. His design education led to an enduring interest in information design, and the use of research methods to inform design practice.



David Dodd is a graduate of Trinity College Dublin (TCD) in Environmental Science and also holds certificate and higher diploma qualifications in noise and air quality related areas. He recently graduated with a Masters in Science Communication from Dublin City University (DCU). He spent 7 years working in environmental consultancy dealing with Environmental Impact Statements for projects such as landfills, motorways and remediating contaminated sites. He has worked with the Environmental Protection Agency since 2005 and currently works within the EPA's environmental research programme. He is responsible for project management under the Climate and Air research pillar and responsible for communications activities within the research programme and other EPA events such as public climate change lecture series.





Wesley Grubbs is an artist, data visualizer and provocateur based in Berkeley, CA. In 2007 he founded Pitch Interactive, a studio who's focus is weaving code with design with statistics to find versatile solutions to communicate complex data for clients such as Google, Facebook, Wired, GE, Esquire, Scientific American, Popular Science, The Gates Foundation and The Dow Jones.

Built upon his life experiences, degrees held in International Economics and Information Systems and his innate interest in the brain and cognition, Wes' work focuses on revealing patterns about human behavior and how our actions impact our surroundings.

Pitch Interactive's work spans illustrations, physical installations, console game user interfaces, software applications, websites and textiles. Their work has been showcased at the MoMA's TalkToMe exhibit in New York, La Penacée's "Conversations Électriques" in Montpellier, the McKnight Foundation's 30 year anniversary exhibit, the Foosaner Art Museum's "The Art of Networks" exhibit, The Max Planck Science Express Train, the Data Flow books and many other internationally acclaimed publications.



Professor Chris Rapley CBE is Professor of Climate Science at University College London and Chairman of UCL's Policy Commission on Communicating Climate Science. He is a Fellow of St Edmund's College Cambridge, a visiting Professor at Imperial College London, a Distinguished Visiting Scientist at NASA's Jet Propulsion Laboratory in Pasadena, California, a member of the Academia Europaea, a Board member of the Winston Churchill Memorial Trust, Chairman of the European Space Agency Director General's High Level Science Policy Advisory Committee, and Chairman of the London Climate Change Partnership, committed to ensuring London's resilience to climate change. Prof Rapley was awarded the 2008 Edinburgh Science Medal for having made 'a significant contribution to the understanding and wellbeing of humanity'. He was made a Commander of the British Empire in 2003.



Stephen R.J. Sheppard is Professor in Landscape Architecture and Forest Resources Management at the University of British Columbia, Vancouver, and Director of the Collaborative for Advanced Landscape Planning (CALP). He is an internationally recognized expert in visualization, and has over 30 years' experience in research and practice in landscape planning, public involvement, environmental perception, and, since 2003, in planning for climate change. He is a Fellow at the Institute for Sustainability Solutions Research, University of Plymouth, UK, and Adjunct Professor at the Nanjing Forestry University, China.



Richard Black joined BBC World Service as a sound engineer in 1985 after graduating from Cambridge with a Natural Sciences degree. During his time with the BBC he worked as a producer on science, sports and current affairs programmes, and presented documentaries and feature programmes for World Service, Radio Four and Five Live. He also worked in commercial radio and as a radio journalism trainer. After several years as World Service Science Correspondent he became Environment Correspondent for the BBC website. Reporting assignments included successive UNFCCC summits, IPCC assessments, UN CBD in 2010, and many environmental documentaries from the field. He left the BBC in 2012 to become Director of Communications for the Global Ocean Commission, and currently works as a consultant on projects including a distillation of the IPCC Fifth Assessment Report for businesses.



Michael Depledge | Chair of Environment & Human Health, University of Exeter

Professor Depledge was the founding Director and is currently Chair of the Board of the European Centre for Environment and Human Health. He has been an expert advisor to the United Nations and World Health Organisation since the early 1990s running several research programmes in Brazil, China, Vietnam and elsewhere. Formerly, he was the Chief Scientist of the Environment Agency of England and Wales and served as a member of the Royal Commission on Environmental Pollution. He is also the former Chairman of the Science Advisory Group on Environment and Climate Change of the European Commission. He is currently a member of the UK Governments Hazardous Substances Advisory Committee.



