

Evolving Science Communication: 10 years of science communication at UWE

Friday 4th April 2014, The Watershed, Bristol, UK.

Conference Programme Overview [Final]

9.30 - 10.00	Arrivals and Registration
10.00 – 10.15	Welcome Dr Emma Weitkamp and Dr Clare Wilkinson, Science Communication Unit, UWE, Bristol, UK.
10.15 – 11.15	Plenary One: Science Communication - International Perspectives and Opportunities Professor Frank Burnet, International Director of Cheltenham Festivals and Emeritus Professor of Science Communication, UWE, Bristol, UK.
11.15 – 11.30	Tea and Coffee
11.30 – 13.00	Presentation Session One: Gareth James, The Institution of Engineering and Technology (IET) (Graduate 2007) <i>Engineers are blokes who fix your boiler... the image problems that are hampering engineering</i> Jennifer Garrett, NERC (Graduate 2013) <i>The Building as an Exhibit: Communicating Environmental Sustainability in Science Centres</i> Dr Alison Rivett, Stimulating Physics Network/At-Bristol STEM Learning (Graduate 2010) <i>Involving students in STEM communication activities</i>
13.00 – 14.00	Lunch
14.00 – 15.00	PechaKucha Presentations
15.00 – 15.15	Tea and Coffee
15.15 – 16.45	Presentation Session Two: Melanie Davies, The Francis Crick Institute (Graduate 2013) <i>The Francis Crick Institute: engaging the local community</i> Ellen Dowell, University of Surrey and Imperial College, London (Graduate 2010) <i>Einstein's Garden: Creative, collaborative and playful approaches to public engagement</i> Melanie Knetsch, ESRC (Graduate 2010) <i>Can academics really engage 'hard to reach' audiences?</i>
16.45 – 17.00	Comfort Break
17.00 – 18.00	Plenary Two: Science; not just for scientists Imran Khan, Chief Executive of the British Science Association
18.00 -	Drinks Reception and Poster Presentations

Conference Programme Abstracts and Biographies

Plenary One: Science Communication - International Perspectives and Opportunities Chaired by Dr Emma Weitkamp, SCU.

Frank Burnet founded the Science Communication Unit at the University of the West of England, Bristol. With a background in Biochemistry and the occasional outing as an actor, Frank moved into the science communication field following a successful career as a Biochemistry Lecturer. In 2000 Frank began to work as an adviser on the development of a Science Festival in Cheltenham and became its founding co-director with Kathy Sykes in 2002, the same year as he was appointed the first Professor of Science Communication in the UK.

Since retiring from UWE, Frank established the Frank Burnet Consultancy at the beginning of 2009 and has worked in countries as varied as Saudi Arabia, where he has been the lead consultant for the creation of an annual National Science Festival and Finland as a member of the Scientific Advisory Board of the Arctic Centre in Rovaniemi.

Plenary Two: Science; not just for scientists Chaired by Professor Alan Winfield, SCU

Imran Khan joined the British Science Association as Chief Executive in 2013. Originally a biology graduate, he gained a masters in Science Communication and spent time as a freelance science writer and political researcher before becoming Director of the Campaign for Science and Engineering (CaSE) in 2010. At CaSE he led national campaigns to protect science spending, promote evidence-based policy, and fight immigration restrictions for scientists.

He has been named by The Times as one of the 10 most influential people in science under the age of 40, written for The Financial Times, The Guardian, the World Health Organisation, appeared on BBC Newsnight and Al-Jazeera, and is a trustee of the international development charity Practical Action.

Presentation Session One: 11.30 – 13.00 Chaired by Dr Erik Stengler, SCU

Engineers are blokes who fix your boiler... the image problems that are hampering engineering

Gareth James BSc (Hons) MSc PGCE FRAS FCMI MIET Head of Education 5-19, The Institution of Engineering and Technology (IET)

Engineering, manufacturing and R&D are increasingly being seen by government as being the means to rebalance the UK economy and to address the deficit. With a growing, changing economy and an aging workforce there is huge demand for those with the appropriate skills and qualifications to meet the needs of engineering across all sectors, particularly at the technician level.

