

# Public Engagement at Bath

Supporting researchers to engage



UNIVERSITY OF  
**BATH**



# Welcome!

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**Professor Jane Millar, Principal Investigator,  
Engaged360@Bath project**

The Engaged360@Bath project that saw the establishment of a Public Engagement Unit has been, as intended, a catalyst for change at the University of Bath, change that could not have happened without the resources of the project. We started our work with a solid and long-standing commitment to public engagement, but mainly through the activities and willingness of a relatively small group of colleagues. The Engaged360@Bath project gave us the opportunity to do more, to embed more deeply across the University, to reward and make visible, to develop skills and expertise, to be more reflective about evaluating what we do, and – perhaps most importantly – to articulate the meaning and purpose of public engagement with research for the University of Bath.

As Principal Investigator for the project, I enjoyed, and learnt a lot from, working with our small, but very experienced and knowledgeable, professional public engagement team. Academic colleagues and postgraduate students across the University have been involved in lots of different ways, and it has been good to be able to recognise that with small grants, awards and events. We will be continuing to seek exciting and innovative ways to develop further, keeping our eye on our main purpose – excellent research, which is enhanced by being engaged and outward looking. This publication celebrates some of the project successes and the researchers that were involved.



**Professor Jonathan Knight, Pro-Vice-Chancellor (Research)**

As Pro-Vice-Chancellor (Research), I am excited by high quality research that has a wider impact beyond academia. Engagement is a step towards that wider impact. At the University of Bath, we are committed to making our research knowledge and experience available for the good of society, via communications and engagement.

For me, producing high quality, impactful research is all about having energetic people, doing imaginative research, communicating their research, engaging with a wide variety of people and organisations and having accountability to the public purse that often funds the research. Therefore, engagement is a vital part of being an academic and harnessing the energy and creativity of the academic population is an essential part of the role of the Public Engagement Unit.

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## Introduction

'Public Engagement' means different things to different people; you will see this in the wide variety of activities described in this publication. We find the National Coordinating Centre for Public Engagement's definition helpful which states that public engagement is:

**The myriad of ways in which the activity and benefits of research can be shared with the public. Engagement is by definition a two-way process, involving interaction and listening, with the goal of generating mutual benefit.**

We are all members of the public, and citizens in our communities. However, when we describe the 'public' for 'public engagement' we tend to think of people in non-academic settings. It is tempting to picture a broad, general public but not everyone has the same needs when it comes to interacting with research and researchers. For this reason we usually describe publics: non-academic groups who contribute to, and benefit from, research.

High quality public engagement has a clear purpose and brings benefits to all parties involved. It can be useful to decide if you want to inform people about research, listen to public views on research, or collaborate with non-academic citizens. You will see examples of these differing approaches in the following pages. Our researchers have described many benefits of undertaking public engagement activities which include developing skills, refining research questions, and enriching teaching.

# The Public Engagement Unit

The Public Engagement Unit was established in July 2012 and is based in the Department of Marketing & Communications. Our mission is to:

Facilitate high quality public engagement, embedded across the whole research lifecycle, with staff and students building mutually beneficial links between our research and the public.

In pursuit of our mission, we work across all academic departments and in tandem with other professional services, most notably: Research & Innovation Services; the Researcher Development Unit; Human Resources; and the Widening Participation Office.

We believe that public engagement can improve:

- Research quality
- Research impact
- Research visibility

Our work with researchers, and the partnerships that we forge with external partners, are rooted in these beliefs.



Young people engaging with research at the Festival of Nature



In our first three years we have, amongst other things:

Developed a **Public Engagement Network** of researchers and professional services staff with over 340 registered members

Established two **Vice-Chancellor Awards for Public Engagement with Research**, one for postgraduate researchers and one for staff

Invested over **£30,000 in engaged research projects**, supporting a range of innovative off-campus activities

Embedded public engagement with research in **probation and promotion criteria and academic role descriptions**, as a means to demonstrate excellence in research

Designed and delivered professional development opportunities for researchers, reaching over 550 people

Supported over 100 researchers in completion of engagement and impact sections of grant proposals

Provided and supported a series of opportunities for researchers to engage with the local community, including the Pint of Science Festival, the Festival of Nature, Bath Taps into Science, Bath Inspires and the Fringe Arts Bath Festival

Grown the **Images of Research competition** to an annual reach of over 4,000 people

Arranged **nine public engagement conversations**, providing an opportunity for over 200 people to learn more about specific engagement-related issues



Left, top: Jon Chouler, winner of the 2015 Vice-Chancellor's Postgraduate Prize for Public Engagement with Research

Left, bottom: Researchers taking part in the Pint of Science Festival



# Rewarding excellent public engagement

## Public Engagement Awards

The Vice-Chancellor's Awards for Public Engagement with Research recognise the important role played by those who undertake excellent public engagement with their research, increasing the non-academic impact of their research, improving their own skills and leading by example.

Awards are presented to both staff and postgraduate research students.



### 2014 Staff Award Winner –

**Dr Paul Shepherd, Department of Architecture & Civil Engineering**

Dr Paul Shepherd is a Lecturer in Digital Architectonics, who worked at Buro Happold after completing his PhD in highly non-linear finite element modelling. Paul's research builds on his years as a practicing engineer, investigating how computers can be used more effectively in the design of the built environment.

For Paul, public engagement is fundamental to his role as an academic and in his attitude to research. The communication of complex concepts to non-specialist audiences is core both to his research and public engagement work. He has engaged all ages from primary schools to the University of the Third Age, although he has targeted his promotion of mathematics and engineering to older school students. Paul has a long-standing commitment and passion for engaging the public in his research, and positions himself as a role model for young, aspiring engineers.



### 2015 Staff Award Winner –

**Dr Sarah Bailey, Department of Pharmacy & Pharmacology**

Dr Sarah Bailey is a Senior Lecturer in Pharmacology with a PhD in pharmacology and over 40 peer reviewed publications in internationally recognised journals.

Sarah's ongoing research into the mechanisms underlying depression and anxiety crucially depends on the use of animal models to test potential drugs and to gain a better understanding of brain circuitry. This requires continued public and government support and prompted Sarah to become a Schools Ambassador for the organisation Understanding Animal Research. As one of the first UK scientists to talk openly on national television about using animals in her biomedical research, Sarah has since engaged and enabled local MPs, school and patient groups to visit the University of Bath's animal facilities. She continues to develop new ways to engage the public with drug discovery research.

## Images of Research

Images of Research is an annual competition that challenges researchers to explain the impact of their research using an eye-catching image and short description.

