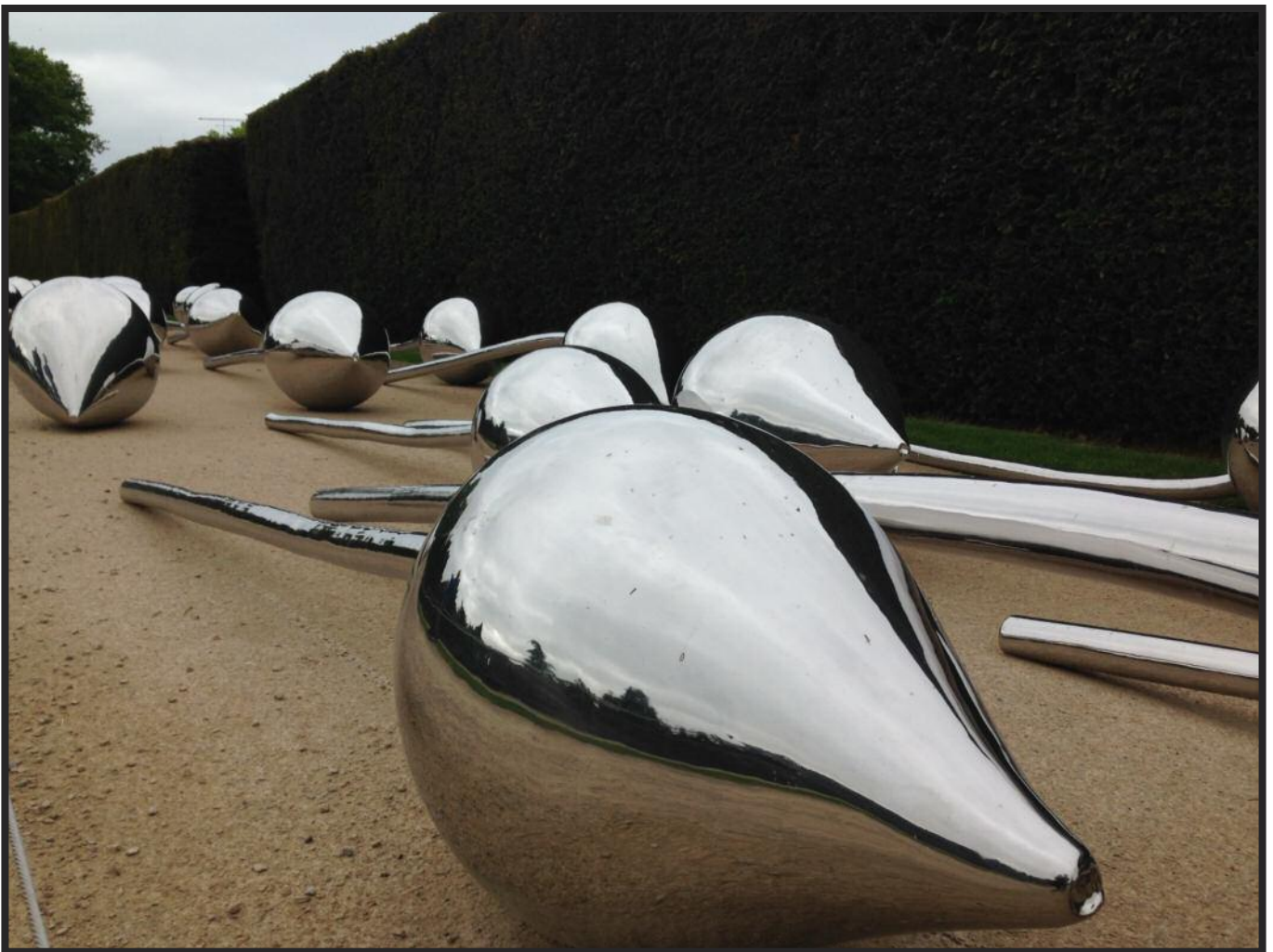


# SATSU Annual Review 2016



**DEPARTMENT OF SOCIOLOGY**

# SATSU Annual Review 2016

## Contents:

<b>SATSU Focus</b>	<b>2</b>
<b>Director's Report</b>	<b>3</b>
<b>News</b>	<b>5</b>
<b>Project Updates</b>	<b>7</b>
<b>Research Biography Profile</b>	<b>11</b>
<b>Nature.com Article</b>	<b>13</b>
<b>Output</b>	<b>14</b>
<b>Contacts</b>	<b>20</b>



## SATSU's Focus

Established in 1988, SATSU is an internationally recognised social science research centre located in the Department of Sociology exploring the dynamics, practices, and possibilities of contemporary science and technology. Its principal focus is on the biosciences, health, digital media and social networking including new forms of democratic governance, and the broader regulatory universe within which these are found. Our approach is to provide both theoretical and empirically-grounded critical analyses of these fields, and to undertake interdisciplinary and policy-relevant research informed by both conventional and novel methodological techniques.

SATSU currently has 14 members as well as Affiliated members based in the UK and overseas, and is directed by Professor Andrew Webster. The Unit collaborates with colleagues working in dedicated research centres in the UK and internationally within the field of science and technology studies, social media, and science and technology policy. We also welcome applications for PhD study through the new Science and Technology Studies PhD doctoral training programme.

# Welcome

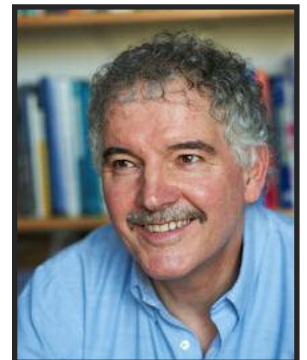
## Director's Report

This past year we have seen a number of developments in the Unit that will have an important impact on our research and the range of networks with which we work. Most importantly, we welcome the appointment of two new members of staff, Professor Joanna Latimer, who joined us in May from the School of Social Sciences, Cardiff, and Dr Sam Robinson who joined us in January from the Centre for the History of Science, Technology and Medicine at the University of Manchester. Joanna is an STS scholar of international standing who has made a major contribution to both STS and medical sociology towards our understanding of the relationship between medicine, science and genetics, exploring how through richly detailed ethnography the way medicine is itself revealed through its articulation with the body. She is currently examining the ways in which bio-gerontological models of ageing shape the meaning of ageing and disease. She is also Editor of the journal *Sociology of Health and illness*. Her work will be a valuable new track in SATSU's portfolio of studies on the biosciences. Sam Robinson has joined Amanda Rees' project as our new postdoc: he completed his PhD at Manchester, focusing on the use of ocean science for surveillance during the Cold War. He has considerable expertise in scientific/technological futures and dystopian science fiction especially in regard to the environment. His research interests as well as skills in regard to digital systems and the web will make an important contribution towards the AHRC 'Unsettling Science' project. He is also developing ideas relating to the role of 'science diplomacy' in international relations.

While it is nice to welcome new members, it was with great shock and sadness that in November one of our long-standing colleagues, Graham Lewis, died suddenly. Graham joined us in 2001 on a Wellcome Trust project that explored the impact of pharmacogenetics on the drugs industry and clinical delivery. His knowledge of the industry proved invaluable and this technical expertise informed many of the subsequent projects he worked on, including a Department of Health project on pharmacogenomics, the EU REMEDIe project and current REGenableMED project. His work was always assiduously prepared, accurate, informed and never claiming more than could be warranted by the data. Always a modest man, but forthright when he felt he needed to be, he was a loyal and

strongly supportive colleague of the Unit and its endeavours. He will be much missed by his SATSU colleagues and the wider Department.

The Unit has had a busy year with existing and recently started projects (for fuller details see specific project pages in the Review). Darren Reed and Mark Johnson's project in the Digital



Creativity Hub has continued to break new ground in regard to ways in which digital applications can enable new forms of civic engagement with data, extended further through work with York City's Environmental Observatory. The REGenableMED project has made excellent progress this year with plans ahead for major events with the MHRA and the All Party Parliamentary Health Group in the House of Commons. Regenerative medicine also figures in a new history of science project led by Leeds University based James Stark with whom Andrew Webster is collaborating. Siân Beynon-Jones and her colleague at Kent, Emily Grabham, have held very successful network meetings relating to their AHRC project on time and regulation. The network is especially interested in how time is performed/enacted through regulation, and how temporalities are sustained through regulatory practices and the ways in which legal and regulatory time(s) have material expression (through, for example, sunset clauses, case files, precedent), and various incarnations as sequences of time, time limits, zero-hour contracts etc. The international project led by Pascale Lehoux has made a start and its first full project team meetings are planned for early autumn 2016. The 7-year programme of work is developing a radical approach to innovation which is based on an ethics of technology-design that contributes to the common good that healthcare systems embody and which calls for affordable and user-friendly innovations that foster sustainability by addressing system-level challenges.

