

## Programme

10:00 - 10:4	5 Registration at Highfield House	
10:45 - 11:0	0 Opening of Circling the Square Conference	Reiner Grundmann (Nottingham)
11:00 - 12:0	0 Opening Keynote	
	Introduction: Karen Cox (Nottingham)	Brian Collins (UCL)
12:00 - 13:0	0 Lunch	
13:00 -14:15	Panel session 1:	Daniele Fanelli (Montreal)
	Research and decision making -	Sheila Jasanoff (Harvard)
	The science policy-interface.	Beth Taylor (Institute of Physics)
	Chair: Patricia Thomson (Nottingham)	Chris Tyler (POST)
14:15 - 15:1	5 Media Keynote	
	Introduction: Brigitte Nerlich (Nottingham)	Andrew Williams (Cardiff)
15:15 - 16:0	0 Tea & Coffee	
16:00 - 17:1	5 Panel session 2:	David Colquhoun (UCL)
	A good news story from science? -	Athene Donald (Cambridge)
	Researchers facing the media.	Felicity Mellor (Imperial)
	Chair: Laurie Cohen (Nottingham)	Jon Turney (science writer)
17:30 - 19:0	0 Reception at Highfield House	
	(sponsored by the 'Making Science Public'	
	Leverhulme programme)	

19:00	Dinner at East Midlands Conference Centre	
15:00 - 17	7:00 Public film screening: The Machine at the Broadway cinema in Nottingham city centre (sponsored by Nottingham Catalyst)	David Kirby (Manchester) Jenni Metcalfe (Econnect Communication, Queensland)
13:00 - 14	4:00 Lunch at The Hemsley	
11:30 - 12	2:45 Panel session 4:  'Citizen science' and new social media.  Chair: Sarah Sharples (Nottingham)	Suzi Jarivs (UCD, Innovation Academy) Sylvia McLain (Oxford) Neil Lancastle (Leicester) Warren Pearce (Nottingham)
11:15 - 11	1:30 Tea & Coffee	
10:00 - 11	Taking a stance or calming the waters - challenging established science.  Chair: Michael Clifford (Nottingham)	Dominic Dyer (Badger Trust) Roger Pielke Jr (Boulder) Jane A Smith (writer and researcher Stephen Turner (Florida)
09:00 - 10	0:00 Opening Keynote Introduction: Paul Heywood (Nottingham)	lan Boyd (DEFRA)
Wednesda	ay, 21 May 2014	

Thursday, 22 May 2014			
pening Keynote Steve Rayner (Oxford) roduction: Chris Rudd (Nottingham)			
nel session 5: Angela Cassidy (KCL)			
t robust knowledge or make Timothy Johnson (Heriot Watt)			
lieve? - Evidence, uncertainty  Stuart Parkinson (Scientists for			
d the role of values.  Global Responsibility)			
nair: Reiner Grundmann (Nottingham)			
a & Coffee			
nel session 6: Jason Blackstock (UCL)			
w directions: how can Reiner Grundmann (Nottingham)			
circle the square? Philip Moriarty (Nottingham)			
nair: Brigitte Nerlich (Nottingham)  Kate Roach (writer and researcher)			
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### Introduction and Overview

The Science, Technology and Society (STS)
Priority Group is a cross-Faculty organisation
at the University of Nottingham, composed
of scholars with reputations for high-quality,
interdisciplinary research and the capability to
attract significant external research funding.
The Priority Group meets to discuss ways
to stimulate new research exploring the
intersection between science and society.
It funds novel research at the University and
acts as a forum to discuss and plan new
research ventures.

The "Circling the Square" Conference is the STS Priority Group's flagship event. It brings together social scientists, those in the arts and humanities, policy experts, science communicators and natural scientists to discuss the various interconnected aspects of research, politics, media, and impact.

## Key Academic Leads of the STS Priority Group:



Professor Reiner Grundmann Academic Champion of the STS Priority Group Professor of Science & Technology Studies, University of Nottingham

Professor Brigitte Nerlich Sociology and Social Policy

Professor Philip Moriarty Physics and Astronomy

Professor Christopher Johnson Cultures, Languages and Area Studies

Professor Georgina Endfield Geography

Professor Sarah Sharples Engineering

Dr. June McCombie Chemistry

## **Introduction and Overview**

#### Background to the conference:

Researchers are increasingly interacting with policymakers to satisfy the growing demand for scientific research in evidence-based policy-making. In addition, they are becoming more involved with the media (and therefore the public) in order to publicise their research. to demonstrate their usefulness and 'impact', or to comment on the evidence base of policy decisions. All these activities are being studied by a growing number of social scientists and humanists, especially from within the field of Science and Technology Studies. This conference explores the role of knowledge in policy making, bringing together leading, international scholars and early career researchers in the natural sciences, social sciences and humanities with practitioners at the science-policy interface, the public and the media.