Engineering is the fundamental to our modern society but engineering and engineers are largely misunderstood by the public. Engineering is rarely taught explicitly in schools; increasingly sparse and ill-informed careers information fails to make students and their influencers aware of the opportunities available; engineering carries with it an image that is outdated and unrepresentative so it is often not seen as a worthy career choice; in the UK it suffers from a lack of presence from women; and, whilst the routes into engineering are many and varied, the valuable vocational training offers are usually looked at as being inferior to academic pathways.

If the sector is to address some of these problems it needs to reach out to young people, especially girls, and encourage them to pursue engineering courses and careers but it also needs to engage with teachers, parents and the wider public to raise awareness and appreciation of engineering's pivotal role in society.

This presentation will look at the state of UK engineering; how the engineering community is responding to the challenges, particularly around skills shortages, recruitment and perceptions; and, what more needs to be done.

After studying Astrophysics Gareth James trained as science teacher. He taught at middle school level before leaving to develop the education business of the Island Planetarium. In 2001 he joined the team developing the schools and public programming at the new National Space Centre, where he eventually ended up managing the whole programme. Whilst at the NSC he was part of the first cohort studying UWE's part-time MSc Science Communication. In 2007 he was recruited to the Science in Society team at the Science and Technology Facilities Council (STFC) where he oversaw several programmes including the grant funding. In 2009 he became the Head of Education 5-19 at the Institution of Engineering and Technology (IET), a global professional engineering members' organisation, where he leads on a range of UK and international activities including teaching resources; supporting members in public and schools engagement; engineering edutainment and competitions; and, grant funding.

The Building as an Exhibit: Communicating Environmental Sustainability in Science Centres

Jennifer Garrett, Social Media, NERC

The past two decades have seen a growth in the realisation that our current way of life on the planet is unsustainable. Public participation in pro-environmental behaviour is crucial if we are to succeed in achieving sustainable development for the future. During the same two decades there has been an increase in the popularity of science and discovery centres. Along with science museums, science and discovery centres are visited by 20 million children and adults each year.

The potential for science centres in the delivery of sustainability communication is significant. Improving sustainability is of increasing importance to many businesses, including visitor attractions. However there is

no set of recommendations for science and discovery centres to implement environmental practices despite their growing interest in communicating climate and sustainability science.

This paper seeks to outline the importance of science and discovery centres to lead by example and presents recommended 'best practice' for communicating environmental sustainability. It focuses on the communication of sustainable features and practices employed by science centres through case studies of Eden Project, the Centre for Alternative Technology and At-Bristol.

The city of Bristol is home to At-Bristol, a science centre with sustainability at its core, and the Association for Science and Discovery Centres. In the year leading up to European Green Capital 2015 these leading organisations should work together to inspire science centres UK-wide and across Europe to practice what they preach, operate sustainably and engage the public in pro-environmental behaviour.

Jennifer Garrett completed her MSc Science Communication research project in 2012, working in collaboration with At-Bristol to understand the role of science centres in sustainability communication. Jennifer also holds a BSc in Psychology & Zoology from the University of Bristol. Most recently she has been working for the Natural Environment Research Council (NERC) as Social Media Intern, with the aim of using new channels to engage with business and attract new talent to the organisation. Prior to this Jennifer was Communications Officer at the Economic and Social Research Council (ESRC) where she developed and implemented the first Celebrating Impact Prize, an annual awards event to reward outstanding social and economic impact from ESRC-funded research. Jennifer also enjoys writing and has contributed a number of feature articles to the ESRC Society Now magazine.

Involving students in STEM communication activities

Dr Alison Rivett, External Liaison & Research Officer, Stimulating Physics Network SW and At-Bristol STEM Learning

Many organisations recognise the value of involving students in public engagement activities and are keen to involve enthusiastic young role-models in communicating STEM to different audiences. This presentation will reflect on findings from a research project comparing three different models of student involvement: accredited course, voluntary and paid employment. It will cover the successes and challenges of different models; influences on motivation to participate, and the short and long term student perspective on their experience. It will give some recommendations for involving students in STEM communication activities; what support mechanisms assist in the process or recruitment; and how to maximise the benefits both for participants and the organisation.

Alison Rivett manages the Stimulating Physics Network in South West England, which provides support for all physics teachers, particularly non-specialists. This role is based with the STEM Learning team at the At-Bristol Science Centre (previously the Science Learning Centre South West) who offer high quality professional development for science teachers. Alison is also a consultant for the Ogden Trust, working across the region with schools and universities to help schools develop physics enrichment activities for their students. In addition she works with Bristol ChemLabS (the University of Bristol School of Chemistry's outreach programme); running hands-on workshops and giving demonstration assemblies in primary schools in the South West and beyond. Alison has a long-standing interest in evaluation and research including the impact of CPD courses on teachers as well as the effects and effectiveness of outreach on both participants and those delivering the activities.