Nik Brown has been completing his new book on AMR and the politics of immunity, and John Gardner has been finalising his book *Rethinking the Clinical Gaze* which will appear early in

# Welcome

## Director's Report Cont...

2017. Dave Beer has published a major work on data and metrics, *Metric Power*, which examines the ways in which power is deployed through data measures and algorithms. A wide range of peer-reviewed papers have also appeared and are listed towards the end of the Review.

Knowledge Landscapes' European network. We will continue to retain and foster new links with all our European colleagues in the years ahead, whatever happens in respect to the actual implementation of Brexit. Many members of the Unit as usual, attended and convened sessions at the 4S/EASST Conference in Barcelona.



Track Session - 4S/EASST

The Unit has also been heavily involved in two wider initiatives: the local/regional UoYSTS Roundtable which, after a series of seminars held a major workshop in July which culminated in a number of research proposals that members will be taking forward over coming months. Equally importantly, as Co-Chair of AsSIST-UK (along with Robin Williams at Edinburgh) I have seen the Association membership build steadily and now approaches 250 across all the major STS/history of science/innovation research groups in the UK. The Association's website carries reports on its contributions towards national inquiries and debates relating to government policy, and most recently to the potential impact of Brexit.

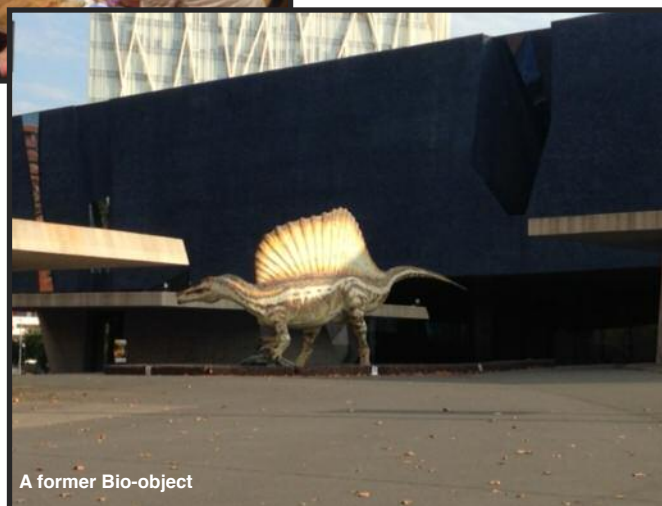
This reference to Brexit reminds us of how important our international links and networks are, such as the still thriving Bio-Objects network and a more recently established 'Navigating

It is, I think, important to ask how, within the context of Brexit, expertise in the UK can be drawn on to provide the best possible policy intelligence in anticipating future developments and mitigating risks. While specific funding decisions will need to be made – such as whether to underwrite H2020 contracts secured over the period ahead – more importantly, there is an opportunity to rethink the relation between science policy-making and the wider society, especially in order to address the democratic deficit that in many ways has been seen to underpin the Brexit vote. I believe that this is where the expertise of the social sciences and especially STS can make a major contribution, and through our various networks and contacts we should all press for this to put into practice.

AJW



Bio-objects colleagues



A former Bio-object

## AsSIST-UK Update

It has been a busy year, especially for the Exec Committee of AsSIST-UK, and the two Co-Chairs, Robin Williams and myself. After a formal public launch at the April meeting of the BSA in Aston, which was timed to tie-in with a piece I did for Nature (see separate item on this elsewhere in the Review), membership has continued to rise steadily and now numbers around the 240 mark. It was also pleasing that the ESRC has now recognised AsSIST-UK as a 'Learned Society' and one of our members, Professor Brian Balmer (UCL) attended the annual meeting the ESRC has with all such bodies in June. The website has also been created and contains regular News items and reports provided by members. (see [assist-uk.com](http://assist-uk.com)).

One of its main goals is to understand and foster constructive relations between science, policy and civic society. In relation to this, it has made a number of formal submissions to the House of Lords and House of Commons select committees of inquiry, notably one relating to Science and Public Engagement and a more recent one

on the impact of Brexit. The Association received information from members about the risks this is bringing, which echo those that have been expressed by many other national bodies following the Brexit decision. These relate to concerns over staff mobility, security, collaborative research and the networks underpinning them, access to EU research facilities and continuity of research programmes beyond the current period.

It is important to ask how, within the context of Brexit, expertise in the UK can be drawn on to provide the best possible policy intelligence in anticipating future developments. This is less to do with policy for (specific areas of) science and more science for policy making under novel, unexplored conditions. Most importantly, how to deal with the end of subsidiarity and legacy policies – such as on measures to restrict environmental pollutants agreed at an EU level – that will no longer apply in legally binding terms at the UK level, and how UK (and devolved) government can engage more effectively with pertinent expertise. What aspects of

these policies still make sense within the UK, are there ways they can be improved post-Brexit, what might these be and how are we to achieve them? The UK's influence on policy in Europe will undoubtedly decline in formal terms, but a fresh rethink of UK-specific policy making might have lessons for other European countries. This is where AsSIST-UK's expertise can be drawn on, in collaboration with other learned societies, in advising the Department for Exiting the European Union (DEEU) on the need for new policy mechanisms and approaches. There is an opportunity provided by the Brexit vote to mobilise policy expertise across the social sciences to re-think the UK's policy framework and processes in such a way as to build a strategic and not simply de-coupling approach to withdrawal from the EU. AsSIST-UK is a professional community with knowledge on science and innovation systems, an expertise that can help to understand the implications of and responses to a reconfiguring of relationships between the UK and the EU.

**AJW**

## Building Interdisciplinary Analysis and Capacity: The UoY STS Roundtable – Workshop Report

The UoYSTS Roundtable was launched over a year ago, and this past year members gradually worked up ideas which would form the focus on a regional workshop. The Workshop (held on July 6 at the UoY) brought together over 50 colleagues from the University of York and Yorkshire area to explore possibilities for joint, interdisciplinary research. Four themes provided a broad analytical canvas on which to open up the debate: governance, metrics and data, temporality and innovation. The meeting opened with a keynote address by Steve Fuller, Professor of Social Epistemology at Warwick, followed by panels on each

theme and a detailed, more empirically focused, debate in the afternoon 'sandpit' session. The meeting concluded with feedback and suggestions for collaborative research, defined here as work which can only ask and answer research questions through interdisciplinary expertise. Delegates are now helping to build these ideas via email networking in the first instance followed by meetings in the autumn to further develop the proposals in a more focused way.



## News

### Navigating Knowledge Landscapes: Network – Online Health Searching: Update

The NKL network enjoyed an excellent meeting in York in July which was linked to the UoYSTS Roundtable. Prior to this meeting the network leads, Anna-Lydia Svalastog, had submitted a proposed COST Action relating to the ways in which people use the web to secure health information. The main aim of the Action is to help both patients and healthy individuals to navigate health-related knowledge landscapes in such a way that it benefits their health and wellbeing, and the wellbeing of societies. It is to provide the theoretical concepts and start to develop practical solutions that will respond to the need of those who are embarking on navigating digital landscapes, helping them to avoid the pitfalls of the plethora of different contents and interests, and guiding them to the knowledge which would improve their lives for better. It will also explore what institutions and practices should be fostered and supported as enablers of such positive navigation of knowledge landscapes in the health domain.

Many of these issues have been explored through a series of Knowledge Landscapes articles in the *Croatian Medical Journal*.

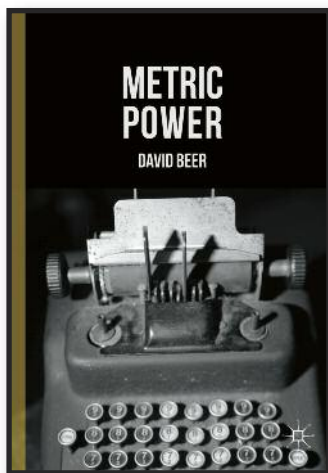


The network is holding its next meeting in Tenerife in November, as part of the DiPEX International conference: the Database of Individual Patient Experiences holds over a 100 collections on many different types of illness experiences. International collaboration is now established across 13 countries. NKL members will be presenting papers at the DiPEX event on three topics:

- a) knowledge landscapes as a key context for, or even an integral part of health narratives
- b) how individuals navigate the knowledge landscapes
- c) the relation between web-users, on-line producers and co-producers of health narratives and knowledge landscapes

### New Publication: Metric Power

by Dr David Beer



This book attempts to understand how power is deployed through metrics. This book examines the powerful and intensifying role that metrics play in ordering and shaping our everyday lives. Focusing upon the interconnections between measurement, circulation and possibility, it explores the interwoven relations between power and metrics. The book draws upon a wide-range of interdisciplinary resources to

place these metrics within their broader historical, political and social contexts. More specifically, it illuminates the various ways

that metrics implicate our lives – from our work, to our consumption and our leisure, through to our bodily routines and the financial and organisational structures that surround us. Unravelling the power dynamics that underpin and reside within the so-called big data revolution, the book develops the central concept of *Metric Power* along with a set of conceptual resources for thinking critically about the powerful role played by metrics in the social world today. If you are interested in the book then you might also be interested in this piece which was written for The Guardian political science section