#### This conference has two major aims:

First, it explores the opportunities and challenges involved with the development of policy-relevant evidence from the perspectives of researchers and practitioners. Researchers can play different roles in these debates, as pure scientists, as honest brokers, or as advocates. They can speak as individuals, or as part of scientific organizations. One major challenge they face is the response to expectations from the media, decision makers, and the public to provide new insights, policy recommendations based on predictions, or simple truths. The use and abuse of evidence by the media and political elite needs addressing.

The second aim of the conference is to foster a much needed conversation between researchers, decision makers, journalists, and engaged citizens. In particular, speakers will explore how relevant actors communicate, and in which contexts, and what they expect from each other. These issues will be addressed drawing on recent controversies from the UK and abroad, such as climate change, the economic crisis, and drug regulation.

#### **Programme Committee**

Professor Reiner Grundmann, Chair of Science and Technology Studies, Institute for Science and Society, School of Sociology and Social Policy

Dr Sarah Hartley, Leverhulme Research Fellow, School of Biosciences

Professor John Holmwood, School of Sociology and Social Policy

Professor Philip Moriarty, School of Physics and Astronomy

Professor Brigitte Nerlich, Director of the Making Science Public Leverhulme programme, Institute for Science and Society, School of Sociology and Social Policy

#### **Organising Committee**

Professor Georgina Endfield, School of Geography

Dr Gregory Hollin, Mildred Blaxter Postdoctoral Fellow, Institute for Science and Society, School of Sociology and Social Policy

Dr Cornelia Lawson, Public Engagement Research Fellow, Institute for Science and Society, School of Sociology and Social Policy

## **Keynotes**

## Day 1: Opening Keynote

#### Introduction

Professor Karen Cox is Deputy Vice Chancellor and Professor of Cancer and Palliative Care at the University of Nottingham. Her academic and research interests include information provision, decision-making and quality of life in relation to cancer treatment trials and palliative care. Her research investigates the experiences of patients and their families and examines how they deal with a cancer diagnosis, treatment and follow-up.



Professor Brian Collins,
Director of the Centre for
Engineering Policy, UCL
Professor Brian Collins took up the
role of Professor of Engineering
Policy at University College London
on 1st August 2011 and is Director

of the Centre for Engineering Policy and PI on a £3.5M grant running the International Centre for Infrastructure Futures. He is also co-investigator on a £10M research programme investigating liveable cities for the future, specialising in governance and policy issues. Prior to his appointment at UCL he was the Chief Scientific Adviser (CSA) for the UK Department for Transport (DfT) and CSA for the Department for Business, Innovation and Skills (BIS) from 2006 to 2011. He was Professor of Information Systems at Cranfield University from August 2003 until July 2011.He was a member of the Council of Science and Technology working party that published in 2009 the report 'A National Infrastructure for the 21st Century' under the leadership of Sir Mark Walport, now GCSA.

In 2009 Professor Collins was elected a Fellow of the Royal Academy of Engineering. In the 2011 New Year Honours List, he was bestowed by Her Majesty the Queen the Honour of Companion of the Bath (CB). He is a Fellow of the Institute of Civil Engineers, of the Institute of Engineering and Technology, of the British Computer Society and of the Institute of Physics. He has an Honorary Doctorate from City University London, has a visiting Professorship at Wollongong University, New South Wales, Australia and holds an Honorary Doctorate from Kingston University.

## Day 1: Media Keynote

#### Introduction

Professor Brigitte Nerlich is Professor of Science, Language, and Society at the Institute for Science and Society at the University of Nottingham. Her research focuses on the cultural and political contexts in which metaphors and other framing devices are used in the public, policy and scientific debates about emerging technologies, emerging diseases, as well as climate change. She is director of a Leverhulme Trust funded research programme "Making Science Public: Challenges and Opportunities".



Dr Andrew Williams, Cardiff School of Journalism, Media and Cultural Studies

Dr. Andy Williams is a Lecturer at the School of Journalism, Media and Cultural Studies at Cardiff University.