PechaKucha Presentations: 14.00 – 15.00 Chaired by Dr Ann Grand, SCU

Zombie games: when data-hungry scientists play with the public

David Robertson, Exhibition Content Developer, Science Museum, London

Eight people cheer. Thirty others groan. The battle against the zombies is lost, and the traitors reap the spoils. A psychologist steps forward to explain how the risky subterfuge paid off.

The Science Museum's theatrical *ZombieLab* festival featured an unusual approach to science communication: mass-participation live games, carefully designed to capture data on people's behaviour and decision making. Hundreds of participants later, the research has now been published and discussed at conferences. This talk will offer an inside look at turning a research question into a live experience.

How do you convince a scientist to adapt their research into a zombie-themed game? What did the researchers and the players get from the event? And can mass experiments work as an approach for science communication in other contexts?

David Robertson is part of the Contemporary Science team at the London Science Museum. Following several years of environmental chemistry research, David completed a masters in Science Communication in 2011 and has been delivering innovative live science events ever since. With the LottoLab project, David managed a drop-in open neuroscience lab, collaborated with researchers to run nightclub-themed mass experiments, and helped school children create their own psychological studies. David then moved into the Contemporary Science team at the Museum, where he oversees event programming in the Dana Centre, with an emphasis on surprising and unusual formats. He was the lead content developer for the ZombieLab festival in 2013.

How to Talk to Your Cat about Science

Rowena Fletcher-Wood, University of Birmingham

Engagement is a two-way process: the endeavour is not reaching your audience – but meeting them halfway. *How to Talk to Your Cat about Science* poses an unusual challenge in science communication to highlight the importance of selecting and tailoring information to the audience, whilst still maintaining its integrity.

Incorporating both absurd and serious examples of science communication, this project explores how creative training schemes such as talking to your cat about science can open the door to stronger, more effective science communication. The presentation will briefly cover the themes:

- choice of language
- gaining and maintaining interest
- creating access/competing with prejudice
- relevance
- audience involvement

Deliverable ways to implement training will also be discussed.

Rowena Fletcher-Wood completed an MChem at Somerville College, Oxford, in 2011 and is now in the 3rd year of a PhD in materials environmental chemistry at the University of Birmingham, where she is also a Public Engagement and STEM Ambassador. Rowena has presented at academic conferences in Croatia and Tokyo and performed in the science shows Story Collider, Famelab and Science Showoff. She writes for the University's Engineering and Physical Sciences newsletter, and a blog for the RSC and Speakers of

Science, a platform for exploring new kinds of science communication. After tutoring for many years, Rowena writes and record scripts for the online educational tool, the Virtual School and gives mock Oxbridge interviews. This March she is taking part in I'm a Scientist, Get Me Out of Here and volunteering at the Big Bang Festival! Rowena is a part-time climbing instructor and loves to climb, do archery, cook and write novels.

It's Phenomenal!

Dr Elizabeth Stevenson, University of Edinburgh

It's phenomenal was an arts-science project delivered during Innovative Learning Week (ILW) at the University of Edinburgh. ILW presents an opportunity to go 'off-curriculum' and experiment with learning, teaching and engagement and we seized this opportunity to encourage groups of chemistry students to work with students of graphic design and illustration. Their brief was to interpret chemistry 'phenomena' and produce a piece of work which communicated their phenomenon to a lay audience.

Student groups were randomly assigned a chemistry-related phenomenon from the following list: spectroscopy, crystals, combustion, magnetism, sodium chloride, water, colour. The week culminated in an exhibition of the phenomena in one of the undergraduate chemistry laboratories.

It's not often that undergraduate students are presented with an opportunity to explore and experience the possibilities and potential of interdisciplinary working, thus experiencing different ways of thinking and different approaches to challenges.

Dr Elizabeth Stevenson is a Lecturer in chemistry and in science communication at the University of Edinburgh. She has considerable experience in delivering science engagement activities in schools, at science festivals and with community groups. She has led several, externally funded public engagement projects: Renewable Energy Roadshow, Superbugs: a 21st Century Challenge and Chemical Connection and has trained many post-graduate and undergraduate students in science communication skills. In her current role she is Programme Director of the MSc Science Communication and Public Engagement at the University of Edinburgh.