Dr. Pádraig Murphy is Lecturer in Communications at Dublin City University, Chair of the MSc in Science Communication programme and Director of the DCU Societal Impact Platform. His teaching and research interests include science communication, Science and Technology Studies, public participation in, and public and media representations of, science and technology and concepts of identity, nature, culture and society in education. An environmental science graduate, Dr Murphy's background also includes content management in elearning.

His current research and writing has focused on deliberative and participatory dialogue models for biotechnology, nanotechnology, and sustainable technologies, as well as how such technologies can be part of anticipatory governance. He managed a citizens jury on the trialling of the GM potato in Ireland - the *#gmpotato Community of Inquiry* project - funded by the Irish Environmental Protection Agency. He is author of *Biotechnology, Education and Life Politics: Debating Genetic Futures from School to Society* (2014), currently in press with Routledge.

Dr. Murphy is also coordinator of the Celsius research group at DCU and part of the Management Board of DCU Community Knowledge Exchange, a 'science shop' based in DCU. He is also co-chair of Campus Engage and Work Package Leader on the Framework 7 project 'PERARES', a project which connects community-based research across Europe.



Felicity Liggins : Met Office

After graduating in 2004 with a Masters Degree in Geology, Felicity joined the Environment Agency, initially working in hydrometry and telemetry and then moving on to project managing the delivery of catchment flood management plans. Wanting a fresh challenge, Felicity joined the Met Office as a climate consultant in 2008. By interpreting the complex climate science undertaken by the Met Office and other climate research centres around the world, Felicity helps clients assess how climate variability and climate change might have an impact on their business.

As well as her role as a senior scientist, Felicity recently gained a Masters in Science Communication and now leads the Met Office's STEM outreach programme, coordinating a network of over 130 Ambassadors who work with young people, inspiring them to study science, technology, engineering and maths



Thomas Nocke studied computer science and computer graphics at the University of Rostock and obtained his Ph.D. in 2007 with a dissertation on data visualization for climate research. Since 2006 he has been investigating the interdisciplinary topic of climate data visualization—considering both visual data analysis and visual climate knowledge communication aspects—at the Potsdam Institute for Climate Impact Research, Potsdam, Germany. Since 2012, he is heading the development activities related to the ClimatImpactsOnline.com web portal.



Dr Saffron O'Neill is a Lecturer in Geography at the University of Exeter. Her research explores the social science dimensions of climate variability and climate change. She currently holds an ESRC Future Research Leader fellowship, 'Visualising Climate Change', which is exploring the diverse places in which people experience climate change in their everyday lives: from personal attachments to valued places, to interactions on social media. Saffron tweets about climate change communication and public engagement: [@SaffronJONeill](https://twitter.com/SaffronJONeill).



Sam Lanyon is the MD of Concept Shed Ltd and specialises in mixing creative and technical skills in a team to design and build bespoke and prototype products, often focusing on human interaction and engagement as well as novelty and entertainment with products such as AutoWed. Sam was home educated until 16, growing up off grid with only solar panels and wind turbines for power. He has a master's degree in electronic engineering and also owns The Old Lemonade Factory, an in-town hub of creative and engineering businesses in Falmouth.



Liane Bradbrook: Evidence Advisor, Environment Agency

Liane's role is to encourage and develop the use of infographic techniques which stimulate engagement with the work of the Environment Agency's Evidence Directorate. Most recently this included developing infographics 'on the fly' for briefing Government during the recent flooding incidents. Liane has worked for rural and environment based organisations in the public sector for over 20 years; and has a wide range of experience both in creative thinking and innovative approaches to knowledge exchange, engagement and communications. Liane is adept at connecting people, ideas and opportunities.

A graduate of Falmouth School of Art, Liane has a BA in Graphic Design and Photography from Bristol Polytechnic (now UWE) and a PG dip in Information Management from Bristol University.