Entries are initially displayed on-campus where awards are made for *Best Image*, *Best Description* and *Best Overall Entry*, before the exhibition is toured around venues in the city. The competition is a useful starting point for researchers looking to engage the public with their research.

In recent years, thousands of people have enjoyed viewing the images. They are also available online at: [go.bath.ac.uk/ior](http://go.bath.ac.uk/ior)



# Engagement in the Faculty of Engineering & Design



## **Professor Tim Ibell, Associate Dean (Research), Faculty of Engineering & Design**

Our prime driver in conducting research is to benefit society. It is really important that we remind ourselves of this obvious fact from time to time. Society is our 'client', and it is therefore compelling that we should be engaging with our 'client' as often and as profoundly as we can. To me, this is the essence of public engagement. It is the involvement of the most important stakeholders in our research. But even were this not compelling enough, the very act of public engagement builds reputation of our research standing across a broad cross-section of society, and it ensures that our communication skills are stretched and enhanced. Academics rely on heightened communication skills daily, after all.

There are all sorts of public groups that are important to us in the Faculty of Engineering & Design. Our engagement with diverse publics gives us the opportunity to talk about why engineering is so important to society and why someone should become an engineer. In particular, I think there is the need to attract more female students into engineering. This is not as simple as just targeting such students directly. They have many influencers – family, friends, teachers etc – and engagement across a broad range of these is necessary to inspire and attract more people into the profession.

## Images of Research



### **Don't be deceived by appearances!**

#### **Dr Eshrar Latif, Department of Architecture & Civil Engineering**

Appearances can be deceptive. These five small buildings (or test cells) all look the same both inside and out and are built in a way that should ensure that they have the same amount of heat loss through the walls, floors and roofs. However, the walls of these buildings contain the following, completely different thermal insulation materials: hemp-lime; mineral wool; polyisocyanurate; wood fibre; brick; and block cavity wall.

These buildings are put to the test in the rugged environment of a decommissioned military airfield in Wroughton, UK, where they are exposed to extreme wind flow and temperature conditions to test which takes the least amount of energy to maintain a comfortable indoor temperature.

*Highly Commended for Best Image, Images of Research 2015*





*"You will develop a better technology or product if you're working from the start with the people who will be using it."*  
Dr Marianne Ellis

## Spotlight on Engaged Researchers

### Dr Marianne Ellis, Department of Chemical Engineering

Dr Marianne Ellis is a Senior Lecturer in Chemical Engineering and a tissue engineer who supports regenerative medicine through the use of biochemical engineering for bone, heart, liver, skin, pancreas and nerve tissues. She has recently developed a research interest in cultured meat, aimed at developing systems to produce such meat on a large scale, in a cost-effective manner.

Marianne has collaborated with surgeons and industrialists to identify particular problems that they have in order to engineer the most appropriate solutions and technology via her research.

Marianne's motivations for engagement are to:

- listen to and benefit from different perspectives
- keep her research grounded in real-world issues
- generate research impact and to make a difference
- develop her professional skills

Through engagement activities Marianne has benefitted professionally; developing skills, efficiency and confidence and broadening her networks.

### The importance of networking

Networking is vital to identify new research partners and opportunities and through external meetings and conferences, Marianne has successfully sourced potential collaborators. One such example is a charity called 'New Harvest' whose research needs matched Marianne's research interests. She now sits on their board providing them with advice and gaining access to valuable information and contacts to help inform her research.

**Dr Valeska Ting, Department of Chemical Engineering**

Dr Valeska Ting is a Lecturer in Chemical Engineering and a Prize Fellow in Smart Nanomaterials motivated by research leading to beneficial environmental impacts, specifically the development of materials for hydrogen storage. She is also involved in a collaborative project developing thin film sensors to monitor, change and subsequently reduce pollutant levels.

Valeska has engaged with industry (e.g. Ford, Airbus, MAST Carbon); politicians (through the Royal Society’s Pairing Scheme); non-scientists, children and young people, in order to raise awareness of her research and to draw on her collaborators’ skills, knowledge and experiences to shape future research and maximise impact. She has delivered a range of activities targeted towards a broader public including public poster sessions, public lectures and Ignite talks.



Valeska is driven to engage as a means to:

- inspire, inform and educate others to make informed choices
- ensure research is adopted and adapted into practical technologies that make a real difference to the environment
- help shape and inform policy change
- make research accessible to non-academics
- develop her professional skills

Valeska has found engagement a valuable way to build her profile. Online videos she has produced about her research have drawn global interest, allowing her to connect with researchers in America.



**Ignite talks**

Ignite talks are five minute long presentations with 20 slides, each slide moving on automatically every 15 seconds. Valeska and many others find them an excellent and quick way to convey a lot of information to an audience. They can be uploaded to YouTube and shared via social media to allow for maximum coverage, and for conversations to continue online.

**TOP TIPS**

Be prepared for the different audiences and ‘big picture’ questions they may ask you before you engage. *“Research your audience well so you are able to put yourself in their shoes and target your activity and messages more appropriately.”*

Dr Valeska Ting



Professor Jane Millar, Paul Freeman and Dr Valeska Ting



**The Royal Society Pairing Scheme**

Through this annual programme that gives policymakers and research scientists an opportunity to experience each other’s worlds, Valeska was paired with a Paul Freeman, a senior scientist in the Department of Energy and Climate Change.

*“The Royal Society scheme gave me an unprecedented opportunity to understand political decision making and develop an appreciation of how to inform policy.”*

Dr Valeska Ting



## Engagement Highlights

### Costing Research for Industry

**Dr Ettore Settanni, Department of Mechanical Engineering**

Dr Ettore Settanni has devised and delivered an interactive workshop to secure industrial buy-in for new engineering-related research.

Ettore's workshop transferred new knowledge generated by an Engineering and Physical Sciences Research Council funded project – *Costings for Avionics Through-life Availability* – to relevant industry partners.

The workshop engaged industry partners with the research findings and challenged their understanding of engineering research as 'data-driven' and centred on knowledge about well-defined pieces of hardware. The workshop introduced a modelling approach that uses both qualitative and quantitative data to underpin the successful execution of availability contracts.

34 participants were involved representing 19 different industrial partners from the aerospace, defence, design and engineering, energy and manufacturing sectors.

The workshop:

- provided first hand insight into what industry actually values
- translated academic work into a style accessible to a non-academic audience
- deployed real-life examples from across industrial sectors and different geographic contexts to highlight research and to enhance credibility
- introduced industrialists to innovative approaches that may become common place in the future
- resulted in 90% of delegates wishing to learn more about the subject

*"Personally, I have found that getting more acquainted with the 'language of industry' has enabled me to share core ideas from my research in a way that is accessible to industry partners."*

Dr Ettore Settanni



### The Young Researchers' Programme

**Dr Paul Shepherd, Department of Architecture & Civil Engineering**

Dr Paul Shepherd collaborated with Paul Thomas from the Bath Royal Literary & Scientific Institution to develop and deliver The Young Researchers' Programme.