<https://www.theguardian.com/science/political-science/2016/aug/11/numbers-dont-need-to-be-trusted-to-shape-our-lives-they-just-need-our-attention-bbc>

## Project Updates

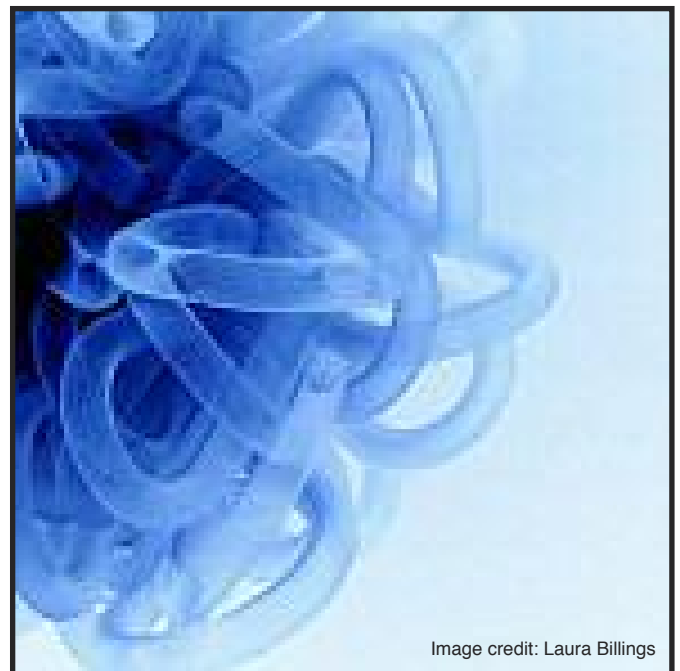
### Regulating Time: New Perspectives on Regulation, Law and Temporalities – Dr Siân-Beynon-Jones

This project is an AHRC funded research network which aims to create an interdisciplinary network of scholars whose work engages with the relationships between regulation and time. The network is co-ordinated by Emily Grabham at Kent Law School, in collaboration with Siân Beynon-Jones (SATSU). Through a series of workshops, culminating in a final conference and, ultimately, an edited book, it aims to make time central in the analysis of law and regulation. Questions to be explored through the network include:

- How do concepts of time shape regulation, and vice versa?
- How do concepts of time affect experiences of regulation, and vice versa?
- In what ways can interdisciplinary approaches to time improve our understanding of the relationship between time and regulation?
- What can academic research on regulation and time learn from stakeholders? How might collaborations between academics and stakeholders in this field engage with, and shape, wider public perspectives on time and regulation?

Three events have been organised as part of the network this year. The first – a symposium on Time, Regulation and Technoscience – was hosted by SATSU on 20 January 2016. Through a series of rich, empirically informed papers, it explored the specific temporal dynamics which emerge at the intersection between technoscience and regulatory processes.

The second event, organised by Siân Beynon-Jones and hosted by the British pregnancy advisory service (bpas), was a workshop which brought together a range of stakeholders to explore the possibilities of Changing Conversations about Time and Abortion? Abortion law in Scotland, England and Wales provides a compelling illustration of the regulatory significance of concepts of time. Parliamentary and public debate about abortion has routinely focussed on a particular temporal issue, namely, the upper gestational limit at which the procedure is provided. Through a series of papers and discussion sessions, this interdisciplinary event sought to open up the parameters of such discussions by engaging with the complexities of time in women's lives and in abortion practice.



The final event was an international conference held in the grounds of Canterbury Cathedral in September 2016, which brought academics, artists and writers together to explore scholarship in this emerging field: *The New Legal Temporalities? Discipline and Resistance Across Domains of Time*.

For further information, please see the network website:  
<http://www.kent.ac.uk/law/time/>

And the network blog:  
<http://regulatingtime.blogspot.co.uk/?view=flipcard#!/>  
Follow the project on Twitter: @regulatingtime

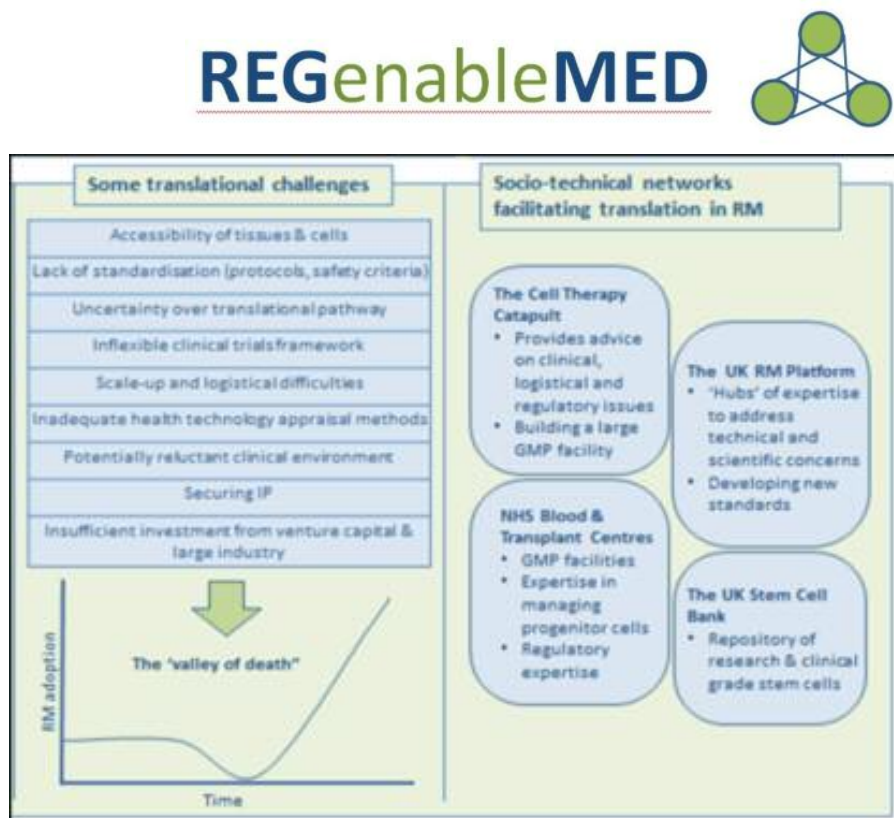
# Project Updates

## REGenableMED

SATSU's project on regenerative medicine – REGenableMED – has been engaged in a number of engagement and dissemination activities: members prepared a film for the ESRC Festival of Social Science week and have presented at the British Sociological Association's annual conference on clinical adoption as well as a Workshop for stakeholders on redistributed manufacturing and cell therapy, at the University of Nottingham. Presentations have been made at the EuCeLEX workshop in Paris on regulation, the law and stem cells, and the York Festival of Ideas with colleagues from the Department of Biology on *Regenerative Medicine and Time to the Clinic: What's possible, what's likely and when?*, and to NHS England stakeholders in the field. Two Policy Briefings have been published and disseminated widely across UK policy communities in health and medicine: *Regenerative Medicine in the United Kingdom* (September 2015) *Reimbursement* (April 2016). Partners have also submitted evidence to public inquiries on regenerative medicine being held by the UK Parliamentary Science and Technology Select Committees.

Collectively, members of the project have published 8 papers and a book this past year, with plans for another 7 papers in the year ahead.

Some of the key activities we have undertaken or for which planning is underway include:



- A Workshop for MPs who are members of the All Party Parliamentary Health Group on 8 November
- The MHRA's Patient Forum for a workshop on regenerative medicine on 11 November
- A workshop with Medical Directors of Trusts and members of the Academic Health Science Centres on the implications of regenerative medicine for the future in context of NHSE's 'Sustainability and Transformation Plan'
- NICE's evaluation of the regenerative medicine field: Andrew Webster was on the review group and his suggestions replacing greater emphasis on building uncertainty into the TA was taken on
- A number of EU consultations to which we have responded and where our recommendations have been adopted (eg in relation to Good Manufacturing Practice for Advanced Therapy Medicinal Products)
- NHSE providing advice on the dynamics of innovation take-up, especially in regard to 'capture' and 'spread'
- An EPSRC Feasibility study on scale-up and models for manufacturing:
- Written Evidence to the Commons and Lords discrete Select Committees of Inquiry on RM: Information and advice to the ScarFree' Charity on RM and wound/scar repair

# Project Updates

## Unsettling Scientific Stories, Unsettling Histories of Science?

Dr Amanda Rees, PI

The AHRC-funded 'Unsettling Scientific Stories: Expertise, Narrative and Future Histories' project began in October 2015. Based at the Universities of York, Aberystwyth and Newcastle, its focus is on how science and technology was used to write the history of the future, in fiction and in fact, throughout the long, technological, twentieth century.