Tap That

Andy Robinson, Discovery and Learning Team, National Marine Aquarium, Plymouth.

This PechaKucha presentation will focus on the behaviour changing campaign currently being implemented by the National Marine Aquarium in Plymouth. Over the last year, the Aquarium has been using the principles of science communication and conservation psychology to produce a campaign that aims to change people's behaviour towards bottled water and refillable bottles. With bottled water acting as a major contributor to both marine and terrestrial pollution, the Aquarium wishes to reduce the number of bottles purchased, increase the use of refillable bottles and make a greater availability of refill points for members of the public. The presentation will look at the stages involved in the campaign and examine how areas of science communication, such as evaluation, changing stereotypes and breaking down barriers, have enabled the progression of the Aquarium's conservation work.

Andy Robinson is the Lead Presenter for the Discovery & Learning team at the National Marine Aquarium in Plymouth and a current part-time student on the Science Communication masters. While studying his undergraduate degree in Marine Biology, Andy also began his work at the Aquarium as a Host, communicating to the public about the marine environment. He has now progressed onto the formal education team where he leads the delivery of science shows, outreach visits and special events for students from foundation years to University level.

Chain reaction!

Dr Dan Lloyd, School of Biosciences, University of Kent.

The University of Kent's School of Biosciences has worked on a number of projects that have attempted to cross boundaries between the humanities, arts and sciences. A recent collaborative project marked the 30th anniversary of the invention of polymerase chain reaction (PCR). Seeking to avoid the usual celebratory treatment of scientific anniversaries, this project sought to explore the PCR process rather than specific outputs, combining art and science using an academic approach drawn from a history of science perspective. The *Chain Reaction* project embedded artists within research laboratories, allowing artists and scientists to share and reflect on each other's practice. The artistic outputs, ranging from painting, photograms, crochet and video, formed part of an exhibition in Canterbury that explored some of processes of science that are often hidden – its frustrations and rituals, the attitudes and characters of those involved, as well as some of the scientific concepts behind this technology.

Dan Lloyd is a Senior Lecturer in the School of Biosciences at the University of Kent and a National Teaching Fellow. An interest in communicating science from an early stage of his research career led to a series of curriculum developments at Kent drawing science communication into the undergraduate and postgraduate curriculum. This started with the development of science communication final year projects that integrated with the University's outreach scheme with widening participation schools and community groups. He co-developed Kent's MSc in Science, Communication and Society, a cross-disciplinary programme jointly delivered with the University's School of History. As Director of Graduate Taught Programmes, he has overseen the development of a suite of laboratory-based MSc courses, all of which incorporate a specific academic focus on public engagement with science.

Presentation Session Two: 15.15 – 16.45 Chaired by Michelle Kilfoyle, SCU

The Francis Crick Institute: engaging the local community

Melanie Davies, Communications and Engagement, The Francis Crick Institute.

The Francis Crick Institute is a new biomedical research institute being built in Somers Town, central London. Due to open in 2015, its work will help understand why disease develops and find new ways to treat, diagnose and prevent illnesses such as cancer, heart disease and neurodegenerative diseases.

The Crick is committed to making a positive, lasting contribution to Somers Town. At the heart of our engagement strategy is the Living Centre, a purpose-built community space attached to the institute, being developed with the community to improve health and wellbeing in one of England's most deprived wards.

By working in partnership with the community, and taking into account its needs and diversity, the Crick has a unique opportunity to help improve health and wellbeing and engage people with its work. There is much we can learn from the Somers Town community, and we see two-way engagement and power-sharing as vital in forming genuine, mutually beneficial partnerships. We have already built relationships with many local stakeholders and continue to work closely with them as the institute develops.

This talk will discuss the challenges of engaging the local community and describe some of the projects, events and initiatives that have allowed relationships, trust and mutual understanding to flourish, as well as plans for the future. As the Crick moves towards opening, the challenge lies in making our community and public engagement programmes relevant and meaningful, so that the local community, as well as Crick scientists, feel confident, equipped and inspired to engage.