This eight month programme enabled young people aged 13+ to complete a meaningful research project. They learned from and with postgraduates and early career researchers what it is like to be a researcher.

The programme was modelled on real-life scientific research processes, creating an immersive experience and an opportunity for all participants to reflect on their own learning, and to develop confidence and skills in presenting and communicating.

All the young people were new to the idea of research and some felt apprehensive about studying Science, Technology, Engineering and Maths subjects. All the postgraduate and early career researchers were new to supervision and most were new to public engagement.

Through the activity:

- the postgraduate and early career researchers enjoyed supporting, supervising and mentoring young people, valuing the opportunity to engage on social and educational issues
- all the participants engaged in hands-on activities and discussions
- participants actively reflected on the research skills they were developing and on their own learning journeys

*"It was exciting to see my research from a different perspective. The Young Researchers' Programme enabled young researchers and postgraduates to share their ideas, to collaborate, engage and communicate, and to each bring different ideas to the table, as a source of creativity."*

Ammar Azzouz, postgraduate researcher

# Engagement in the Faculty of Humanities & Social Sciences



## **Professor David J. Galbreath, Associate Dean (Research), Faculty of Humanities & Social Sciences**

Much of the work that we do here at the University of Bath is dealing with real problems in real time. This means that both our scientific and applied research is geared towards addressing social, political and economic challenges. The Faculty of Humanities & Social Sciences prides itself in being able to engage with its key beneficiaries, communicate to a range of audiences and co-produce research with our stakeholders.

Public engagement is the bridge that allows our researchers to have a skillset and models for embedding our research in the larger public arena. For example, our researchers have engaged across our global, national and local communities such as with charities, government departments, families, schools, businesses and more.

The Faculty benefits from having a Public Engagement Unit that is able to produce the expertise, knowledge and how-how about how to bring our research and our communities together for the benefit of both parties.

## Images of Research



Photo courtesy of Wolf Ellis, University of Bath partner, Evidence for Development

### **Questioning the straw man**

#### **Professor James Copestake and Fiona Remnant, Department of Social & Policy Sciences**

This Ethiopian farmer is intending to benefit from a non-governmental organisation (NGO) project to improve farm incomes. Demand prospects are good due to increasing industrial beer production in the country which currently relies heavily on malt barley imports. Whether he and others see an increase or decrease in their production and sales, how can we establish what part the NGO project played in that change?

The 'Assessing Rural Transformations' research project aims to get to the heart of this attribution problem, and to provide a reality check for similar aid interventions. We're testing evaluation methods based on asking farmers themselves about the most significant events in their lives, reducing bias by de-linking data collection completely from the NGO being evaluated.

*Winner of Best Image, Images of Research 2015*



## Spotlight on Engaged Researchers

### Dr Rita Chawla-Duggan, Department of Education

Dr Rita Chawla-Duggan is a Lecturer in Education and her research focuses on father involvement in young children's learning and how learning is supported through quality education. Her research interests have led her to engage with fathers, children, local authorities, politicians, schools, think tanks and charities, drawing different stakeholder groups together to help inform research proposals and to form a research advisory group.

Through engagement Rita aims to:

- help shape future research and maximise impact
- generate funding for future research
- make research relevant and fruitful to stakeholders

Rita has successfully broadened the reach of her research through the media and through research partners' networks, and better understands her partners' individual priorities for father involvement

in children's education. She has developed professionally, from 'pitch' and presentation skills to managing relationships and enhancing credibility amongst stakeholders.

### Interdisciplinary collaborations

Rita has collaborated with Dr Susan Milner from the Department of Politics, Languages & International Studies and a local authority on a research project focused on Fathers' Friday – an initiative aimed at strengthening fathers' participation in children's education and development. Rita and Sue successfully utilised media (an online film and blog) to disseminate key findings and to broaden reach of their project. The blog generated more than a 100 comments and the film was used as a case study by a national charity.



An image taken from the Fathers' Friday initiative

*"I have fostered good relationships with stakeholders. My next concern is how I go about sustaining these and utilising them for future research."*

Dr Rita Chawla Duggan

### TOP TIPS

*"Planning your engagement is crucial. Think about how you plan to engage right at the beginning of your research rather than at the end. Contextualise your engagement plans within the broader development of your research."*

Dr Rita Chawla-Duggan





**Dr John Troyer and the Centre for Death & Society, Department of Social & Policy Studies**

Dr John Troyer is a Lecturer in the Centre for Death & Society (CDAS). CDAS is particularly active in engaging the public to help inform its research. The researchers in the Centre have embraced the engaged research agenda, bringing people who are not normally involved in research into their activities and giving them a voice. The researchers aim for intellectual creativity and rigour in research, and engage – as relevant – with industry, the professions and government.

**Dead & Buried**

CDAS' 'Dead & Buried' project saw researchers working with young people identified as NEET (Not in Employment, Education or Training) on arts-based activities to explore issues related to death and alternative burial processes. The project resulted in a professionally-curated exhibition of the young people's art, an exhibition that was later viewed by the University's Chancellor and The Countess of Wessex. The project featured as a case study on the Arts & Humanities Research Council's website.

Researchers from CDAS are regularly involved in the University's Images of Research competition and their research has also been widely reported both in the national and international media, most recently in relation to a joint CDAS / Institute for Policy Research Policy Brief on funeral costs

John's own research tackles a range of bioethical issues surrounding death, dying, the dead body and body disposal technologies. John has engaged and collaborated with cemetery staff, school groups, museums and a broader public, adopting mass media channels to maximise coverage on the topics of assisted dying and organ donation, whilst targeting narrower museum audiences when discussing history of science and its relation to death and dying.

John is motivated by a desire to:

- inform and inspire audiences
- develop new insights, thoughts and ideas
- form new partnerships and research collaborations and broader networks
- develop professional skills

Above: Young people involved in the Dead & Buried project

**A fruitful partnership**

John collaborated with Arnos Vale Cemetery Trust and Calling the Shots digital media company on the 'Future Cemetery' project to trial new user technologies in cemetery spaces.