Why another 'long' century? Well, the project's timeline officially begins with the publication of de Ferranti's design for Deptford Power Station in 1887, marking the beginning of large scale electricity generation in the UK, and ends with the appearance in 2007 of the 4th report of the International Panel on Climate Change, which put the issue of anthropogenic climate change beyond reasonable scientific doubt. In other words, we're investigating the period of history in which British society became fundamentally interpenetrated by and dependent on the operation of increasingly global scientific and technical systems. From reshaping the landscapes through industrial agriculture and urban architecture to remodelling interpersonal relationships through social media and wearable tech, developments in science and technology have profoundly changed the way in which we understand and experience community life. Even more significantly, as we know, they've changed the way in which we think about the future and even how we think about what the future actually is.

There are six components to the 'Unsettling Scientific Stories' project. Three are case studies, each focusing on a specific period within the long century: Victorians and Edwardians, White Heat/Cold War and Environment, Complexity, Catastrophe. These look in detail at how science and technology were deployed in thinking about the future at these historic points. They are investigating how the dazzling displays and spectacular experiments of scientist-performers encouraged the development of a culture of futurism, in fiction, in fact and in a variety of different spaces. More prosaically, they are considering how ideas of improvement, reform and progress were gradually replaced later in the century by notions of planning and crisis, as the limitations on public and private resource (physical, economic, historic) became plain, and the future became something that could and should be prepared for. These case studies will show how the optimism of the 1880s had, by the turn of the next century, become considerably blunted, as fears of political or military disaster became overlaid

with the awareness that the notion of the human capacity to control natural systems had been somewhat overstated. Confidence in technological, or technocratic progress was increasingly confronted, in novels, films, research papers and committee rooms, with its unanticipated – and wholly unintended – consequences. The future was becoming fearful.

Tying these case studies together, however, are three ventures which stretch across the century, each focusing in a different way on how people use science – consciously or not – to think about the future. Over the course of this century, we wanted to investigate how people thought about, used and judged scientific knowledge. In a sense, what we wanted to create with these three elements was a means to develop a 'Citizen History of Science'.

Past Periodicals, based at Aberystwyth University, is surveying journals from throughout the period to see how science is deployed within their pages: magazines that adopted a range of political and economic perspectives, and which were widely read, but which didn't consider themselves primarily oriented to 'popular science'. It's examining articles and editorials alongside cartoons, picture, adverts and other ephemera in order to identify and categorise scientific themes and questions as they emerged in the popular context, and assembling them into a database. This will – in the first instance – provide a key resource for the project itself, but also, we hope, become an enormously useful tool for other scholars. Its fundamental role is to help us figure out how people in the past used science to imagine their future. Parts of the database will increasingly be available online as the project proceeds – take a look at <http://unsettlingscientificstories.co.uk/past-periodicals-database>.

In tandem, one of the parts of the project based at Newcastle University – Prospecting Futures – is investigating how people in the present use science to think about the future. Treating SF readers as lay experts in both science matters and contemporary future making, this part of the projects works with them to reflect on what they know. At the moment, it's exploring the nature of the texts and narratives that it will use – popular and obscure, challenging and entertaining, short sharp visions of different scientific, social and political themes as well as more immersive efforts at world creation. It's going to critically reflect on what active readers do when they read about the future – how do they

## Project Updates

navigate the extraordinary variations in form and genre, how do they deal with the pleasures and frustrations of engaging in worlds that are both strange and familiar, and how does this shape their notion of what our present could become? We're currently making connections with reading groups and other interested parties across the North East and Wales – if you're interested, please contact [amy.chambers@newcastle.ac.uk](mailto:amy.chambers@newcastle.ac.uk) for details.

The final (University of York) venture focuses on the decisions that people make – individually and collectively – about the future. Presenting Choices is creating an interactive role-playing game that focuses on how the future (our present) emerged out of past decisions. Asking players to imagine themselves back into that past, it will offer them different storylines and scenarios – drawn from the empirical work done in other areas of the project – and give them the opportunity to navigate their way through what choices they might themselves historically have made. As such, it will play a key role in project outreach. But we also intend to use it more directly in relation to our notion of 'Citizen History of Science'. In particular, we will build in feedback opportunities throughout, asking our players to tell us 'what information did we leave out?' 'is this the right way to tell this story?' 'was the cartoon or the advert or the editorial more useful in making your decision?'. We

presented a beta version of this when Amanda Rees and Iwan Rhys Morus gave a plenary at the Science in Public conference in Kent this summer – and got a lot of useful feedback from the audience. Further details can be obtained from [sam.robinson@york.ac.uk](mailto:sam.robinson@york.ac.uk).

We hope that these different outreach elements will help us understand not just how people, whether scientifically trained or not, use science to think about the future, but also how non-historians utilise historical knowledge. We will then, we hope, be able to use that information to improve our own analytic narratives, and to deploy them more actively in public debate as we work on ways of achieving 'Citizen History of Science'.

We also, however, plan to read a lot of really good stories, some of which may well involve space battles, while we're doing it.

In January 2016, Dr Amanda Rees won the 2019 guest editorship of the prestigious North American history of science journal, *Osiris*. Published by the University of Chicago Press, each annual edition of *Osiris* focuses on significant and emergent themes within the history of science: the one produced by Dr Rees, together with Professor Iwan Rhys Morus of Aberystwyth University, will centre on the relationship between science fiction and the history of science, and is titled *Presenting Past Futures: SF and the History of Science*.

## The Digital Creativity Hub

Dr Darren Reed, Dr Mark Johnson



In the last year the work of Dr Darren Reed and Dr Mark Johnson in the newly-funded interdisciplinary Digital Creativity Labs has developed in two directions. Firstly, they are in the process of carrying out the "Episode" project. Episode stands for "Environmental Policy In Simulation, Open Data, and Engagement", and is a project working closely with the City of York Council (CYC). The CYC collects a large volume of data on the city, ranging from traffic lights to bus routes, incomes to school placements, overdue library books to litter bins, and road quality to air pollution. These are then gathered and combined into the York "Open Data Platform" (ODP), through which the data is made available to the public and categorized in high-level

headings such as "Culture", "Health", and so forth. However, relatively few York citizens are aware of the ODP's existence, and of those who are, few have the requisite technical skills and knowledge to meaningfully engage with this data. The objective of Episode is to get people interested in York's data and policy, and by extension, to get them engaged with CYC's policies and their open data platform. The council will thereby be able to be more open, more accountable, and more transparent. We are creating a game that makes the examination of this data playful and fun, as well as removing the technical expertise barriers to engaging with it, in the process opening up the ODP to a far greater range of potential users.

The second element is the study of "esports" or "electronic sports", which refers to professionalized computer gaming through which players and teams make money (and in some cases a full living) from their skilled gameplay. In 2015

## Project Updates

professional gaming competitions were watched by 188 million people, with over \$65 million awarded in prize money, contributing to a cumulative total of over \$201 million so far. These have taken place in dozens of countries primarily across Europe, North America, and South-East Asia, with publicized sponsorships from major global companies including Coca-Cola, Microsoft, Red Bull, Sony, and Google, in an “eSports” market currently worth \$748 million and estimated to grow to \$1.9 billion by the end of 2018. We are currently investigating professional

gamers in the United Kingdom, and pursuing funding for research into esports in European and East Asian contexts. We are especially interested in the interactions between players and viewers via internet-mediated broadcast, and the emergence of a new and complex ecosystem of players, broadcasters, companies, teams, and tournament organisers. In the coming year we'll be further pursuing both of these routes of enquiry further, and hoping to integrate more fully the work of SATSU and the DC Labs.

## Research Biography Profile

### Ruchi Higham

I joined SATSU in October 2013 as a PHD student, working on an ESRC-funded project looking at Clinical Trials and the Challenge of Regenerative Medicine. Because my funding is a multi-disciplinary studentship I have a supervisor in Sociology (Andrew Webster) and Biology (Paul Genever). I am primarily interested in the sociology of clinical trials, and in particular the role that the trial plays in biomedical innovation and the ‘translation’ of scientific discoveries to the clinic.

After graduating in 1999 with a degree in History and Sociology I spent a number of years working as a market researcher, first in the private sector and then in Higher Education. I really enjoyed the research aspects of my role, and it gave me the chance to develop my skills as a researcher, but I knew that eventually I wanted to return to academia. Having identified health research as a particular area of interest, I studied Biology and Health Sciences at the Open University, and then received funding from the York Trials Unit to undertake an MSc in Health Services Research. With this somewhat eclectic background, the ESRC multi-disciplinary studentship was a perfect opportunity for me, and I was really excited to find a PHD project that allowed me to combine my interests in Biology, Sociology and Health Sciences.