Joanna Benn is British and specialises in communicating and campaigning on international environmental issues. She is currently project managing and editing a series of reports and infographics on climate change for the business community. Having lived in six countries including the UK, Switzerland, Italy, Kenya, the USA, she has had the privilege of working for international news networks, Foundations, the United Nations, print outlets and various non-governmental organisations. Jo worked in the ITN Newsroom having won the annual Terry Lloyd Memorial Bursary in 2008 and was an *Executive Producer of Extinction Sucks*, an internet television series for *Babelgum*. She has written for various environment websites and print outlets including the BBC, NatGeo Asia, WWF and The Environmentalist. She began her career at Associated Press TV News in London as a TV producer where she managed production for international news packages and promotional materials. She is proficient in Spanish & French.



Mark Picken launched MPAD, which offers branding, strategy, design, PR, marketing and digital services, in 1999 with the aid of funding from the Prince's Trust.

Over the last 15 years MPAD has grown to become one of the leading full service agencies in Cornwall and across the South West.

During that time the company has build specialisms in the charity and sustainable sectors.

Mark has lead MPAD to become a sustainable business and was recognised with the Best Individual Award at the 2008 Cornwall Sustainability Awards. He is also vice chair of Business Leaders for Low Carbon group and is currently working with the Local Nature Partnership.



Antony Turner is the co-founder and CEO of Carbon Visuals, a company that turns carbon footprint data and stories into engaging images, films and web-tools. After a successful career spent launching engineering technologies he helped set up the *Business & Sustainability* programme in 2000 at Schumacher College, which he managed for five years, and in 2003 he set up CarbonSense, a specialist climate change communications consultancy. He has lectured at major universities, given a TEDx talk, and worked with a wide range of organisations including BT, TNT, Honda Formula One, the Met Office and HM Treasury.



Shukru Esmene is a PhD student researching the perceptions of, and barriers to, electric vehicle use in Cornwall.

This project is considering the implementation of electric vehicle usage in Cornwall and the 'knowledge waste' between the stakeholders involved in establishing widespread usage. The research taking place under the supervision of Dr Tim Taylor, Professor Clive Sabel and Dr Bridget Woodman (Exeter University, Tremough), and is in collaboration with a local business; Eco-drive.

Shukru completed a BSc in Environmental Geoscience and MSc in Environment, Science and Society at University College London. His academic focus was on the environmental impacts of the mining, oil and gas sectors. During his MSc Shukru specialised in sustainable construction and the environmental assessments of building projects, working in this sector in London following his studies.



Alex Smalley is the Centre's Communications Manager. His background in science communication spans work within government, private consultancy and the media.

His main focus is the accessible dissemination of the Centre's science to a range of audiences, including the public, policy makers and business.

Alex has an interest in making the academic process visible to non-specialists and enjoys making short films.



Sarah Watts is a Knowledge Exchange Officer who brings together businesses and academics to collaborate on novel research projects. Sarah's ultimate goal is to help facilitate business growth through the development and application of new knowledge. As part of the Centre's Knowledge Exchange team, Sarah co-ordinates the In Residence Scheme, providing support to those involved throughout the process. Sarah also organises a series of business facing events which provide academics and businesses with the opportunity to network around various subjects and themes. Previously, Sarah has held positions in staff development, logistics management and technical theatre.



Dara Lynott BE, MSc, PE, CEng, FIEI: Deputy Director General, Environmental Protection Agency

Dara graduated from the National University of Ireland, Galway with a Bachelor of Engineering Degree (Civil) and from Northeastern University, Boston with a Master of Science in Civil Engineering. He is a Chartered Engineer and Fellow with Engineers Ireland and is also a licensed Professional Engineer (PE) in the State of Vermont. He worked as a consultant in Boston for eight years in the design of municipal solid waste, hazardous waste and wastewater treatment facilities. He joined the EPA in 2004 and in 2004 he was appointed as a Director of the Environmental Protection Agency with responsibility for the Office of Environmental Enforcement. He is the Deputy Director General of the EPA since 2010 and in 2012 took over responsibility for the Office of Climate, Licensing and Research.



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.