*"My partners are innovative, creative and forward-thinking and have provided an ideal testing ground for new ideas and concepts for 21st century cemeteries."*

Dr John Troyer



**TOP TIPS**

*"If you're starting out in public engagement, make sure that you really want to do it. Start with a topic that excites you and an engagement activity that you're comfortable with. Challenging yourself can come later."*

Dr John Troyer

Through engagement John has developed a wider network of contacts and advocates, shaping emergent research opportunities and growing his professional reputation. He continues to improve his time management skills through balancing public engagement and research with teaching.

## Engagement Highlights

### Stakeholder Panels for Smokers and Drinkers

**Dr Sally Adams, Department of Psychology and  
Dr Karen Evans-Reeves, Department for Health**

This collaborative project involved establishing and delivering two targeted stakeholder panels, each with up to 20 members of the public who were both smokers and drinkers, in order to gather thoughts on relevant research-related issues and to inform plans for future research. The panels gathered and discussed smokers' attitudes and thoughts on research published on the TobaccoTactics website and examined factors associated with alcohol use and alcohol hangover to inform new research in this area.



The stakeholder panels provided:

- opportunities to communicate directly with beneficiaries of research
- an understanding of how smokers react to industry voices and how research findings can be presented more effectively
- opportunities to consult drinkers on alcohol hangover and to inform the design and development of an Economic & Social Research Council grant on the cognitive effects of alcohol hangover
- insight into both sides of the argument around plain packaging

#### TOP TIPS

- Be open to learning from non-academic participants
- Gather formal feedback from panel members about their experience of the panels, what has and hasn't worked for them, to inform future panels
- Expect people to challenge your research and welcome this!

### A support tool for friends of those who self-harm

**Hannah Heath, Department of Psychology**

Hannah Heath is a postgraduate researcher whose research explores how young people make sense of supporting a friend who self-harms and the subsequent impact of this on friendship. Hannah has delivered focus groups with friends of people who self-harm and those who support them to co-create and refine a practical support tool (a leaflet).

Hannah designed and delivered eight focus groups targeted at both University students and staff of two local support services. In total, 24 people participated and shared ideas. In phase one, participants were presented with mind maps of the main findings from Hannah's research, using them as a basis for discussion. They also contributed ideas for the leaflet and how it should look. In phase two, participants gave feedback on the leaflet in terms of content, layout, and design.

Through the activity, Hannah benefitted from:

- a wider network of practitioner contacts in the South West to input to her research
- an opportunity to promote her research through an interview on a local radio station
- increased motivation and a better understanding of the practical implications of her research
- a better understanding of the time it takes to design and deliver a project
- improved design skills and knowledge of software

#### TOP TIPS

Run with opportunities that arise as projects progress. *"I connected with new people along the way, always following up contacts that I was given. The project made me challenge myself to say 'yes' to new experiences."*

Hannah Heath

*"The project and the engagement reminded me that my research offers real impact for people in the community. It was motivating to see people engage with my research through the project."*

Hannah Heath

### Patient and Public Involvement (PPI) in research

Historically, major funders of health research such as the National Institute for Health Research (NIHR) have viewed PPI as an important part of the research process.

At Bath, we have our own specialists in PPI – Bath Research & Development based in the Department for Health. Bath R&D runs the Participate Network, made up of people willing to get involved in research in three different ways:

- **Research Panels** – helping researchers to shape research ideas and plans
- **Research Partners** – working closely with researchers across a project, helping in its planning, design, delivery and dissemination
- **Research study participants** – taking part in studies or trials

# Engagement in the School of Management

## **Amanda Willmott, Research Manager, School of Management**

The School of Management is committed to undertaking research which contributes positively to and works with society. Engaging with and influencing the wider world through addressing societal challenges ensures that our academic activity is beneficial. We view effective public engagement as an essential part of the work which we carry out and it is a crucial part of our research strategy.

We do not want our research to exist in a vacuum; we want our research to influence and be used by our local community and society at large. We are most effective at doing this when there is a relationship between research and the public which is beneficial

to both. Seeing our research being applied practically by people and companies outside of academia helps practitioners and it also adds credibility and insight in the research that we are carrying out, and promotes an understanding of our research integrity. Practitioners also bring a unique perspective which enriches the research that we do.

Public engagement is a great way for us to interact with key non-academic and public groups, for example senior practitioners in academics various areas of specialism. An example of this would be the HR Alumni that we have established and our close corporate connections which enable us to identify impactful research questions and they facilitate the translation between high quality research and impact.

## Images of Research



### **Is your diet sustainable?**

#### **Professor Michael Beverland, Dr Judith De Groot and Dr Krista Bondy, School of Management**

When we think of sustainability and food we typically think about how things are grown or produced and how far they are transported; but not what we eat. Agriculture however accounts for almost 20 per cent of all climate change emissions and has an even larger footprint when one factors in water and energy use. Much of this impact is driven by demand for animal-based protein.

Our research focuses on understanding how to transition consumers to a primarily wholefood plant-based diet. Research reveals this diet is not only healthier but also has the lowest carbon footprint out of all dietary options.

We are working on overcoming the barriers to widespread dietary change and developing pathways for consumers to shift to more sustainable eating habits.

*Highly Commended for Best Overall Entry, Images of Research 2015*



## Spotlight on Engaged Researchers

### Dr Christos Vasilakis

Christos Vasilakis is a Senior Lecturer in Information, Decisions and Operations. His research explores how mathematical modelling and computer simulation techniques can resolve healthcare delivery problems. He has engaged with health and social care managers and professionals through the creation of project teams; collected data through observations of practitioners at work; and undertaken process mapping to establish practitioners' unique roles.

Christos uses engagement as a means to:

- inform the definition of the research project
- develop mathematic models that respond to challenges in the sector and that have practical value
- learn as much as possible about a specific problem so that he is better able to understand it and to address it

Through engagement Christos has developed extensive networks, strong interpersonal skills and an ability to empathise with his key public. His research has benefitted from the unique insight and perspectives of others and has led them to appreciate his research findings and their integrity.

*"I recognised early on in my research career that behind the data lay real people with real issues for who I could hopefully make a difference."*

Dr Christos Vasilakis



*"Having seen both sides of engaged research, I am convinced of the mutual benefit that can arise from research collaborations."*

Dr Chris Archer-Brown

### Dr Chris Archer-Brown

Dr Chris Archer-Brown is a Lecturer in Information Systems. His research focuses on social and mobile technologies within organisations to improve communications between employees, their partners and customers, to span common organisational boundaries and to gain competitive advantage.

Chris has engaged with 'Knowledge Intensive Professional Services' organisations, such as the Environment Agency and Deloitte, to develop research ideas and to secure hard data to inform his research in enterprise social media. Chris has undertaken a range of qualitative interviews to gather data and to advise collaborators on their own social media approaches.