He was previously the RCUK Research Fellow in Risk, Health and Science Communication (2008-10). He has provided expert opinion and advice to a number of government bodies, media groups, and professional associations including the BBC, the Department of Business, Innovation and Skills, the Expert Group on Science and the Media, the National Union of Journalists, and the Welsh Assembly's Broadcasting Subcommittee. He regularly contributes to the UK national and regional press and broadcast media, including Times Higher Education, Nature News, the New Statesman, national BBC Breakfast News, the Guardian Unlimited, Press Gazette, OpenDemocracy, and BBC Wales television and radio news.

Abstract: This lecture will address recent research into UK journalists and their sources and what it tells us about the quality and independence of the news we read about science. It will touch on commonly-accepted roles of science news and how journalists believe these might be attained in practice, before examining a series of constraints which hinder this. Constraints such as: changes in journalists' working conditions since the advent of new media; the rise of secretive and manipulative corporate science public relations (PR); the use of persuasive communicational tactics to campaign on controversial scientific issues; and the growth of promotional activities by Universities and academic publishers since the

## Day 2: Opening Keynote

#### Introduction

Professor Paul M. Heywood is Sir Francis Hill
Professor of European Politics and Executive Dean of
the Faculty of Social Sciences at the University of
Nottingham. Before joining Nottingham, he taught at the
University of Glasgow and at the University of London.
He also worked for the Economist Intelligence Unit,
London (1989-93). In 2006, he was appointed Adjunct
Professor at the University of Hunan (China), where
he is Senior Adviser to the Center for Clean Governance. He is a Fellow of the Royal Society of Arts, and
an Academician of the Academy of Social Sciences.



#### Professor Ian Lamont Boyd, Chief Scientific Adviser to Defra

Professor Ian Boyd's career has evolved from Physiological ecologist with the Natural Environment Research Council Institute of Terrestrial Ecology, to a Science

Programme Director with the British Antarctic Survey, Director at the Natural Environment Research Council's Sea Mammal Research Unit, Chief Scientist to the Behavioural Response Study for the US-Navy, Director for the Scottish Oceans Institute and acting Director and Chairman with the Marine Alliance for Science and Technology for Scotland. He has also been the Chief Executive or board member of several companies for the University of St Andrews. He is currently Professor in Biology at the University of St Andrews and Chief Scientific Adviser to the UK Department of Environment, Food and Rural Affairs. In parallel to his formal positions he has chaired, co-chaired or directed international scientific assessments; his activities focusing upon the management of human impacts on the marine environment.

Ian was responsible for establishing the Scottish Oceans Institute at the University of St Andrews and the Marine Alliance for Science and Technology for Scotland, one of Scotland's cross-institutional research pools including eight of Scotland's universities. He established several operating companies for the University of St Andrews and these now operate globally with subsidiaries in the United States, Canada and Hong Kong. As Director of the NERC Sea Mammal Research Unit he was responsible for advising Defra and the Scottish Government about policy related to marine mammals. He is also a member of the Scottish Science Advisory Council and is on the Board of Reviewing Editors of Science.

Professor Boyd has received numerous honours and awards recognising his contributions to science, including the Scientific Medal of the Zoological Society of London, the Bruce Medal (awarded once every 4 years) for his research in Polar Science and has been elected as a Fellow of the Royal Society of Edinburgh, Scotland's National Academy, and is a Fellow of the Society of Biology

## Day 3: Opening Keynote

#### Introduction

Professor Chris Rudd is Professor of Mechanical Engineering and Pro-Vice-Chancellor for Knowledge Transfer at the University of Nottingham. His research interest is lightweight structures, especially fibre composites and he has developed several innovative processes for turning these unique materials into useful devices. His responsibilities include alumni, fundraising, public engagement and commercialisation. He is on the board of the China-Britain Business Council and a regular commentator on University-led innovation and east-west technology exchange.



Professor Steve Rayner, Director of the Institute for Science, Innovation and Society, University of Oxford

Professor Steve Rayner is James Martin Professor of Science

and Civilization at Oxford University's School of Anthropology and Museum Ethnography and Director of the Institute for Science, Innovation and Society, where he also co-directs the Oxford Programme for the Future of Cities and the Oxford Geoengineering Programme, both supported by the Oxford Martin School. He is also Honorary Professor of Climate Change and Society at the University of Copenhagen and Senior Fellow at The Breakthrough Institute, a non-partisan environmental NGO based in California's Bay Area. He previously held senior research positions in two US National Laboratories and has taught at leading US universities, including Cornell, Virginia Tech, and Columbia.