Melanie Davies graduated from the MSc in Science Communication at UWE in 2013. Since then she has worked as a science presenter for At-Bristol and Explorer Dome, and helped set up the Litmus Test, a monthly evening event that features short films, spoken word, art and comedy inspired by science. Melanie is currently doing an internship with the Communications and Engagement team at the Francis Crick Institute in London. Her roles include managing and assisting others with the planning and delivery of public and community engagement projects.

Einstein's Garden: Creative, collaborative and playful approaches to public engagement

Ellen Dowell, Research Collaborations and Public Engagement, University of Surrey and Imperial College, London.

This presentation will showcase a selection of creative, collaborative and playful public engagement projects that have been produced for Einstein's Garden at the Green Man Festival. Key messages will include the interdisciplinary collaboration of scientists and arts practitioners, the role of design and visual communication and the importance of play. The presentation will include project examples from:

- Science at Play – funded by the Wellcome Trust, this two-year project experimenting with playful approaches to public engagement involved a range of collaborations including psychologists working with a ventriloquist on a circus side-show of perception illusions and performers working with researchers from the Cardiff Institute of Tissue Engineering and Repair on an interactive performance about wound healing
- The Energy Factory – funded by an RCUK Partner Festival grant, this interactive installation engaging audiences with six different low carbon technologies was created through a collaboration between interaction designers and researchers from three UK institutions
- Blood Lines – developed through a collaboration between researchers from the National Heart and Lung Institute and a textile designer, this participatory knitting installation engaged audiences with the vascular system

- Hormone Harmony – funded by the Physiological Society, this interactive performance engaging audiences with the endocrine system was created and co-delivered by three professional performers and two hormone researchers.

Ellen Dowell is a creative producer of public engagement with science projects. She has a BA in Theatre: Design for Performance and an MSc in Science Communication. Ellen is the curator of Einstein's Garden (the science, nature and environment area of the Green Man Festival), she co-founded Qualia Theatre (a company making theatre inspired by science) and she has been the recipient of eight public engagement with science grants (including a Wellcome Trust Arts Award, two Wellcome Trust People Awards, a Research Councils UK Partner Festival Award, an Economic and Social Sciences Research Council Festival Award and a Physiological Society Public Engagement Grant). Ellen works part-time for the University of Surrey, facilitating a programme to initiate and foster new interdisciplinary research collaborations, and she works part-time at Imperial College developing creative public engagement projects for the National Heart & Lung Institute.

Can academics really engage 'hard to reach audiences'?

Melanie Knetsch, Deputy Head of Communications, ESRC

ESRC's Festival of Social Science has been running for over ten years and one of the key aims is to encourage academics to engage with a 'new' audience. Our recent review of the Festival demonstrates how in the last five years academics have really

embraced this opportunity. This session will explore why academics are seeking new audiences, is innovation important to engage with them, and the role the ESRC's Festival has had in enabling this over the years. It will also address some of the on-going challenges around innovation in engagement, how to encourage researchers to re-think their audiences and the role engagement plays in achieving impact.

Melanie Knetsch is head of public engagement and Deputy Head of Communications at the Economic and Social Research Council (ESRC). Her role includes supporting academics to undertake public engagement and impact activities, training and advising ESRC researchers on communications and engagement activities, and developing and communicating impact case studies. Melanie also oversees the ESRC's new annual Celebrating Impact Prize and ESRC's Festival of Social Science which has been running for over 10 years.

Poster Presentations: 18.00 onwards introduced by Dr Clare Wilkinson, SCU

Please join us for some refreshments, networking and an opportunity to view and discuss the following posters.

Underground Britain: public perceptions of the geological subsurface

Hazel Gibson, School of Geography, Earth and Environmental Sciences, Plymouth University

Geological issues are increasingly intruding on the everyday lives of ordinary people. Whether it's onshore exploration and extraction of oil and gas or underground storage of radioactive waste, many communities are being confronted with contested geo-engineering interventions under their backyard. As well as being able to communicate the technical aspects of such work, geoscience professionals also need to appreciate that for most people the subsurface is an unfamiliar realm. In order to engage communities and individuals in effective dialogue about geological activities, an appreciation of what 'the public' know is needed, but this is a subject in its infancy. In an attempt to provide insight into these key issues, this study constructs 'Mental Models' of people's perceptions of the subsurface. General recommendations for public engagement strategies will be presented based on the results of selected case studies; specifically expert and non-expert mental models for communities in the south-west of England.