Chris' motivations for engagement are to:

- try out ideas in a real-world setting
- forge new collaborative partnerships with consumer intelligence agencies
- provide opportunities for regular dialogue between academics and practitioners so that research remains applicable and relevant

Chris' engagement has generated hard data to prove a return on investment and improved his collaborators' ideas and practices, giving them critical space to think about the issues that they face. His engagement has led to new research projects.

### TOP TIPS

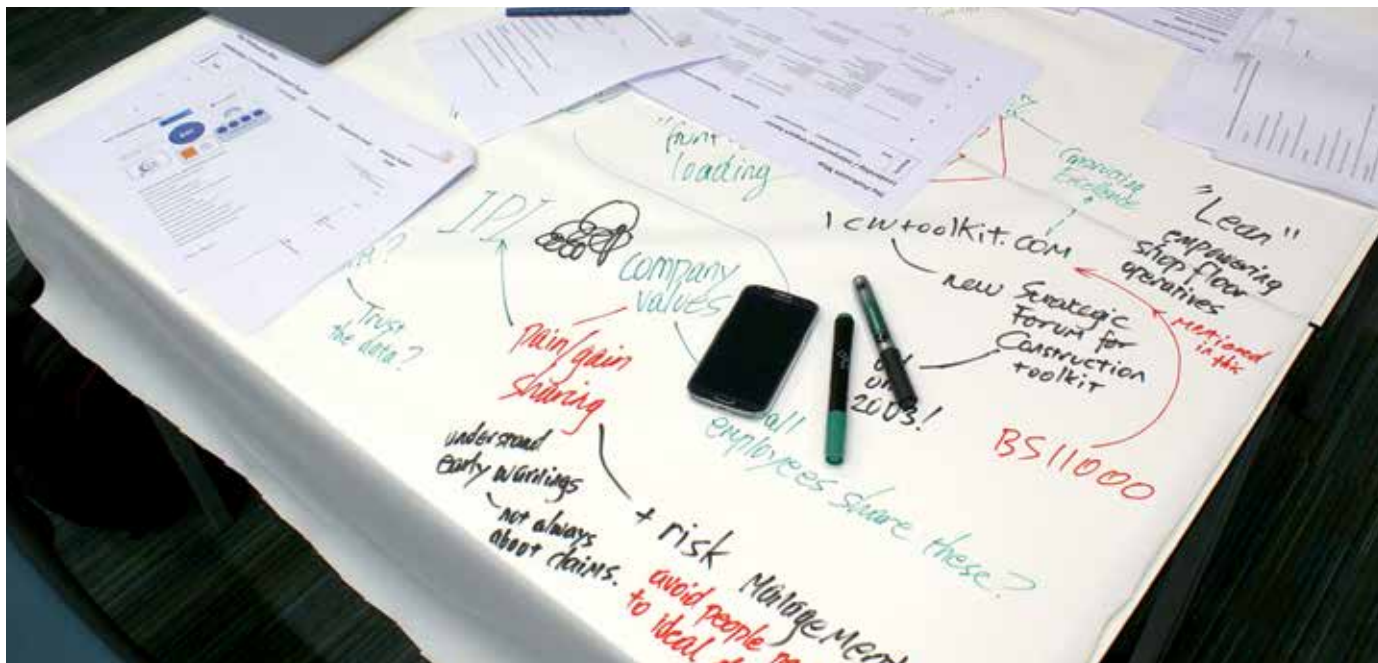
*"For applied research, don't leave engagement as an after-thought. Engage right at the beginning to help you approach the relevant literature and formulate research questions."*

Dr Christos Vasilakis

*"Be really exact about the benefits to your collaborator of engaging with you. Articulate how engagement with you could support their specific goals."*

Dr Chris Archer-Brown

## Engagement Highlights



### Behaviours4Collaboration – Engaging with industry

#### Professor Juani Swart

In response to changes in the UK construction sector that require all centrally-funded construction projects to be delivered in collaboration by several stakeholders, Juani arranged a half-day stakeholder engagement event to gather feedback on a tool designed to support collaborative working - the Profession Map. The Map aims to help the construction sector to recognise and sustain positive collaborative behaviours. The Behaviours4Collaboration group engaged with key stakeholders including Stride Treglown, Building SMART UK, Constructive Coaching and Constructing Excellence.

The interdisciplinary and interorganisational workshop was hosted on campus in the Chancellors' Building and drew together academics and professionals from across the construction sector. World Café methodology was used to stimulate feedback through group discussion which was recorded and circulated to all attendees.

The workshop resulted in:

- real-time feedback on the Profession Map and its use across different contexts
- a positive impact on practice and an opportunity to apply for further research funding
- an opportunity for stakeholders to inform a tool that is relevant to them, enhancing their buy-in

*"I very much enjoyed collaborating with external stakeholders in the design and implementation of our workshop. The work that arose from it led to us winning additional grants to develop our collaboration further."*

Professor Juani Swart



Industry partners at the Behaviours4Collaboration workshop

#### Using Effective Facilitation Methods

World Café is one of many reliable facilitation techniques. Using appropriate facilitation enables inclusive engagement where all participants have a voice and learn and listen to each other. It is easy to assume that putting people together in a room will result in quality engagement – this is rare. Facilitation of some kind is usually needed to build trust, share underlying assumptions and develop meaningful dialogue. Seeking advice on the various techniques can really improve your engagement activities.

#### TOP TIPS

- Be clear on the intended outcomes for stakeholders involved
- Think about where engagement best fits in your research journey – the earlier the better!

## Research/industry collaborations

### Dr Richard Fairchild

Working alongside Dr Kate Woodthorpe from the Department of Social & Policy Sciences, Dr Richard Fairchild developed an *Introductory Guide to Research/Industry Collaborations* (available via the Public Engagement Unit's website: [www.bath.ac.uk/public-engagement](http://www.bath.ac.uk/public-engagement)). Such collaborations are distinct from consultancy work as they involve researchers working with rather than for industry partners.

Through the *Introductory Guide*, Richard and Kate explored the dynamics of university-industry research, the benefits and challenges of such collaborations from the viewpoint of researchers. Their thinking was in part informed by a public engagement conversation on engaging with industry where attendees shared their own experiences of university-industry research, the benefits, risks, practical challenges and solutions for all involved.

### Public Engagement Conversations

Every semester, the Public Engagement Unit arranges several free public engagement conversations on specific engagement-related themes. In recent years, hundreds of researchers have attended the conversations that have covered topics such as: engaging with schools; using social media to engage; art and research; and public engagement and impact.