My doctoral research has involved interviewing clinicians and scientists involved in clinical trials of cell therapies, as well as a longitudinal study at an active trial site, involving multiple visits over an 18 month periods to observe regular trial management meetings and other trial-related activities. My fieldwork has given me the chance to explore how the clinical trials process both enables and inhibits innovation in Regenerative Medicine, and I have seen first hand how messy the day to day reality of the trial is

in comparison to the rigid process suggested by the trial protocol. I am now in the process of writing up my results, and one of my main findings concerns the various ways in which the trial framework for cell therapies is performative, because the challenges trialists experience (or their expectations of future challenges) have a structuring effect on innovation in the field.



During my studies I have also had the opportunity to make links with other PHD students in both Biology and Sociology, and have been closely involved with the ESRC-funded RegENABLEmed project, which has a lot of links with my own research. I have co-authored a paper with other researchers from this project, which is currently under review, and also presented some of our findings in a joint paper at the recent EASST/4S conference in Barcelona, Science and Technology by Other Means. One of the most interesting, and challenging, aspects of my project has been thinking about how to work effectively with researchers in areas as diverse as Biology, Sociology and Health Sciences, and how to make my results meaningful to each discipline. Luckily I have two very supportive and open-minded supervisors, as well as some extremely talented colleagues and fellow students to work with, so I've had no shortage of guidance and inspiration.

# Research Biography Profile

## Sam Robinson

I joined the University of York in January 2016, as a postdoctoral researcher on the AHRC-funded project *Unsettling Scientific Stories* (led by senior lecturer in sociology Dr Amanda Rees) working on Cold War science fiction and its relationship to science policy and scientific advancements in the era. I have a background in history with particular interests in the Cold War history of science and cultural history. I am currently working on a book entitled *Between the Devil and the Deep Blue Sea: Ocean Science and the British Cold War State*, under review for publication with Palgrave, that documents the remarkable growth of marine research in the UK, and its underlying ambitions, from the end of Second World War naval exercises to the deployment of nuclear submarines in the Atomic Age.

After completing my degree in the History of Science at the University of Aberdeen in 2010, I was recruited to complete an ERC-funded doctorate on the earth sciences in the Cold War, as part of the *Earth Under Surveillance* project (2009-2014, PI Dr Simone Turchetti) at the University of Manchester. My thesis, which is currently being revised as a monograph, analysed the significance of sea studies in the context of British naval operations, the surveillance of enemy vessels at sea, and the gathering of intelligence on the capabilities of enemy forces. Centring on the complexities of the Cold War British State, my research has revealed the connections between leading scientists, government administrators, and military officers, and their interplay in the establishment and development of oceanographic studies. Taking a sociological approach, I argued that at the core of the political-scientific interface there existed key policy networks and that historians can gain a better understanding of this interaction by looking at some of the key figures, or 'nodes' in these networks, so as to gain a better understanding of the dynamics and historical

evolution of the policy networks that emerged in Cold War Britain.

My current research, as part of the *Unsettling Scientific Stories* project, centers on understanding the role that scientific futures had in shaping British society during the Cold War. An era that saw the birth of the Jet Age, the Space Age and the Nuclear Age, and also influential pop culture texts such as *Doctor Who*, *Star Trek*, and *The Hitchhikers Guide to the Galaxy* that reflected, responded to, and inspired advancements in real-world science. I am also the lead researcher developing the digital sociological components of the project, which includes an interactive online game that will help us to better understand the role of experts in influencing decision making, supporting an ever-increasing research database tracking the history of the future through periodicals (lead researcher: Dr Mat Paskins, Aberystwyth University), and recording the results of fieldwork that engages with science readers and explores how they use fiction to engage with science and imagined futures. You can find out more about the *Unsettling Scientific Stories* Project and read about our progress in regular blogposts at [unsettlingscientificstories.co.uk/](http://unsettlingscientificstories.co.uk/) or follow us on Twitter: @UnSetSciStories.

Beyond my research I am an active member of the British Society for the History of Science (BSHS). In my capacity as a member of the conference committee I support academic research events across the country and in July 2017 I will be involved in bringing the BSHS annual conference to the University of York.



## New SATSU Member – Joanna Latimer

I am delighted to have joined SATSU in May 2016 as Professor of Sociology, Science & Technology, having been at Cardiff School of Social Sciences for 16 years. My research works between medical sociology and the social study of science and technology, with a focus on biopolitics and the cultural and existential effects and affects of how science and medicine are done. I have published widely on genetics, science & medicine; the body & personhood; care: politics and practices; contemporary social philosophy/(post)humanisms, including the place of animals & other non-humans in science and the ordering of social relations. I work ethnographically, illustrating theoretical discussion with analyses of contemporary art & literature alongside field work. Books include

*The Gene, the Clinic and the Family* (Routledge) which won the BSA/ Medical Sociology Annual book prize and *Un/Knowing Bodies* (Sociological Review Monograph/Wiley-Blackwell). I am editor of the journal *Sociology of Health and Illness* and on the Board of the *Sociological Review*. My current work, a collaboration with life scientists, focusses on biology, ageing and interspecies relationality.



# WORLD VIEW

*A personal take on events*

JOHN HOUHAN/UNIV. YORK



## Recognize the value of social science

*A professional body for UK social scientists can help to improve research practice — and not just in public engagement, says Andrew Webster.*

If the science community is serious about integrating social science into its thinking and operations — and statements by everyone from *Nature* and the UK government to Paul Nurse, former president of the Royal Society, indicate that it is — then we social scientists must do more to make this happen.

Our input is necessary because, too often, the reach and influence of research is discovered only with hindsight. Lessons are ‘learned’ only after the social implications of new domains of science and technology have provoked controversy or challenged existing norms. Social science can help to predict these implications and plan for them. It can also help to frame science questions to make them more sensitive to economic, cultural and social factors.

Scientists have their own hands-on understanding of how the science and innovation system operates, and what demands it faces. Why should they pay attention to social-science contributions, particularly when these are not yet well known and understood across the scientific community?

Social scientists understand that many colleagues in the hard sciences are sceptical of what we can offer. We know that we need to make our contribution more widely understood and appreciated. This week, social scientists in Britain take what we hope will be a significant step.

We (including myself and colleagues Robin Williams of the University of Edinburgh and Fred Steward of the Policy Studies Institute in London) are launching a professional association, with an explicit goal of engaging with science and science policy. Researchers in the social sciences have built links with specific scientific constituencies, but have failed to engage at a more general level.

We argue that it is especially important to do this now, because all researchers are being urged to explore and make explicit how their work has reach and influence in the wider world. And we want to make clear that social science — especially science, technology and innovation studies (STIS) — should be integral to science and does not merely handle external issues, for example by addressing ‘public acceptance’.

Our new body is called the Association for Studies in Innovation Science and Technology-UK (AsSIST-UK; [assist-uk.com](http://assist-uk.com)). It has been built over 18 months and has a strongly interdisciplinary membership of more than 200 people. Unlike similar bodies in mainland Europe and the United States, which tend to look inwards to the academic discipline, it is intended to take our methods and thinking into the broader world.

One priority is to lobby for social-scientist involvement in the earliest stages of research projects, when emerging ideas are most open to discussion. We want to work at national and regional levels, from the UK government and research-funding councils to professional science bodies and the devolved

governments in the four UK nations, which are experimenting with science and technology policies.

Science and society are not discrete, as some researchers seem to assume. Knowledge — about the impacts of climate change, for example — gets its value and usefulness only when rooted in particular contexts. This makes it diverse and contested. From the perspective of a social scientist, the challenge for researchers in genomics, for instance, is not to ‘communicate’ their ideas and discoveries to a homogenous ‘public’: it is to realize that they are members of that public and act accordingly. Change in the direction of science cannot be viewed from a single position. It is relative and depends on the position of the observer, and on the interplay of diverse knowledge communities.

Social science can help in interrogating the evidence and assumptions behind theoretical models (say, for biomarkers of ageing). It can assess how technical standards are defined and applied to a new field, and how innovation shapes the way in which clinical trials are designed and conducted (as my own research has done in regenerative medicine). Models, standards and trials all rely on agreement about appropriate evidence and how it is used. This allows for fruitful discussion across the sciences and the early recognition that knowledge is provisional and may change — important if a project is to have scope for future debate.

One of the first tasks for our new group is to review the research and activities of our members, to identify their existing impacts on science (through specific projects and membership of national bodies) and how they have engaged more broadly with the wider scientific community. To increase that engagement, we aim to identify and share examples of good practice. We want to bring together STIS expertise in diverse fields such as biomedicine, energy and data analytics to inform research-council programmes — including the current move towards interdisciplinary doctoral training across the social and natural sciences.