Susanne Lorenz is a Research Postgraduate at the University of Leeds, looking at the communication and visualisation of climate change projections for climate change adaptation planning in Local Government in the UK and in Germany. She is also an Associate on the Advancing Knowledge Systems to Inform Climate Adaptation Project at the University of Leeds led by Prof. Suraje Dessai. Prior to commencing her PhD she worked as a Climate Adaptation Officer in Local Government in the East Midlands and the North East of England.



Michael Saunby is a software engineer and intrapreneur at the Met Office, Exeter, and in the past at ECMWF and Reading University. In 2013 he was chosen as one of the 50 most influential people in Exeter. He has degrees and diplomas in electronic engineering, land management, and an MBA from the Open University. His working life has been spent alongside weather and climate scientists helping to realise some of their more ambitious undertakings. Many of the projects he has contributed to have continued to deliver benefits to society for a decade or more. He's not always proud of the long life some software has.

In 2012 Michael introduced the Met Office to hackathons and has subsequently planned, and run, numerous open collaborative events at Met Office HQ and elsewhere. In designing these events he regularly collaborates with the NASA Open Innovation Team, V&A Digital Futures and many others. For September 2014 he is helping design an event for the Science Gallery in Dublin as part of the Strange Weather exhibition.



Sabine Pahl: Associate Professor (Reader) in Psychology at Plymouth University Sabine currently divides her time between research on restorative environments (e.g., for use in healthcare; Blue Gym), the multi-centre eViz project (Energy visualisation for carbon reduction, with Bath, Birmingham and Newcastle Universities; <http://www.eviz.org.uk><<http://www.eviz.org.uk/>>) the European MARLISCO project (Marine Litter in European Seas: Social Awareness and Co-Responsibility, <http://www.marlisco.eu><<http://www.marlisco.eu/>>) and teaching at undergraduate and postgraduate level.



Dr. Paul Nolan works as a computational scientist at the Irish Centre for High-End Computing (ICHEC), Dublin. His research mostly involves numerical weather forecasting and climate modeling.

Previously, he worked at the Meteorology & Climate Department at University College Dublin (UCD) as a postdoctoral researcher. His research involved simulating the effects of global warming on the future climate of Ireland using the method of Regional Climate Modelling. To address the issue of model uncertainty, a Multi-Model Ensemble approach was employed. These simulations were run on the ICHEC and ECMWF supercomputing facilities.



Barry O'Dwyer is a Postdoctoral Climate Scientist working at the Coastal and Marine Research Centre (CMRC), University College Cork (UCC). Barry is currently working on the EPA-funded project *Ireland's Climate Information Platform* (ICIP) which is designing and develop a one-stop web-based resource of climatic and adaptation information for Ireland (www.climateireland.ie)

ICIP has the specific aim of facilitating sectoral and spatial planners in Ireland in planning for climate change adaptation. In doing so, ICIP is developing a range of tools, in which visualisation plays a key role, to enable decision makers increase their understanding of climate change and adaptation, overcome the uncertainties inherit in climatic information, and incorporate this information into their planning.



Carolyn Arnold is studying for a PHD at Falmouth University on storytelling in business and how it can promote pro-environmental behaviour. She has produced short films in which representatives of Cornish businesses talk about their sustainable activities and is testing how these might increase one's impression of a social norm, alongside audiences' perception of truth and the effects of story structure. Carolyn organised the AIR Pressure week of events at Falmouth University, collaborating with ECEHH and Exeter University's ESI, hosting the previous Communicating Climate Change event.

Carolyn is a visual artist in her spare time and is interested in the less-quantifiable effects that more abstract artforms can have on people's behaviour. She has had solo shows in Bath, Brighton and Exeter, her most recent work presents waste products in mass, symmetrical form. She moved to Cornwall from London two years ago, and has previously worked for the Royal Photographic Society and Rambert Dance Company.