He has served on various US, UK, and international bodies addressing science, technology and the environment, including Britain's Royal Commission on Environmental Pollution, the Intergovernmental Panel on Climate Change and the Royal Society's Working Group on Climate Geoengineering. Until 2008, he also directed the national Science in Society Research Programme of the UK Economic and Social Research Council. He is the Founding and General Editor of the Science in Society book series published by Earthscan.

Professor Rayner has received numerous awards, including the 25th Homer N. Calver Award from the Environment Section of the American Public Health Association, the Pacific Northwest National Laboratory Director's Award for R&D Excellence and two Martin Marietta Energy Systems Awards for groundbreaking work in risk analysis and global climate change policy analysis respectively. He was included in the 2008 Smart List by Wired Magazine as 'one of the 15 people the next US President should listen to'.

### Panel sessions

## 1. Research and decision making The science policy-interface

#### Chair: Professor Patricia Thomson, School of Education, University of Nottingham

Pat Thomson is Director of the Centre for Research in Arts, Creativity and Literacy (CRACL). She is the current Director of the Centre for Advanced Studies which serves the faculties of Arts and Social Sciences. Pat is known for her interdisciplinary engagement with questions of creative and socially just educational learning and change. She authors the blog patter.



Dr Daniele Fanelli, Visiting Professor, School of Library and Information Sciences (EBES), University of Montreal Dr Daniele Fanelli trained as an evolutionary biologist at the Univer-

sity of Florence and University of Copenhagen, and also worked as a science writer before specialising in the study of scientific misconduct, bias and related issues. Fanelli's work and opinions on research integrity are frequently cited in the popular press, and he is involved at various levels with international conferences and initiatives. He is member of the Research Ethics and Bioethics Advisory Committee of Italy's CNR, and has worked at the University of Edinburgh, University of Leuven, London School of Economics.



Professor Sheila
Jasanoff, Pforzheimer
Professor of Science
and Technology Studies,
Harvard Kennedy School
Sheila Jasanoff is Pforzheimer
Professor of Science and Technol-

ogy Studies at the Harvard Kennedy School. A pioneer in her field, she has authored more than 100 articles and chapters and is author or editor of a dozen books, including Controlling Chemicals, The Fifth Branch, Science at the Bar, and Designs on Nature. Her work explores the role of science and technology in the law, politics, and policy of modern democracies, with particular attention to the nature of public reason. She was founding chair of the STS Department at Cornell University and has held distinguished visiting appointments in the US, Europe, and Japan. Jasanoff served on the Board of Directors of the American Association for the Advancement of Science and as President of the Society for Social Studies of Science. She has received a Guggenheim Fellowship, the Sarton Chair of the University of Ghent, and an Ehrenkreuz from the Government of Austria.



Dr Beth Taylor, Chair of the UK National Committee for the International Year of Light 2015 Until April 2014, Beth Taylor was

Director of Communications and

International Relations at the Institute of Physics (IOP), responsible for media relations, public affairs, science outreach activities and the Institute's web presence. She also led the Institute's international activities, including the physics for development programme which supports physics education and training in the developing world.

Before joining IOP in 2007, Beth was a member of the corporate strategy team of the UK Atomic Energy Authority (UKAEA), to work on the privatisation of AEA Technology and the refocusing of the UKAEA on nuclear decommissioning and waste management. She became head of the UKAEA's corporate communications in 1998, responsible for media and community relations at Dounreay, Windscale, Harwell and Winfrith.

Beth is a vice chair and director of the UK National Commission for UNESCO, with particular responsibility for the natural sciences portfolio. She was a founding director of Caithness Horizons, a visitor centre and community facility in Thurso.



Dr Chris Tyler, Director of the Parliamentary
Office of Science and
Technology (POST)
Chris Tyler joined POST in 2012
having spent the previous two years as Executive Director at the Centre

for Science and Policy, Cambridge University. Prior to that, Chris was a science adviser to the House of Commons Science and Technology Select Committee and also worked at Sense About Science. Chris has a degree in Anthropology from the University of Durham, a PhD in Biological Anthropology from the University of Cambridge and sits on the Board of the Campaign for Science and Engineering (CaSE).

## 2. A good news story from science? Researchers facing the media

#### Chair: Professor Laurie Cohen, Nottingham University Business School

Laurie Cohen is Professor of Organisational Behaviour and her research focuses on women's career transitions and careers in emerging forms of organization. She has also been involved in a series of studies on perceptions and enactment of management in professional organizations.