Conversations always run on a Wednesday afternoon, 1.15 – 2.30pm, and involve researchers and professionals from within and without the University presenting on a given theme, followed by Q&As. The aim is for people to share their ideas and experiences, to give top tips that attendees can then apply to their own engagement practice.

The *Introductory Guide* outlines a range of benefits of engaging with industry including ensuring that your research has relevance, interest and impact beyond a community of scholars, with practical implications and benefits in the 'real-world'. Industry partners are increasingly a source of funding for research and bring differing perspectives that can help shape research questions or inform new research horizons.

The *Introductory Guide* acknowledges some of the common challenges of university-industry research most notably, negotiations around intellectual property rights and the time it takes to conduct rigorous academic research, and offers potential solutions for these.

### TOP TIPS

- Network, network, network: It is vital to put yourself out there and to promote your work where you can
- Be clear on the distinction between consultancy and research
- Agree on the inputs, desired products / outputs and benefits of the research upfront
- Be clear and realistic about the time commitment you can give to the collaboration



*"I've networked with researchers in the Department of Psychology and have subsequently become a member of the Neuroeconomics Research Group, an outlet for this type of research."*

Dr Thanos Verousis

## Engaging those with ADHD

### Dr Thanos Verousis

Thanos developed an engagement activity to inform his plans for a multidisciplinary research project on Attention Deficit Hyperactivity Disorder (ADHD) and risk aversion. He aimed to listen to the experiences of those with the condition and the charities that provide ADHD support. He engaged with the Bristol Adult ADHD Support Group and volunteers with ADHD.

Thanos met with ten attendees of the Bristol ADHD Support Group and also conducted four one-to-one interviews with people who responded to an advert on the Group's website for project participants.

Through engagement Thanos has benefitted from:

- an increased understanding of conducting qualitative research, its pitfalls and strengths
- a valuable experience of interviewing, approaching stakeholders and setting objectives
- opportunities to consider the ethical implications of his research including language and research usage
- developing research that is more beneficial to those with ADHD, supporting them to make informed financial decisions
- a solid platform to inform future research in this field

### TOP TIPS

Emphasise the empowering nature of engaged research rather than treating people as part of a clinical process

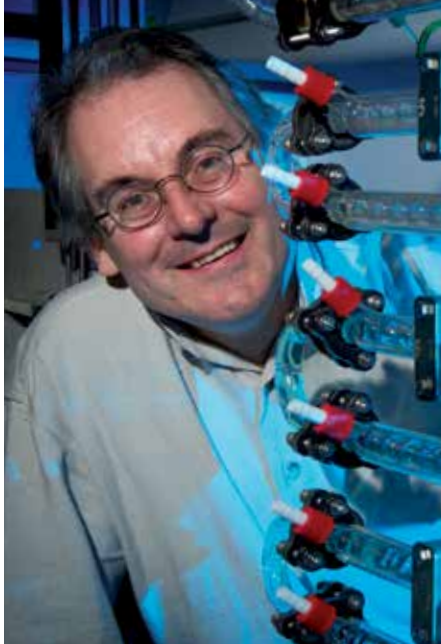
Be prepared for the risks associated with group dynamics and identify any sensitive topics beforehand

*"I benefitted from having a 'critical friend', another researcher experienced in qualitative approaches."*

Dr Thanos Verousis



# Engagement in the Faculty of Science



**Professor Chick Wilson, Associate Dean (Research), Faculty of Science**

As academics and researchers we are embedded in wider society, with the benefits and responsibilities that entails. Universities are vital institutions within local communities, and engaging fully is both a responsibility and an opportunity. We are trusted with delivering education, and with substantial amounts of public funding to carry out our research. In the Faculty of Science our research is carried out across the full spectrum of intellectual and academic investigation, from the highly curiosity-driven fundamentals to research that has more of a direct application in society. Ultimately, however, all of our activities are designed to benefit society (or its shorthand interpretation ‘the public’), whether it is delivering a new generation of graduates with knowledge, and skills to benefit their entry into the workplace, or in delivering a scientific or technological breakthrough that is of immediate material benefit to people; a new drug, for example, or a device for medical diagnostics, or research that will help secure a cleaner environment for living.

Disseminating the findings of our research beyond the specialist academic literature to broader society is vital in ensuring we are able to maximise the potential benefits our research can deliver. However, if we are to meet this ambition of using our academic developments to improve society, we must go beyond dissemination and engage others in our research in a range of ways. By listening to, and working with, young people, policy makers, industrialists, clinicians, entrepreneurs, charitable organisations, institutions such as museums, public bodies, and many others our excellent research increases in relevance and reach whilst meeting real societal needs.