And we want to act as a national body that can contribute to specific fields of science from their earliest days onwards. Social scientists should help to plan for the possibilities of gene editing, for example, and anticipate the challenges posed by the diversification and growth of biobanks.

To make the most of science, we must know how science operates, and understand the factors that influence it. Social scientists in the United Kingdom and elsewhere have been studying that for more than 50 years. We are ready and able to help. ■

**Andrew Webster** is Director of the Science and Technology Studies Unit (SATSU) at the University of York, UK.  
e-mail: [andrew.webster@york.ac.uk](mailto:andrew.webster@york.ac.uk)

TO MAKE  
THE MOST OF  
**SCIENCE,**  
WE MUST  
KNOW HOW  
SCIENCE  
**OPERATES.**

➔ **NATURE.COM**  
Discuss this article  
online at:  
[go.nature.com/arstjn](http://go.nature.com/arstjn)

# Output

## Publications

- Beer, D. (2016). 'How should we do the history of big data?' *Big Data & Society* 3(1): 1-11.
- Beer, D. (2016). 'Number's don't need to be trusted to shape our lives: they just need our attention', *The Guardian*, 11 August 2016, <https://www.theguardian.com/science/political-science/2016/aug/11/numbers-dont-need-to-be-trusted-to-shape-our-lives-they-just-need-our-attention-bbc>
- Beer, D. (2016). 'Snapchat's new Memories function could change the way we remember', *New Statesman*, 13 July 2016. <http://www.newstatesman.com/science-tech/social-media/2016/07/snapchat-s-new-memories-function-could-change-way-we-remember>
- Beer, D. (2016). 'The Carnival of Uncertainty', *Open Democracy*, 3 July 2016, <https://www.opendemocracy.net/david-beer/my-350-on-brexite-carnival-of-uncertainty>
- Beer, D. (2016). 'How do we reimagine?', *The Sociological Review website*, 3 July 2016, <http://www.thesociologicalreview.com/blog/brexit-how-do-we-reimagine.html>
- Beer, D. (2016). 'Metrics and the production of uncertainty', *LSE Politics & Policy*, 24 May 2016, <http://blogs.lse.ac.uk/politicsandpolicy/55395-2/>
- Beer, D. (2016). 'In defence of writing book reviews', *Times Higher Education*, 7 April 2016, <https://www.timeshighereducation.com/blog/defence-writing-book-reviews>
- Beer, D. (2016). *Metric Power*. Basingstoke: Palgrave Macmillan.
- Beer, D. (ed.) (2015). 'Fiction and Social Theory', *Theory, Culture & Society*, an e-Special issue, available at <http://tcs.sagepub.com/site/especials/fiction-social-theory.xhtml>
- Beer, D. (2015). 'Walter Benjamin's blog', *Berfrois*, 8 December 2015, <http://www.berfrois.com/2015/12/david-beer-on-walter-benjamin/>
- Beer, D. (2015). 'Being trained by Twitter stats', *LSE Impact*, 25 November 2015, <http://blogs.lse.ac.uk/impactofsocialsciences/2015/11/25/being-trained-by-twitter-stats/>
- Beer, D. (2015). 'Mason's Postcapitalism: Are networks actually part of the problem?', *Open Democracy*, 11 November 2015, <https://www.opendemocracy.net/uk/david-beer/masons-postcapitalism-are-networks-actually-part-of-problem>
- Beer, D. (2015). 'When 'special measures' become ordinary', *Open Democracy*, 7 August 2015, <https://www.opendemocracy.net/ourkingdom/david-beer/when-%E2%80%99special-measures%E2%80%99-become-ordinary>
- Beer, D. (2015). 'The Growing Power of the Data Analytics Industry', *Discover Society*, August 2015, <http://discoversociety.org/2015/07/30/the-growing-power-of-the-data-analytics-industry/>
- Beer, D. (2015). 'Productive measures: Culture and measurement in the context of everyday neoliberalism', *Big Data & Society* 2(1): 1-13.
- Beynon-Jones, S.M. (under review). Gestating Times: Women's Accounts of the Temporalities of Pregnancies that end in Abortion in England. *Sociology of Health & Illness*.
- Beynon-Jones, S.M. (2015). Re-Visioning Ultrasound Through Women's Accounts of Pre-Abortion Care in England. *Gender & Society*. 29 (5). 694-715.
- Brown, N. (2015). Metrics of hope: Disciplining affect in oncology. *Health*: 19 (2) 119-136.
- Brown, N., & Williams, R. (2015). Cord Blood Banking: Bio-objects on the borderlands between community and immunity. *Life Sciences, Society and Policy*.
- Choi, H., Bull, P., & Reed, D. (submitted) Audience responses and the context of political speeches in Korea. *Journal of Communication*.
- Eriksson, L., & Webster, A. (2015). Standardizing work as a recursive process: shaping the embryonic stem cell field, *New Genetics and Society* vol 34:1 72-88.
- Gardner, J. (in review). Patient-centred medicine and the broad clinical gaze: Measuring outcomes in Paediatric deep brain stimulation. *BioSocieties*.
- Gardner, J. & Cribb, A. (in review) The Dispositions of Things: The non-human dimension of power and ethics in patient-centred medicine.

## Publications cont...

*Sociology of Health and Illness.*

Gardner, J., Faulkner, A., Mahalatchimy, A., & Webster, A. (2015). Are there specific translational challenges in regenerative medicine? Lessons from other fields. *Regenerative Medicine*.

Gardner, J., Samuel, G. & Williams, C. (forthcoming). Sociology of low expectations: 'Recalibration' as innovation work in biomedicine. *Science, Technology & Human Values*.

Gardner, J., & Webster, A. (in review). The Social Management of Biomedical Novelty: Facilitating translation in regenerative medicine. *Social Science & Medicine*.

Gardner, J., & Webster, A. (in review). The Cell Therapy Catapult: Tensions in creating biovalue in regenerative medicine. *Science, Technology & Human Values*.

Gardner, J., & Williams, C. (2015). Corporal diagnostic work and diagnostic spaces: clinicians' use of space and bodies during diagnosis. *Sociology of Health & Illness*.

Gardner, J., & Williams, C. (2015). Responsible research and innovation: a manifesto for empirical ethics? *Clinical Ethics*.

Gardner, J., Faulkner, A., Mahalatchimy, A. & Webster, A. (2015). Translational Challenges in Regenerative Medicine. *Regenerative Medicine*.

Gardner, J., Samuel, G., & Williams, C. (2015). Sociology of low expectations: 'Recalibration' as innovation work in biomedicine. *Science, Technology & Human Values*. Published online before print.

Gardner, J., & Williams, C. (2015). Corporal diagnostic work and diagnostic spaces: clinicians' use of space and bodies during diagnosis. *Sociology of Health & Illness*, 37(5): 765-781.

Gardner, J., & Williams, C. (2015). Responsible research and innovation: a manifesto for empirical ethics? *Clinical Ethics*, 10(1-2): 5-12.

Giles, D., Stommel, W., Paulus, T., Lester, J., & Reed, D.J. (2015). 'Microanalysis of online data: The methodological development of "digital CA"' *Discourse, Context, and Media*, vol 7, pp. 45-51.

Johnson, M. R. (In Press). "Bullet Hell: The Globalized Growth of danmaku games and the Digital Culture of High Scores and World Records", in Pulos, A., & Lee, A. (eds.), *Video Games in East Asia*, Palgrave Macmillan.

Johnson, M. R. (2015). "The Use of ASCII Graphics in Roguelikes: Aesthetic Nostalgia and Semiotic Difference" in *Games and Culture*.

Reed, D. J. (in press). Relinquishing in Musical Masterclasses: Embodied Action in Interactional Projects. *Journal of Pragmatics*.

Reed, D. J. (submitted). Receipt Assessments in Pedagogic Interactions: The Case of Music Masterclasses. *Research on Language and Social Interaction (ROLSI)*.

Reed, D. J. (submitted). Performance and Interaction on Soundcloud: Social Remix and the fundamental techniques of Conversation. *Journal of Pragmatics*. Special Issue on the Microanalysis of Online Data.

Rees, A. (forthcoming). 'The Welsh Neanderthals? Race, Skulls and Science in the Celtic Desert', *Fortean Times*.

Rees, A. (2016). 'Stories of Stones and Bones: interdisciplinarity, narrative and practice in British popular prehistory, 1911-1935', *British Journal for the History of Science*, 49(3) (expecting pp v soon!)

Samuel, G., Williams, C., & Gardner, J. (forthcoming). UK press officers, professional vision and the generation of expectations. *Public Understandings of Science*

Webster, A. (2015). 'The Health of Collaborations', in B. Penders et al. (eds.) *Collaboration Across Health Research and Medical Care*, Ashgate: London, 2015. pp 217-226.