Professor David Colquhoun, FRS, Honorary Fellow, University College London

David Colquhoun is a British pharmacologist at UCL. He has

contributed to the general theory of receptor and synaptic mechanisms of single ion channel function in the development of drugs. He was made a fellow of the Royal Society in 1985 and an honorary fellow of UCL in 2004. He runs the website and blog DC's Improbable Science, which is critical of pseudoscience, particularly alternative medicine, and corporisation of science. It won the Good Thinking UK Science Blog Price 2012.



Professor Dame Athene Margaret Donald, DBE, FRS, Cavendish Laboratory, University of Cambridge

Athene Donald is Professor of Experimental Physics and her

research is in the general field of soft matter and physics at the interface of biology. She has chaired many committees within Cambridge and beyond and has served on University Council (2009-14) and as the University Gender Equality Champion (2010-14). As well as various prizes from the IOP and Royal Society, she won the 2009 L'Oreal/Unesco Laureate for Europe award. She was appointed DBE in the 2010 Birthday Honours for services to Physics. She also regularly contributes to The Guardian, especially relating to women in science.



Dr Felicity Mellor, Senior Lecturer in Science Communication Studies, Imperial College London Felicity Mellor's research focuses on the ideological dimensions of public science, especially media

representations of the physical sciences. She carried out the content analysis for the BBC Trust's review of the impartiality of science output and she is currently leading an AHRC-funded project on the 'silences of science'.



Dr Jon Turney, science writer and author

Jon Turney has been a science writer, editor and reviewer since the early 1980s. His articles and reviews have appeared in Times Higher Education, The Guardian, New Scientist, Green Futures and elsewhere. From

1993-2003 he taught at the Department of Science and Technology Studies at UCL. His books include Frankenstein's Footsteps (1998), which won the BMA Award for popular medical book of the year, Lovelock and Gaia (2005) and The Rough Guide to the Future (2010), which was shortlisted for the Royal Society's science book prize.

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## 3. Taking a stance or calming the waters - challenging established science.

#### Chair: Dr Mike Clifford, School of Mechanical Engineering, University of Nottingham.

One of Mike Clifford's main research interests is Appropriate Technology and he has sourced suggestions for engineering from many developing countries. These projects have solved practical problems and have provided sources of income generation for deprived communities across the globe and raised the awareness of the role engineering can play in changing communities for the better. Mike is passionate about lecturing and is well known for his unusual ways of making his lectures more interesting for students including getting dressed in costumes.



#### Dominic Dyer, Chief Executive of the Badger Trust

Dominic Dyer is currently CEO of the Badger Trust and Senior Policy Advisor at Care for the Wild International a leading wildlife protection and conservation charity. Dominic is

also a member the Royal College of Veterinary Surgeons Veterinary Nurses Council. He is a Fellow of the British American Project and the Royal Society of Arts Business & Manufacturing. Dominic undertakes regular broadcasts on TV and radio and contributes to press articles and journals on a wide range wildlife protection farming, food production, conservation and foreign policy issues. Previously, he worked in the UK Ministry of Agriculture between 1987 to 2000 and the Food and Drink Federation in 2000 where he played a key role in developing a number of new industry groups in the organic, soya food, vegetarian and functional food sectors. He was Chief Executive of the Crop Protection Association between 2008 -2012 and played a key role in raising awareness of the importance of plant science to the future of farming and food production on a UK and International basis.



#### Professor Roger Pielke Jr, Center for Science and Technology Policy Research, University of Colorado Boulder

Roger Pielke is Professor in the Environmental Studies Program at

Boulder and a Fellow of the Cooperative Institute for Research in Environmental Sciences (CIRES). Roger's research focuses on science, innovation and politics and he has co-authored books such as The Honest Broker: Making Sense of Science in Policy and Politics and most recently The Climate Fix: What Scientists and Politicians Won't Tell you About Global Warming. He has been awarded the Public Service Award of the Geological Society of America and also received the Eduard Brückner Prize in Munich, Germany in 2006 for outstanding achievement in interdisciplinary climate research.



#### Dr Jane A Smith, Writer and Researcher

Jane A. Smith works on ethical aspects of the use of laboratory animals for a range of organisations, including industry, academia, government and animal welfare – and has been involved with The Boyd Group since

1993, as organiser and writer. Before going freelance, she was employed at the Institute of Medical Ethics in London and then Birmingham University's Medical School. Her own views are in the middle ground, informed by regular visits to laboratories and participation in local ethical review bodies. She has been specialist adviser for two House of Lords' enquiries, and is a tutor for the OU's MSc in Science and Society.