Hazel Gibson initially trained as a geologist, by reading for a BSc in Physical Geography with Geology (Hons) at Plymouth University followed by an MSc in Geohazard Assessment (Distinction) at the University of Portsmouth. Hazel then moved to Australia to commence work as an Engineering Geologist for geotechnical engineering company Coffey Geotechnics. Following this she moved to the U.S.A. to work as a Ranger at Mt St Helens, where Hazel gained experience in outreach and engagement, among other park maintenance responsibilities. Hazel then moved back to the UK and began work at the Natural History Museum in London, where she developed her skills in outreach and engagement with roles in the education and learning department and the identification department. Her current study is an interdisciplinary approach, combining geoscience, communications and psychology to examine perceptions of the geological subsurface.

Royal Observatory Greenwich

Radmila Topalovic and Elizabeth Roche, Royal Observatory Greenwich

The Science Education team at the Royal Observatory Greenwich aims to inspire the next generation of scientists, engage the next generation of citizens and empower their teachers. Astronomy provides a rich foundation for applying maths and physics to some of the most exciting phenomena in the Universe, but it is often associated with great cost and complex concepts when trying to bring the subject into the classroom. We have used limited resources to link some of the most exciting fields in contemporary astronomy with the UK's national curricula in science and mathematics. We endeavour to integrate real science in our programmes in an innovative, interactive and accessible way and this approach has been highly successful. We believe that astronomy is an exciting and inspirational 'gateway science' and naturally leads to imaginative thinking and we hope to share our experience in astronomy education with other science education providers.

Radmila Topalovic is Astronomy Programmes Officer at the Royal Observatory Greenwich. She focuses on the formal learning programme for primary and secondary students, creating and delivering engaging workshops and resources covering a wide range of space topics and incorporating links to all STEM subjects. Radmila has taught science and maths at a secondary school and holds a PhD in space dust.

Elizabeth Roche is the Astronomy Education manager at the Royal Observatory Greenwich. While working in a nanophysics research group she got a taste for science communication and has been hooked ever

since. She has worked around the UK in a variety of science and discovery centres creating, presenting and developing learning programmes for people of all ages on all aspects of science.

I'm a Scientist Get me out of here, online tools to get students enthused about science

Angela Monasor and Rosie Schultz, Gallomanor

I'm a Scientist Get me out of here is a science engagement event where school students get to meet and interact with scientists and engineers. It's a free X Factor-style competition between scientists or engineers, where the students are the judges. Students challenge the experts over online chats, they ask all the questions they want to, and vote for their favourite to win £500 to communicate their work to the public. The company behind the event, Gallomanor, is also taking up greater challenges with *Decipher my Data*, born out of the idea that students benefit from performing real science using real data in the classroom. Students and teachers become scientists working along leading researchers to produce better results than either could achieve on their own. We would be happy to talk about all these projects in greater detail, explain their implications and the results observed so far.

Angela Monasor studied Pharmacy knowing that she would end up in a lab. Angela finally put on her white coat at the Spanish National Centre for Cancer Research, where she completed her PhD. During this time Angela realised that with the narrow focus on a particular protein it is easy to forget to share passion for science with people that have not experienced it. As a result of her determination to keep her perspective fresh and to share her life passion with others, Angela started her own science blog and, together with other scientists and artists, funded Escuelab: an association to bring science to the schools in Madrid. Angela later moved to Bristol in order to take UWE's Postgraduate Course on Practical Science Communication. At the same time Angela is working at Gallomanor on the very exciting projects described above.

Rosie Schultz is a project manager at Gallomanor. Her background is in earth science and physical geography, and it was studying for a masters in the science of natural hazards that showed her how important communication between scientists and people living in at-risk areas is. This sparked her interest in facilitating science communication in science education. She joined Gallomanor in 2011 and makes projects like I'm a Scientist and I'm an Engineer happen.

Gallomanor is a Bath based company that develops and runs science engagement projects that get school students talking with scientists, online. They run I'm a Scientist and I'm an Engineer, Get me out of here! as well as producing science Debate Kits and encourage students to do real science on real data in Decipher My Data.

A place to share and learn?