Webster, A., & Faulkner, A. (2015). Governance and Regenerative Medicine, in E Kuhlmann (ed) *International Handbook of Healthcare Policy*, Palgrave Macmillan: Basingstoke 2015.

Williams, R. (2015). 'Cords of collaboration: Interests and ethnicity in the UK's public blood stem cell inventory', *New Genetics and Society* [online first:<http://www.tandfonline.com/doi/abs/10.1080/14636778.2015.1060116#.VaTjKJ1wamQ>]

# Output

## Conference Papers

- Beynon-Jones, S.M. (2015). The silences of sensitivity: Reflections on researching experiences of abortion. Applied Qualitative Health Research Special Interest Group Symposium: Qualitative Health Research in Practice. University of York. May 2015.
- Gardner, J. (2015). 'A Sociology of Medical Innovation: Deep brain stimulation & paediatric neurology', Wellcome Trust LABTEC colloquium, Brighton 22 June 2015.
- Gardner, J. (2015). 'A sociological study of neuromodulation and the importance of the broad clinical gaze', European Paediatric Neurology Society Symposium on Neuromodulation, Vienna, 25-26 May 2015.
- Gardner, J., & Mahalatchimy, A. (2015). 'REGeneableMED: A social science analysis of regenerative medicine', EUCellEX 1st International Consensus Conference, Toulouse, 30-31 March 2015
- Gardner, J. (2015). 'Patient-centred medical platforms & the broad clinical gaze: Deep brain stimulation in paediatric neurology', Departmental Seminar presentation - Centre for Population and Health Studies, University of Edinburgh. Edinburgh, 21 January 2015.
- Johnson, M. R. (In Press), "The History of the Cyberspace Aesthetic in Computer Games". In Murphy, G. & Schmeink, L. (Eds) Crank Up The Resolution: Cyberpunk in Visual/Virtual Media.
- Johnson, M. R. (In Press). "Integrating Hand-Made and Procedural Content in Game Design", in Totten. C. (Ed), Level Design: Processes and Experiences, CRC Press.
- Johnson, M. R. & Woodcock, J. (In Press). "Storylines, Audiences and Professionalization: Exploring the Cultural Meanings of Technology in a Live-Streamed eSports Tournament" in Thesis Eleven.
- Johnson, M. (2015). "Hand-Made Detail in a Procedural World". Game Developers Conference (GDC) Europe, Cologne.
- Johnson, M. (2015). "Generating Global Cultures and Characters in Ultima Ratio Regum". Nucl.ai Artificial Intelligence Conference, Vienna. (Invited).
- Johnson, M. (2015). "Asymmetric Warfare in Video Games: A Military Force without Economic Capital in Command and Conquer." Canadian Game Studies Association Conference, University of Ottawa.
- Johnson, M. (2015). "Algorithmic Generation of Global Racial, Cultural, Religious, Architectural and Linguistic Variation." Canadian Digital Humanities Association Conference, University of Ottawa.
- Johnson, M. (2015). "Bullet Hell: The Globalized Growth of danmaku games and the Digital Culture of High Scores and World Records." DiGRA 2015, Lüneburg.
- Johnson, M. (2015). "Dusk Hour: Depictions of Ecological Collapse and Posthuman Survivalist Ideologies in Command and Conquer: Tiberian Sun." Brave New Worlds: The Dystopia in Modern and Contemporary Fiction Conference, University of Newcastle.
- Johnson, M. (2015). "Modelling Cultural, Religious and Political Affiliation in Artificial Intelligence Decision-Making." AISB AI and Games Conference, University of Kent.
- Reed, D.J. (2015). 'Aesthetics of the Performing Body. Part of the 'Aesthetics in Interaction' panel' Paper to be presented at Revisiting Participation. Language and Bodies in Interaction, Basel, United Kingdom, 24/06/15 - 27/06/15.
- Webster, A. From Evidence to Evidentiaries: Law, Biomedicine and STS, Centre for Law and Medicine, University of Gothenburg, November 15
- Reed, D.J., & Szczepek Reed, B.B. (2015). 'Displaying learning in performance settings: The co-construction of learner autonomy.' Paper to be presented at International Pragmatics Association (IPrA) Conference, Antwerp, Belgium, 26/07/15 - 31/07/15.
- Rees, A. Attended BSHS Swansea, 3-6 July. Organised session on 'Science Futures, Science Past' with colleagues from Manchester, Kent and Sheffield, presented a paper on 'Neanderthals and Narrative: othering the brother (sic) in 20th century fiction'.
- Webster, A. Innovation, regenerative medicine and redistributed manufacture: a social science perspective, Plenary address, EPSRC Workshop on Targeted Healthcare Production, University of Nottingham, 28 April 2015.
- Webster, A. Translational Medicine and STS, Plenary paper, Making Sense of Clinical Translation, Brocher Foundation, Geneva, May 17-19 2015.

# Output

## Conference Papers Cont...

Webster, A. Bio-objects and the bio-manipulation of life: creating and ordering the unruly, LifeExperiment Workshop, Birkbeck College London, 1 June 2015.

Webster, A. Time Lapses: socio-technical exposures, IVF Histories and Cultures Workshop, University of Cambridge (Coordinated by Sarah Franklin), June 22-23, 2015.

Williams, R. (2015) "Blood in the Archive: Anticipatory logics of Umbilical Cord Blood Banking", AHRC Diagnosing Legal Temporalities Workshop, 15 April, University of Kent. (Invited)

## Open Access Papers

Beer, D. (2015). 'The comfort of a smartphone', Sociological Imagination, 28 May 2015, <http://sociologicalimagination.org/archives/17671>

Beer, D. (2015). 'Taking a measure of happiness', Berfrois, 20 May 2015, <http://www.berfrois.com/2015/05/david-beer-happy-happy-happy/>

Beer, D. (2015). 'The new Apple Watch and the problem of our creeping connectivity', Sociological Imagination, 16 May 2015, <http://sociologicalimagination.org/archives/17447>

Beer, D. (2015). 'Systems of measurement have a productive power in our lives', LSE Politics & Policy, 28 April 2015, <http://blogs.lse.ac.uk/politicsandpolicy/the-productive-power-of-metrics/> (This was republished by the Royal Statistical Society).

Beer, D. (2015). 'Real or fantasy, football is now consumed by numbers', The Conversation, 28 April 2015, <https://theconversation.com/real-or-fantasy-football-is-now-consumed-by-numbers-40522>

Beer, D. (2015). 'Living with smartness', Open Democracy (Transformations section), 27 April 2015, <https://opendemocracy.net/transformation/david-beer/living-with-smartness> (This piece was also republished in The New Turkey).

Beer, D. (2015). 'One hit wonders dominate as social media turns up the pace of the pop charts', The Conversation, 6 January 2015, <https://theconversation.com/one-hit-wonders-dominate-as-social-media-turns-up-pace-of-the-pop-charts-35866> (this piece was also published on Scroll.in and [www.sbs.com.au](http://www.sbs.com.au))

Kane, C.L., & Beer, D. (2015). 'The Aesthetics of Algorithms: An interview with Carolyn L. Kane', *Theory, Culture & Society* open site, 7 January 2015, <http://theoryculturesociety.org/the-aesthetics-of-algorithms-an-interview-with-carolyn-l-kane/>

## Public/Guest Lectures

Beynon-Jones, S.M. (2016) "Gestating Times: Re-framing Discussions of Abortion and Time Through Women's Accounts? Changing Conversations about Time and Abortion? A workshop hosted by bpas as part of the AHRC Regulating Time Research Network. London, April 2016.

Johnson, M. (2016). "Procedural Dialect Generation". International Roguelike Developer Conference (North America), NYU Game Center, New York University, New York.

Johnson, M. (2016). "World-Class Bullet Hell Play: Playthrough and Commentary". DiGRA-FDG First Joint Conference, University of Dundee. (With Dr Michael Cook)

Johnson, M. (2016). "Procedural Generation of Linguistics, Dialects, Naming Conventions and Spoken Sentences", DiGRA-FDG First Joint Conference, University of Dundee.

Johnson, M. (2016). "Deep Play and Dark Play in Contemporary Cinema". DiGRA-FDG First Joint Conference, University of Dundee.

Johnson, M. (2016). "Towards Qualitative Procedural Generation". International Conference on Computational Creativity, Pierre and Marie Curie University.