## Images of Research

**Twinkle, twinkle, little dot...  
... How I wish that you would not!**

**Dr William Wadsworth and Professor Tim Birks,  
Department of Physics**

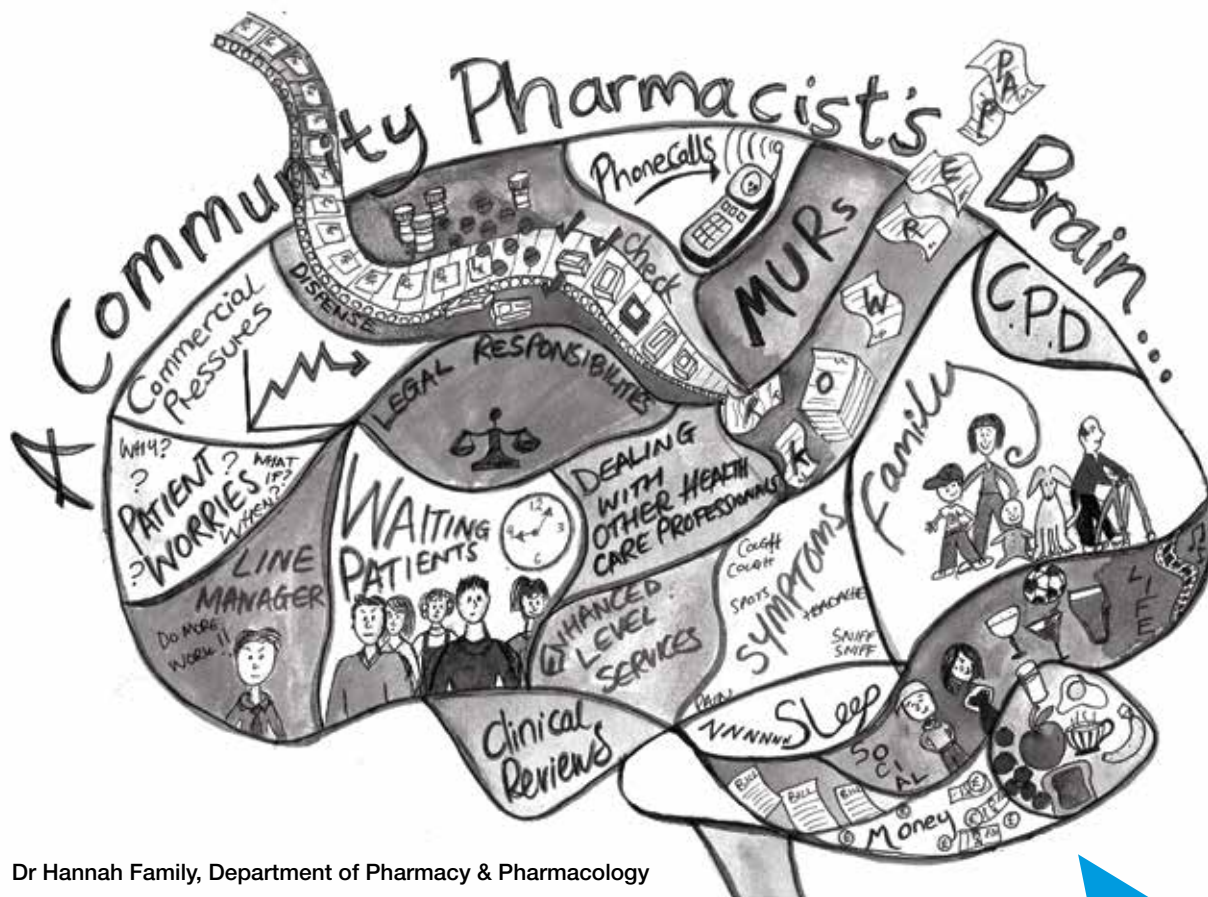
Stars twinkle. They seem to flicker rapidly, though most are in fact perfectly steady. Air movements in the Earth’s atmosphere continually bend the light slightly in random directions, a bit like moving water does. Because this refraction depends on the light’s wavelength, the twinkles are coloured. Here I moved a handheld camera with a half-second exposure so the star’s fluctuating brightness and colour became a fluctuating trail (a short flash captured the stationary tree).

Although very pretty, the twinkling of stars is a problem for astronomers who want to measure what stars are actually doing and not the effects of our own planet’s air. Our research in the Department of Physics uses optical fibres to process starlight from telescopes to undo twinkling and other atmospheric degradations. This will help to understand the development of the universe, and find planets around other stars.

*Winner of Best Overall Entry,  
Images of Research 2015*



## Spotlight on Engaged Researchers



### Dr Hannah Family, Department of Pharmacy & Pharmacology

Dr Hannah Family is a Lecturer in Health Psychology. Her research explores patient safety in a pharmacy context, specifically how mental pressures might contribute to dispensing errors and also how pharmacists can help people engage with healthy behaviours.

Hannah has collaborated with pharmacists, superintendent pharmacists, healthcare commissioners and patients to share views, skills, knowledge and experiences. She ran a competition for pharmacists to instigate conversations and interest in her research. She also developed an interactive workshop on patient safety issues in pharmacy, based on her research, that has been delivered at 6 Local Pharmacy Forums in the UK, and the Bergen branch of the Norwegian Pharmacists Association.

Hannah's motivations for engagement are to:

- ensure the relevance of her research
- open up dialogue with key stakeholders to facilitate the dissemination and adoption of research
- develop ideas for future research

"I did a cartoon doodle of a community pharmacist's brain, a brain map, and populated it with what I thought their mental workload looked like. I then launched a competition that invited pharmacists to complete their own brain map with the mental pressures they thought they were under."

Dr Hannah Family

Hannah has benefitted from a raised profile across the University following her engagement activities and involvement in the Images of Research competition. Her engagement has also informed teaching in pharmacy safety and dispensing and led to her serving a role as South West Chair of the British Psychological Society. Hannah's brain maps have also gone global, featuring in a seminar in Australia and a CPD course in London – proving a useful promotional tool.

### TOP TIPS

"Engaging for the first time can be scary but just give it a go! Twitter is a good place to start as it helps you to see what other people are doing. Every PhD student should also have their own blog; it acts as a CV and you never know who might stumble across it!"

Dr Hannah Family





**Professor Matthew Davidson and the Centre for Sustainable Chemical Technologies, Department of Chemistry**

Professor Matthew Davidson is the Whorrod Professor of Sustainable Chemical Technologies and Director of the Centre for Sustainable Chemical Technologies (CSCT) and the associated EPSRC Centre for Doctoral Training.

Matthew believes that engaging with a diverse range of publics in areas of technology that have a high degree of societal importance is excellent training for postgraduates (and their supervisors!). Developing the self-confidence and skills for engaging with diverse public groups has been core to the CSCT. Using an external agency, Graphic Science, and a large external network of collaborators both the theory and practice of engagement is embedded in the training undertaken by all PhD students within the Centre.

This approach has resulted in a growing cohort of PhD students (over 100 so far) with experience and insight into engagement. Peer-to-peer support within this cohort has stimulated successful pieces of work including a long-standing collaboration with graphic design students from Bath Spa University and orchestration of a ‘Stand-up Science’ series in Bath. The CSCT has produced the first two winners of the Vice-Chancellor’s Postgraduate Prize for Public Engagement with Research – Lisa Sargeant in 2014 and Jon Chouler in 2015.

Matthew’s research focuses on the application of chemistry and catalysis for the manufacture of renewable fuels, chemicals and plastics. Throughout his research career, Matthew has collaborated extensively with industry. He strongly believes in taking an engaged approach to research from the start – working with relevant stakeholders at the appropriate time within a research project and in ongoing relationships. Alongside his industry collaborations, Matthew has also involved young people, families and interested publics through public debates, science cafes, hands-on festival exhibits and media work.



*Left, top and above: Students from the Centre for Sustainable Chemical Technologies regularly design and deliver engagement activities at Festivals across the country.*

Through engagement, Matthew aims to:

- build skills for working effectively with external collaborators
- develop high quality research with real-world applications
- create public spaces for discussion about the future of chemical technologies

*“When we established the CSCT PhD training programme, I was sure that public engagement should play an important role. However, I couldn’t have predicted just how important this training would be for the culture of the Centre. After seven years, the programme has evolved but students still amaze me with their skill, enthusiasm and creativity.”*

**Professor Matthew Davidson**



## Engagement Highlights

### Art of the Brain

#### Dr Sarah Bailey, Department of Pharmacy & Pharmacology

Art of the Brain represented the first collaboration between researchers in the Department of Pharmacy & Pharmacology and local artist, Stephen Magrath, the Bath Royal Literary & Scientific Institution (BRLSI) and local school children. Using art inspired by cutting-edge research, the project aimed to engage members of the public in discussion about brain research undertaken in the department.