#### Professor Stephen Turner, Distinguished University Professor of Philosophy, University of South Florida

Stephen Turner has written extensively on the history of the

patronage of science and on expertise and democracy, including such books as Liberal Democracy 3.0:
Civil Society in an Age of Experts and most recently
The Politics of Expertise. He was the first chair of his university's research misconduct committee, and has written on this topic as well.

## 4. 'Citizen science' and new social media

#### Chair: Professor Sarah Sharples, School of Mechanical, Materials and Manufacturing Engineering, University of Nottingham

Sarah Sharples is a Professor of Human Factors and Head of the Human Factors Research Group. Her work in transport human factors, includes projects on understanding how people use smartphones during journeys and movement, technologies to support journey sharing, new technologies in rail automation and control and human performance in air traffic control. She is also a CI in the Horizon Digital Economy Research hub and Training Programme Manager of the Horizon Doctoral Training Centre.



# Professor Suzi Jarvis, School of Physics, University College Dublin and Director of the Innovation Academy Suzi Jarvis took up the Chair of Biophysics in the Conway Institute

of Biomolecular and Biomedical Research at University College Dublin in 2007. Recently her serendipitous discovery of patentable protein structures in a broad range of natural adhesives has opened up the potential for the biomimetic production of new biomedical adhesives. Suzi was appointed as Founding Director of the Innovation Academy, UCD in 2010 and has been instrumental in driving the Academy's development to date. From 2002 to 2007 she was one of the founding Principal Investigators of the Centre for Research on Adaptive Nanostructure and Nanodevices (CRANN); a joint venture with multi-national partner Intel at Trinity College Dublin.

Prior to that, she worked at the Joint Research Centre for Atom Technology; a Government Research Lab in Tsukuba, Japan, working in the area of nanotechnology. Towards the end of her time in Japan she was actively involved in the policy changes and restructuring which occurred across the science and technology sector primarily through her connections with the Science and Technology Office of the British Embassy.



#### Neil Lancastle, Doctoral Student, School of Management, University of Leicester

Neil has been helping out at 'rethinking economics' since their June 2013 London conference, and

was part of the 'international student letter' project that was published simultaneously in 8 languages. He has an MBA in technology management, and teaches finance and accounting seminars at the University of Leicester where he is a 4th Year PhD student. His research project investigates the 'carry trade' as a counterfactual to theories of economics and finance. His methods include interviews, simulations, statistical analysis and stock-flow consistent modelling



#### Dr Sylvia McLain, Research Fellow in Biochemistry, University of Oxford

Sylvia McLain is an EPSRC research fellow in Biochemistry and a College Lecturer at St. Peter's College at

the University of Oxford. She has a PhD in Physical Inorganic Chemistry, an MSc in Science Education and a BSc in Zoology all from the University of Tennessee in the US. Her research group at Oxford focuses on understanding how water interacts with drugs, lipids and peptides on an atomic scale in solution to give rise to life itself. She also blogs for Occam's Typewriter and the Guardian about science and the philosophy of science.



# Dr Warren Pearce, Research Fellow at the Institute for Science and Society, University of Nottingham Warren is a Research Fellow on University of Nottingham's Making

Science Public programme, researching public debates about climate change in the UK, with a focus on those who are critical of dominant views. He will provide insights from this research for Panel 4, in particular recently published work on Twitter conversations about the IPCC. Warren is also editor of a new issue of Evidence and Policy about the meanings of evidence within public policy, building on previous research about climate policy implementation. He is a contributor to The Guardian, and is Managing Editor of the Making Science Public blog.

#### 5. Is it robust knowledge or make believe?

- Evidence, uncertainty and the role of values

Chair: Professor Reiner Grundmann, Chair of Science and Technology Studies, University of Nottingham.

Bio see page 12.



Dr Angela Cassidy, Department of History, King's College London Angela Cassidy is a research

academic working across the sociology and history of the life and human sciences. She has a particular interest in how scientific

knowledge is constructed, communicated and acted upon during public scientific controversies, and has studied this process in debates over popular evolutionary psychology, food risk, animal health and wildlife management. She is currently a Welcome Trust Research Fellow in the Department of History, King's College London, where she is investigating the late 20th century history of the UK bovine TB problem.