Holly Nielsen is a designer at the World Health Organization Regional Office for Europe in Copenhagen, working in the web and online communications department since 2000. Holly is responsible for the visual identity of the Regional Office website, taking care of the site's everyday design needs as well as leading the creative process for full site redesigns, which she has now done twice. She believes strongly in user-driven design and carries out periodic qualitative user surveys to ensure user needs are met. She is excited about the growing interest in her organization for information graphics, which communicate data and complex information in a user-friendly way. In addition to design work, Holly provides advice to in-house clients on writing for the web and search engine optimization, draws up analytical reports on site performance and manages an internal media library.



Dr Adam Nieman is an artist who works mostly with science and has been involved with science communication and data visualisation for much of his career. He is the Creative Director of Carbon Visuals, where he has developed innovative visualisation techniques primarily for public engagement. (Carbon Visuals is a data visualisation agency with a focus on environmental data aimed at non-specialist audiences.) He makes regular contributions to debates in science communication through peer-reviewed publications and conference papers and less formally in talks, articles and events such as Sci-Foo Camp at Google, California in 2011. Until 2003 Adam was an academic who lectured in cultural theory and science studies across different faculties and departments (from the Faculty of Applied Sciences at the University of the West of England to the Faculty of Art at Bath Spa University). His PhD was in the visual culture of science. He has a degree in physics from Edinburgh University in which he specialised in nuclear and particle physics.



Jonathan Derham BSc, PhD, MA(Mgt), PGeo. Irish Environmental Protection Agency

Jonathan has worked for over 25 years in the environmental sector in Ireland and UK principally, but also in a number of the new EU member states. He is current Head of Programme for the EPAs Climate, Resource & Research Programme. Jonathan is a Geologist by primary training having started working in the mining sector then moving to waste management and industrial regulation, as well as contaminated land and environmental liability, before taking up the EPA Resource Efficiency and Behavioural Change portfolios six years ago. Current key interests are Circular Economy, Behavioural Change, and Adaptation and their role in delivering low carbon, sustainable and resilient communities. He has a healthy interest in science communication both in the educational cycles and via national media.



Dr Julie Doyle is a Reader in Media at the University of Brighton. Julie's research explores the (visual) communication of climate change across a range of actors and social practices, including NGOs, news media, science, arts, interactive gaming and celebrity culture. She is the author of *Mediating Climate Change* (Ashgate 2011), which explores how practices of mediation shape the way we understand and respond to climate change. Julie has collaborated on a Leverhulme Trust funded artist in residence project with the artist David Harradine, resulting in a multi-format film project and mobile app about climate, embodiment, connectedness and home, called *It's the Skin You're Living In*. In 2007 she co-founded the Science and Environment Communication Section of the European Communication Research and Education Association (ECREA) and currently serves on the Board of Directors of the International Environmental Communication Association (IECA). Julie has given talks about the role of visuals in climate campaigning to Greenpeace UK and Greenpeace Germany. She is particularly interested in collaborative research practice between different organisations and disciplines as a necessary challenge for making climate communication more effective.



Paddy Morris works in the Irish Environmental Protection Agency's research team, and has a passion for science, good design and effective communication. *"I've been working in the EPA since 2008, and in that time I've established the EPA's social media channels and worked in licensing, climate change and environmental research. I currently look after a range of projects, from supporting environmental research events in Ireland and researchers that travel abroad, to large scale projects on how we manage our research data. You can find me on Twitter [@EPAResearchNews](https://twitter.com/EPAResearchNews) where I tweet about what EPA Research do and generally interesting science stuff."*



Matt Hocking has been designing for 20 years, three of which were spent heading up the graphics team at the Eden Project. It was during this time that Matt saw an opportunity to set up a studio based on only using the best environmental and social practice.

Leap - Design for change was set up October 2004 and promotions company Go Jute in 2006, to help push the possibilities of design and the environment combined, based on the fact that 80% of environmental impact is decided at the design stage.

Working with start ups, charities, SME's to global corporations on a local to global scale, Leap is the only independent design studio in the UK to be accredited since 2010 with ISO14001. Leap operates off both a financial and carbon budget each year and after minimisation the remainder of the studios carbon footprint is offset through the CarbonZero scheme with 40% of the studios time powered by solar PV and the rest of our energy supplied by Good Energy. Every choice they make for their clients and their studio has the present and future in mind.