Helen Featherstone, PhD. Project Manager (Public Engagement) University of Exeter, and Sandy Oliver, Professor of Public Policy, Institute of Education, University of London

Society-university connections through research are growing in strength and popularity with a parallel increase in calls to share lessons learnt to improve practice. We are planning an open-access, international journal as a forum for critical thinking and investigations about public engagement with research. This poster will present our current thoughts for the journal and we look forward to hearing your responses to the idea. The journal will publish empirical research, conversations, video blogs, spotlight articles, commentaries on single issues from multiple perspectives and reviews of books or events. It will become a lively forum for sharing learning from research and practice that crosses boundaries between research and the wider world, across academic disciplines and policy sectors. However, creating a journal that is relevant

across disciplines and both inside/outside HEIs will be challenging. We will raise some of the issues we've identified and present potential solutions while also inviting delegates to help us shape the journal and get involved.

Helen Featherstone runs the RCUK-funded Catalyst project at the University of Exeter. The Catalyst project aims to embed a culture of public engagement with research by supporting academics and affecting institutional change to reward and recognise public engagement. Prior to joining the University of Exeter Helen was based at UWE, Bristol where she completed her PhD. Helen also has over 14 years practical experience of devising, developing, delivering and evaluating interactive science communication activities.

Sandy Oliver is the public engagement champion at the Institute of Education, University of London. Her special interest involves making knowledge more democratic, through public involvement in doing and using research, and collating the findings of research studies to provide short cuts to high quality bodies of literature. Ten years as an advocate of maternity service users was followed by an academic career developing systems to support public involvement in research and policy, nationally and internationally.

Developing a Regional Framework for Science Communication Activities in Thailand

Wilasinee Triyarat, Science Communication Unit, Bristol.

The National Science Museum, Thailand (NSM) has been commissioned by the government to enhance science and technology for Thai society. The NSM developed the Science Caravan Project in order to take science to local areas of Thailand. This research will for the first time examine the impacts of the Science Caravan, in addition to being one of the first science communication studies focussing on regional efforts at science communication in Thailand. In this research, a mixed methods approach will be used to explore the existing science activities in the Science Caravan, for supporting the needs of Thai people in different regional areas. The results of this research may be used to support the development of a science activities framework to specify the needs of Thai people in different regions.

In 2012, Wilasinee Triyarat graduated from the MSc in Science Communication at the University of the West of England, Bristol (UWE), and she started her PhD in April 2013. Prior to studying in UK, Wilasinee was working as a Science Communicator at the National Science Museum, Thailand from 2005. She was responsible for the development of science activities for young Thai children to promote the increase of science knowledge in Thai society. In the future, Wilasinee plans to return to the National Science Museum, Thailand, to support this organisation to improve and develop science communication based activities that are appropriate for Thai people and the context of science in society in Thailand. Wilasinee's research is funded by the Royal Thai Government.

euRathlon project

Marta Palau Franco, Science Communication Unit, Bristol.

euRathlon is an outdoor robotic competition which invites teams to test the intelligence and autonomy of their robots in realistic mock emergency-response scenarios inspired by the 2011 Fukushima accident. euRathlon challenge will require a team of ground, marine and aerial robots to work together to survey the scene, collect environmental data, and identify critical hazards. Leading up to this challenge in 2015, are directly related land and sea robot competitions in 2013 and 2014, respectively. The euRathlon competitions are supported by annual workshops and an open process of developing benchmarks to allow comparison of different robots. The project is led by the University of the West of England, Bristol, and

funded by the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement num. 601205.

Marta Palau Franco is project manager of the EU-funded project [euRathlon](#), which is led by the University of the West of England, Bristol. euRathlon is an outdoor robotics competition, in which teams of land, marine and flying robots have to work collaboratively in realistic, demanding mock emergency-response scenarios, inspired by the [Fukushima](#) accident.

Marta graduated in Industrial Electronics Engineering from the Escola Universitària Politècnica de Mataró (EUPMT) – Tecnocampus Mataró and has a Masters in Marine Sciences in Oceanography and Marine Environmental Management from the Faculty of Biology of the University of Barcelona (UB) in collaboration with the Faculty of Civil Engineering of the Universitat Politècnica de Catalunya (UPC). During her engineering studies in electronics and automation, she was a member and manager of the “CRA” EUPMT robotics team and one of the organizers of the “III Ciutat de Mataró national robotics competition” in Mataró, Spain. Marta is experienced in fields such as robotics, environment management, marine renewable energies, building installation, health & safety and R+D management.