Dr Tim Johnson, Academic Fellow in the Department of Actuarial Mathematics and Statistics, Heriot-Watt University

Following an undergraduate degree in physics, Tim Johnson worked in oil exploration becoming interested in problems of decision making under uncertainty, and embarked on a path that led him to be the RCUK Academic Fellow in Financial Mathematics during the financial crisis. In this role, Dr Johnson became conscious of the ambiguous role of mathematics in finance, particularly criticisms from the regulators that mathematics was used as much to obscure as to enlighten.



Dr Stuart Parkinson, Executive Director of Scientists for Global Responsibility (SGR)

A UK-based organisation of about 900 natural scientists, social scientists, engineers and others

concerned about the use and misuse of science and technology. Dr Parkinson has degrees in physics, engineering and environmental science. His early career experience on military engineering projects raised serious ethical concerns, and he consequently moved into environmental research and then onto science and technology policy analysis. He has been SGR's Director since 2003, co-ordinating research and advocacy work on range of issues, in particular, military and corporate influence on science and technology.

## 6. New directions: how can we circle the square?

Chair: Professor Brigitte Nerlich, Director of the Making Science Public Leverhulme programme, Institute for Science and Society, School of Sociology and Social Policy, University of Nottingham.

#### Bio see page 5.



Dr Jason Blackstock, Acting Head of Department for Science, Technology, Engineering and Public Policy at UCL (UCL STEaPP)

Jason Blackstock is a leading

international scholar and policy adviser on the interface between science and international public policy. His work includes a focus on the science and governance of climate change, including projects on geoengineering, short-lived climate forcers and sustainable energy transitions.



Professor Reiner Grundmann, Chair of Science and Technology Studies, University of Nottingham

Reiner Grundmann's main research interest is the relation between

knowledge and decision making. In recent years he has been studying the public discourse on climate change where the role of scientific experts, lay audiences, decision makers and the mass media are crucially important. As various actors frame the issue in different ways, their use of language needs to be understood. He also researches the social, political, and cultural dimensions of climate change. This includes the ethics of climate research (as exemplified in 'climategate'), the dilemmas of scientists between advocacy and honest brokering, the role of Sociology in the climate change debate, and the relevance of STS for all of this.



Professor Philip Moriarty, School of Physics and Astronomy, University of Nottingham

Philip Moriarty is a Professor of Physics and an Engineering & Physical Sciences Research Council

(EPSRC) Fellow at the University of Nottingham. He has a keen interest in outreach activities and both science and higher education funding policy. In addition to participating in a number of research council-funded public engagement projects (including Giants of the Infinitesimal), and his membership of the Steering Committee of the Council for the Defence of British Universities, he has interacted with national and international media (including The Independent, The Guardian, and The Economist) on these issues. He is also a regular contributor to Nottingham's Sixty Symbols YouTube project.



Dr Kate Roach,

writer and researcher
Kate Roach began her career in
science television
production, science website
production and as a science writer.
She has been published by the
BBC, BBC Wildlife, Channel 4, The

Guardian blog, The New Scientist, BBC Knowledge and various blogs. After completing her PhD on the cultural history of science she has built a portfolio career. She draws down knowledge from the academy in her capacity as researcher, facilitator and teacher in the third and public sectors. Meanwhile she continues to write and is currently working on a popular book, 'People's Science - A Counter-History of Knowing.' She is also a great believer in the value of fiction in exploring the thorny issues thrown up at the interface of science and policies of state.

## **Public Film Screening**

Location: Broadway Cinema, 14 - 18 Broad Street, Nottingham

Time: 21 May, 3pm Entrance: £3.50

Fee and transport to the cinema are included in the conference Standard Rate and Student Standard Rate.

Film - The Machine (15)

Director: Caradog James Cast: Caity Lotz, Toby Stephens Origin: United Kingdom

Duration: 90m

With an impoverished world plunged into a new Cold War, British scientist Vincent is on the brink of developing a game-changing weapon - an android called The Machine... In a time when science fiction is very much of the bigger-is-better-is-louder variety it's refreshing to have a film like The Machine to be reminded of the glory days. As beautiful as it is – and it is stunning – it's the narrative and the questions it asks that raise the film to the highest ranks of the genre. This is the thinking person's science fiction, a movie that will have you looking at your technology in a whole new way. Raindance Film Festival.