There were three strands to the project:

- an art exhibition at BRLSI with accompanying research presentations
- a public lecture (*Looking at the brain: Brain scans and brain waves*) delivered by Professor Roland Jones
- a workshop (*Brainwave*) with hands-on activities for children aged 8 - 12

Through engagement Sarah and other researchers benefitted from:

- raised research profiles
- new contacts and leads for future research
- interviews on Radio Bristol to promote their research
- a positive partnership with Stephen Magrath who in turn raised his own profile across the University



Artist Stephen Magrath with researchers at the Art of the Brain exhibition

### TOP TIPS

- Draw on the strengths of your collaborators – their expertise is crucial
- Plan marketing for exhibitions well in advance
- Be open to work with different groups of people from different backgrounds and experiences and be willing to accept differences

### Creating a Virtual Exploration Exhibit

#### John Tredinnick, Department of Computer Science

John Tredinnick, a postgraduate researcher in the University's Centre for Digital Entertainment, developed an immersive 360 degree dome projection system to depict the archaeological discovery of The National Trust's Chedworth Roman Villa. John engaged with The National Trust and public visitors to the exhibit to help shape the future of his research on projection technologies.

Alongside devising and trialling the exhibit and demonstrating the potential of such technology for visitor interpretation at heritage sites, the project involved the collection of data from over 5000 visitors and 500 surveys to reveal future research paths that could be undertaken with the system.

This activity enhanced John's research by providing:

- access to archaeological and historical knowledge and information
- guidance on the organisation of large-scale exhibits and interpretation media
- access to a large and diverse public
- an opportunity to test ideas and research in an appropriate context
- constructive feedback from project partners and visitors to inform future directions and uses of the technology

### TOP TIPS

Take advantage of the range of professional services available to you on-campus.

*"The project engaged with a far wider audience than first planned as I actively worked with the University's Press Office to generate local and national coverage."*

John Tredinnick



*"Although the exhibit's basic system could be established from traditional academic techniques, further advancement required data that could only be collected from a real test case."*

John Tredinnick

# How the Public Engagement Unit can help you

The Public Engagement Unit supports researchers at any level and from any discipline to engage non-academics with their research.

There are three broad strands to our work:

## 1) Public Engagement in Practice

We **create and source opportunities for researchers** to get involved in public engagement, such as our annual Images of Research competition and Bath Taps into Science. In the past, we have teamed up with national and local festivals (e.g. the Festival of Nature, the Pint of Science Festival, the Being Human Festival) to provide opportunities for our researchers.

If you are on the lookout for funds to develop new, or improve existing, engagement activities then our **annual seed fund call** could be for you. Previous funding has enabled researchers to trial innovative activities and extend their public engagement expertise.

Also, we have **strong links with a range of local community organisations** (e.g. Bath Royal Literary & Scientific Institution, the South West Foundation, Fringe Arts Bath, At-Bristol) and routes into other organisations both locally and nationally, so do contact us if you need help sourcing collaborators.



*We design and deliver a variety of events and resources to support public engagement with research and encourage collaboration with external experts to develop high quality exhibits*

## 2) Professional Development

We provide **regular public engagement workshops** through the University's Researcher Development Unit and through some Centres for Doctoral Training. We are **happy to develop bespoke courses** for departments or research groups so contact us if you have a particular engagement need.

We have a **small pot of money each year for external trainers**.

In the past, we have sourced trainers to deliver specialist workshops including engaging effectively with local communities and with schools. Tell us if you know trainers or training opportunities that you think we should investigate.

Alongside Research & Innovation Services, we can provide **one-to-one advice on engagement aspects of grant proposals**.

We can support you to plan *Pathways to Impact* statements for Je-S applications. To inform impact case studies, we can help you plan how to evidence and evaluate impact from your engagement activities.

We run a **regular series of public engagement conversations** during semester time. These are opportunities to hear from researchers and experts outside the University about specific engagement topics. Past conversations have covered the likes of: engaging through social media; engaging with industry; public engagement and impact; and engaging with schools. Come along to any conversation that sparks your interest.







Above: We organise the annual Vice-Chancellor's Public Engagement Awards



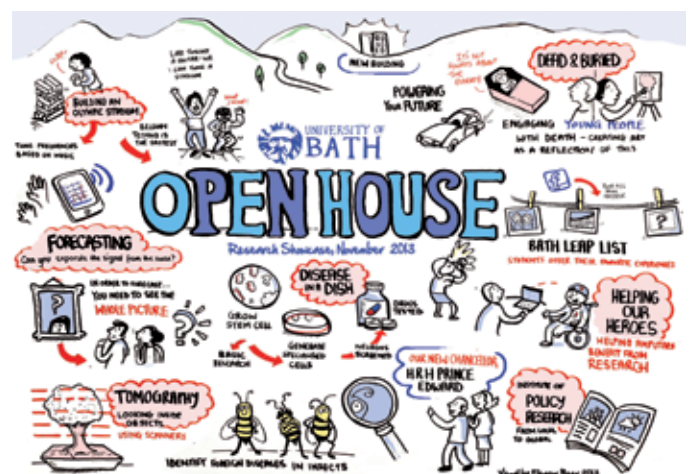
Above: We encourage researchers to evaluate their public engagement activities

### 3) Reward and Recognition

We think it is important to celebrate excellence in engaged research and as such, run the annual [Vice-Chancellor's Awards for Public Engagement](#). Two Awards are available – one for research staff and one for postgraduate researchers. Staff winners receive their Award at the summer graduation ceremony.

We have worked with Human Resources to [incorporate public engagement with research into probation and promotion criteria](#). Public engagement can be used to demonstrate excellence in research and can lead to impact from research. Have a chat with us if you plan to present engagement as part of your case for probation or promotion.

If you have experience of public engagement that you would like to share, contact us as it might be suitable for a case study or to promote in another way. We are also always happy to [link you with other researchers](#) who share your engagement interests.



Above: We support researchers to showcase their research

## Contact details

Email us: [public-engagement@bath.ac.uk](mailto:public-engagement@bath.ac.uk)

Call us: 01225 385353

Visit us: Public Engagement Unit, Department of Marketing & Communications, Wessex House Room 4.09

Find us online: [www.bath.ac.uk/public-engagement](http://www.bath.ac.uk/public-engagement)



# Public Engagement at Bath

Supporting researchers to engage



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