# Output

- Johnson, M. (2016). "Remix Design: Towards Participatory Game Design". Poetics of the Algorithm Conference, University of Liege.
- Johnson, M. (2016). "The Algorithmic Generation of Conversational Dialects". Canadian Digital Humanities Association Conference, University of Calgary.
- Johnson, M. (2015). "Algorithmic Generation of Global Racial, Cultural, Religious, Architectural and Linguistic Variation." GameCity Nights, National Videogame Arcade, Nottingham (Invited).
- Johnson, M. (2015). "A Brief History of Psychology and Video Game AI." Guest Lecture on Undergraduate Psychology Course, University of Bedfordshire (Invited).
- Johnson, M. (2015). "The Procedural Generation of Culture". Norwich Gaming Festival, Norwich (Invited).
- Johnson, M. (2015). "Codifying the abstract: Defining and Programming a Procedurally Generated Renaissance World." Guest Lecture on Undergraduate Game Design Course, University of Lincoln (Invited).
- Gardner, J. (2015). European Paediatric Neurology Society Special Symposium on Neuromodulation 'A sociological study of neuromodulation and the importance of a broad clinical gaze' Vienna, Austria, 25-26th May.
- Gardner, J. (2015). EUCeLLEX International Consensus Conference on Regenerative Medicine 'REGenableMED: A social science analysis of regenerative medicine' Toulouse, France, 30-31st March.
- Gardner, J. (2015). Uni. of Edinburgh Centre for Population Health Sciences Departmental Seminar 'Patient-centred medical platforms and the broad clinical gaze: deep brain stimulation in paediatric neurology' Edinburgh, UK, 21 January.
- Gardner, J. (2015). Annual Conference of the BSA Medical Sociology Group 'The social management of biomedical novelty: biosocial niches and regenerative medicine' York, UK, 9-11 September.
- Reed, D. J., & Szczepek Reed, B. (2015). Displaying learning in performance settings: The co-construction of learner autonomy. Panel: The Social Organization of Learning in Classroom Interaction and Beyond. IPPRA 2015.
- Reed, D. J. (2015). The aesthetics of the performing body. Panel: Aesthetics in Interaction. Revisiting Participation. University of Basel, 24-27 June.
- Rees, A. (2016). Public lecture at the University of Kent, Canterbury - Anthropomorphising the Anthropocene: the pragmatics, politics and poetics of animal agency
- Webster, A. (2015). British Sociology Association Medical Sociology Annual Conference, York, September, 2015 'The social management of biomedical novelty: Innovation niches in regenerative medicine' - with John Gardner.
- Webster, A. (2015). 'After Paul Atkinson' Conference, Cardiff University, September 2015, 'Future Research Priorities in Sociological Research on Biomedicine and Genomics.'
- Webster, A. (2015). IVF Histories and Cultures Workshop, Cambridge, June, 2015. 'Time Lapses: socio-technical exposures.'

## Other Dissemination Activities

- Johnson, M. Freelance writer on game culture/history/criticism for First Person Scholar, Kill Screen, Five out of Ten Magazine, Memory Insufficient and Imaginary Realities.
- Johnson, M. Invited to be the new co-host of the Roguelike Radio podcast (~1,000,000 total hits)
- Johnson, M. Organized and hosted International Roguelike Developers Conference in association with the National Video Game Arcade (Nottingham, UK).
- Johnson, M. Interviewed for BBC News <http://www.bbc.co.uk/news/technology-36361896>
- Johnson, M. Interviewed live on BBC World News to audience of 90m+ Became freelance writer for major gaming publications Vice Gaming and Rock Paper Shotgun.
- Reed, D. The five year Digital Creativity Hub, kicked off on the 1 October. I am theme lead on 'Games and Interactive Media for Society'. Mark Johnson is the Sociology RA.
- Reed, D. I wrote a large £1.1m bid to NERC/AHRC/ESRC entitled "GIVit (Green Infrastructure Valuing Toolkit) (with Environment,

# Output

Electronics, Stockholm Environment Institute, Performance and Drama at Loughborough).

Rees, A. Guest editor, Palaeonarratives and Palaeofictions, British Journal for the History of Science, 49(3), September 2016

Rees, A. Fiction and the Social Imaginary, workshop at the University of York - Othering the Brother: class, race and Neanderthals in 20thC popular fiction

Rees, A. The Future of the History of the Human Sciences, conference at University of York, Biocultural evolution then and now: the brain in environmental context OR Counterfactualising the history of biology and sociology

Rees, A. Plenary speaker, 'Science in Public: Past, Present and Future' conference, University of Kent, Canterbury, Unsettling Scientific Stories - Presenting Choices.

Webster, A. New grant collaborations: Pascale Lehoux (PI) University of Montreal, Responsible innovation in health: designing technologies for sustainable healthcare systems, 7 year grant started October 1 2015.

Webster, A. New grant collaborations: Nick Medcalf (PI) University of Loughborough, Redistributed manufacturing in advanced therapeutics, 6 months feasibility study funded by the EPSRC (with John).

Webster, A. York lead on proposal for a CDT (PhD training programme) on Biosocial - overall bid led by Paul Martin (University of Sheffield).

Webster, A. Co-Chair AsSIST-UK Development Group.

# Contacts

## Director

Professor Andrew Webster  
T: 01904 32 4740  
E: [andrew.webster@york.ac.uk](mailto:andrew.webster@york.ac.uk)

## Administrator

Sarah Shrive-Morrison  
T: 01904 32 3050  
E: [sarah.shrive-morrison@york.ac.uk](mailto:sarah.shrive-morrison@york.ac.uk)

## Academic Staff

Dr David Beer  
T: 01904 32 3049  
E: [david.beer@york.ac.uk](mailto:david.beer@york.ac.uk)

Dr Siân Beynon-Jones  
T: 01904 32 3064  
E: [sian.beynon-jones@york.ac.uk](mailto:sian.beynon-jones@york.ac.uk)

Professor Nik Brown  
T: 01904 32 4741  
E: [nik.brown@york.ac.uk](mailto:nik.brown@york.ac.uk)

Dr John Gardner  
T: 01904 32 3055  
E: [john.gardner@york.ac.uk](mailto:john.gardner@york.ac.uk)

Dr. Mark Johnson  
E: [mark.johnson@york.ac.uk](mailto:mark.johnson@york.ac.uk)

Dr Darren Reed  
T: 01904 32 3047  
E: [darren.reed@york.ac.uk](mailto:darren.reed@york.ac.uk)

Professor Joanna Latimer  
T: 01904 32 4735  
E: [joanna.latimer@york.ac.uk](mailto:joanna.latimer@york.ac.uk)

Dr Amanda Rees  
T: 01904 32 3054  
E: [amanda.rees@york.ac.uk](mailto:amanda.rees@york.ac.uk)

Dr Sam Robinson  
T: 01904 32 3052  
E: [sam.robinson@york.ac.uk](mailto:sam.robinson@york.ac.uk)

## Associated Fellows

Dr John Forrester  
Stockholm Environment Institute  
T: 01904 32 2893  
E: [john.forrester@sie.se](mailto:john.forrester@sie.se)

Professor Paul Martin  
University of Sheffield  
T: 0115 951 5419  
E: [paul.martin@sheffield.ac.uk](mailto:paul.martin@sheffield.ac.uk)

Professor Mike Michael  
University of Sydney  
T: +612 9036 9483  
E: [mike.michael@sydney.edu.au](mailto:mike.michael@sydney.edu.au)

Dr Annemiek Nelis  
Dutch Safety Board, The Hague  
T: +31 (0)70 33370 09  
E: [a.nelis@onderzoeksraad.nl](mailto:a.nelis@onderzoeksraad.nl)

Professor Brian Rappert  
University of Exeter  
T: 01392 723 353  
E: [b.rappert@exeter.ac.uk](mailto:b.rappert@exeter.ac.uk)

Professor Arie Rip  
University of Twente  
T: +31 (0)53 489 4026  
E: [a.rip@utwente.nl](mailto:a.rip@utwente.nl)

Dr Richard Tutton  
University of Lancaster  
T: 01524 510 838  
E: [r.tutton@lancaster.ac.uk](mailto:r.tutton@lancaster.ac.uk)

## Doctoral Students

Ruchi Higham  
E: [rjh539@york.ac.uk](mailto:rjh539@york.ac.uk)

Bayo Ogunrotifa  
E: [abo501@york.ac.uk](mailto:abo501@york.ac.uk)

Rina Siyengwa  
E: [rina.siyengwa@york.ac.uk](mailto:rina.siyengwa@york.ac.uk)

## Postal Address:

Science and Technology Studies Unit  
Department of Sociology  
Wentworth College  
University of York  
Heslington  
York  
YO10 5DD  
United Kingdom  
  
T: +44 (0)1904 32 4740

## Websites

Department of Sociology:  
SATSU Homepage:

[www.york.ac.uk/sociology/](http://www.york.ac.uk/sociology/)  
[www.york.ac.uk/satsu/](http://www.york.ac.uk/satsu/)



Twitter: @UoY\_SaTSU



[satsu@york](mailto:satsu@york)



Typesetting and Design - Sarah Shrive-Morrison