#### Dr David A. Kirby, Senior Lecturer in Science Communication Studies, University of Manchester David A. Kirby was a practicing

evolutionary geneticist before leaving bench science to become Senior

Lecturer in Science Communication Studies at the University of Manchester. Several of his publications address the relationship between cinema, genetics, biotechnology and cultural meanings. He has also studied how media professionals utilize, negotiate and transform science in order to tell stories about science in movies and on television. His book "Lab Coats in Hollywood: Science, Scientists and Cinema" examines collaborations between scientists and the entertainment industry in the production of movies and demonstrates how these fictional texts affect real world science and technology. He recently received an Investigator Award from the Welcome Trust to analyse the interactions among the biosciences, religion and entertainment media. He is currently writing a book titled "Indecent Science: Religion, Science and Movie Censorship, 1930-1968" which will explore how movies served as a battleground over science's role in influencing morality.



#### Jenni Metcalfe, Director of Econnect Communication and PhD Student and Lecturer at the University of Queensland

Jenni Metcalfe is studying a PhD through the University of Queensland,

Australia. She is currently studying at the University of Nottingham under a Universitas 21 exchange. She is also the Founder and Director of Econnect Communication, and lectures in science journalism at the University of Queensland. She has been a science communicator for more than 24 years, working as a journalist, practitioner and researcher in this area. Jenni has published many papers and articles on science communication. She was co-editor of the human scale: International practices in science communication, published in 2006 by Science Press, Beijing. She was President of the Australian Science Communicators (ASC) from 2005 to 2007. During that time, ASC hosted the World Conference of Science Journalists. Jenni has been a member of the scientific committee of the International Public Communication of Science and Technology (PCST) Network since 1996.

Sponsored by:

## Nottingham **Catalyst**

and in collaboration with Broadway cinema, Nottingham

## **Conference Location**

The conference will be held at Highfield House on University Campus. All the main proceedings, including keynote speeches and panel discussions will be held there.

The lunch on 20 and 22 May as well as the evening reception on 20 May will also be held here.

#### **Conference Lunch 21 May**

Lunch on 21 May will be held at the Hemsley.

#### **Conference Dinner**

The Conference Dinner on 21 May will be held at 7pm at East Midlands Conference Centre, which is adjacent to the Orchard hotel.









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## **Sponsors**

## Leverhulme Programme Making Science Public: Challenges and Opportunities

'Making Science Public: Challenges and Opportunities' is a five year interdisciplinary programme of research funded by the Leverhulme Trust (2012-2017). It studies the opportunities that have emerged for science to be more openly practised and debated, but also the challenges posed by making science public or by promoting the making public of science as a solution to a variety of problems in society and in politics.

Director: Professor Brigitte Nerlich Deputy Director: Dr Sujatha Raman Fellows: Drs Stevienna de Saille, Sarah Hartley, Roda Madziva, Carmon McLeod, Alison Mohr, Warren Pearce, Alexander Smith, Adam Spencer, Judith Tsouvalis

Website: http://www.nottingham.ac.uk/ sociology/research/projects/makingscience-public/index.aspx Blogs: http://blogs.nottingham.ac.uk/ makingsciencepublic/



@MakingSciPub

Contact: Dr Harinee Selvadurai, School of Sociology and Sociology, University of Nottingham Phone: 0115 74 84184; Email: harinee.selvadurai@nottingham.ac.uk

## ACRITAS Marie Curie Initial Training Network

ACRITAS (Actuation and Characterisation at the Single Bond Limit) is a Marie Curie Initial Training Network whose primary focus is advanced training and research in scanning probe-based nanoscience at the single bond limit. ACRITAS runs for four years from Oct. 2012, and involves eleven core partners and thirteen associate partners spanning academia, industry, professional bodies, and NGOs.

Coordinator: Nanoscience Group, University of Nottingham Principal Scientist: Prof. Philip Moriarty, School of Physics & Astronomy, University of Nottingham Website: http://acritas.eu

#### Nottingham Catalyst

Nottingham Catalyst is a new programme which helps link research and public engagement across all faculties and schools at University of Nottingham. Nottingham Catalyst is funded by Research Councils UK (RCUK). Its priority is accessing hard to reach communities that do not traditionally engage with Higher Education, including Third Sector organisations (voluntary and community organisations, charities, social enterprises), Health Users and communities, and the "Citizen on the street".



@NottCatalyst

Contact: Veronica Strain, Community Partnerships, King's Meadow Campus, University of Nottingham. Phone: 0115 84 68747; Email: veronica.strain@nottingham.ac.uk

## **Notes**


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