# ISSTI

THE INSTITUTE FOR
THE STUDY OF SCIENCE
TECHNOLOGY AND INNOVATION
www.issti.ed.ac.uk

### newsletter

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### Three exciting new awards for ISSTI members

- 1. Congratulations to Neil Pollock who has secured an ESRC Research Award for a study of Ranking the Rankers: The New Industry of Influencer Relations.
- 2. Congratulations to Martyn Pickersgill who has secured a 5 year Wellcome Trust University Award to study: 'Beyond Diagnosis? Novelty, Need and the Normative in Twenty-First Century Psychiatry'.
- 3. Congratulations to Steve Yearley who is part of a successful consortium that will study the challenges of remote monitoring for food security of land-use decisions.

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### **Grants and Awards**



#### Ranking the Rankers

Congratulations to Neil Pollock who has secured an ESRC Research Award of £223,000 for a study of Ranking the Rankers: The New Industry of Influencer Relations.

Neil Pollock, Head of Entrepreneurship and Innovation Group in the University of Edinburgh Business School, has been awarded £223,000 by the Economic and Social Research Council for a study of Ranking the Rankers: The New Industry of Influencer Relations.

Working with Gian Marco Campagnolo and Robin Williams as Co-Investigators this three year project will investigate how new specialist forms of technical and

market specialists have emerged to help organisations confront and respond to the growing pressure exercised by various forms of product and service rankings which are having such dramatic influence over markets. New groups of 'influencer relations' experts can be found across industrial sectors. In this project, we focus on those within information and communication technology, in this way (re)shaping the power of rankings more generally.



### **Beyond Diagnosis? Psychiatry and Society**

Dr Martyn Pickersgill (Centre for Population Health Sciences) has been awarded a major 5 year Wellcome Trust University Award for the project 'Beyond Diagnosis? Novelty, Need and the Normative in Twenty-First Century Psychiatry'.



Situated the at intersection of STS and medical sociology, it asks how strategic international initiatives to move beyond the use of diagnosis within psychiatric research are being developed and justified; how they being translated into the research of leading UK scientists; and how such developments are being received by clinical psychiatrists wider publics (especially, how they impact understandings

of the nature of mental illness and treatment). The project builds on Martvn's current Wellcome Trust **Fellowship** the sociology of clinical psychology, and his on-going Leverhulme Trust project on the social studies of neuroscience. Over 2014 Martyn gave invited talks on this work at the universities of Copenhagen, Exeter, Lancaster, and Wisconsin-Madison, and also spoke at a Houses of Parliament event on 'Science and Public Trust'. Later this year he will he McGill speaking at University and the University of Lausanne, and delivering the Richardson Research Seminar in the History of Psychiatry at Weill Cornell Medical College. Martyn was recently invited to join the inaugural Editorial Board of the new 4S journal, **Engaging** Science, Technology & Society.



### **Grants and Awards**



#### Food Security and Land Use: the Telecoupling Challenge

Congratulations to Steve Yearley who is part of a successful consortium that will study the implications for food security of land-use decisions that, in our globalised economy, may be taken at far remove spatially and

temporally.

The study, entitled Food Security and Land Use: the Telecoupling Challenge, is funded by the Belmont Forum - a high level group of research councils worldwide founded by NERC and the National Science Foundation. Steve will lead the UK qualitative social science component. The consortium also involves Oxford,

Imperial and Kings College London, partners in the USA, Brazil & China and international bodies the FAO, International Food Policy Research Institute (IFPRI) and Centro Internacional de Agricultura Tropical (CIAT).



# Science, Technology and Innovation Studies research top rated in UK by REF2014 national research assessment

We are delighted by the strong performances achieved across the University of Edinburgh in the recent Research Excellence Framework.

Edinburgh Sociology came top in the UK in the Times Higher Education Supplement "research power" ranking. (Research power is grade-point average multiplied by the size of the submission). Science, Technology and Innovation Studies made up almost 40% of the Sociology submission. Though ranked 6th in the UK in grade point average scores, by virtue of returning all staff we are by a long way the largest UK centre of "world leading" or "internationally excellent" research. This makes us No 1 in the UK in terms of "research power", aided by very strong scores for 'Impact' and 'Environment'.

Source Times Higher Education Supplement (18/25 December 2014)

Ranked by Research Power	Ranked by GPA	Institution	Number of FTEs returned	Percentage of 4*	Grade Point Average	Research Power
1	6	Edinburgh	58	34	3.16	184
2	2	Manchester	49	42	3.26	158
3	7	Essex	47	38	3.14	149
4	16	Open	37	22	2.86	106
5	5	Oxford	33	37	3.19	105
6	19	Goldsmiths	37	18	2.83	105
7	3	Cardiff	29	37	3.22	95
8	21	Warwick	35	18	2.76	95
9	4	Lancaster	29	39	3.21	92
10	8	LSE	25	34	3.12	77



# Special Issue

# The Politics of Innovation for Environmental Sustainability: Celebrating the Contribution of Stewart Russell (1955–2011)

Stewart Russell was Deputy Director,
Research Centre for Social Sciences at The
University of Edinburgh until his tragic and
untimely death in 2011. A workshop
subsequently organised to celebrate
Stewart's intellectual legacy, drew a strong
international array of contributions and
formed the basis for a Special Edition of
Science and Technology Studies - the
journal of the European Association for
Studies of Science and Technology - with
Robin Williams, Sonia Liff and Mark Winskel
as Guest Editors. The first part of this special
edition has been published as Volume 27,
Issue 3 (2014).

The papers engage with and carry forward Stewart Russell's distinctive tradition of analysis, particularly in two areas:

- 1) Theoretical contributions to our broad field of STS and related work in Innovation Studies that both flag opportunities for political engagement, exploring opportunities for action, while also recognising structural constraints; and,
- 2) The application of this approach to empirical studies with particular relevance to environmental sustainability, most notably analyses of developments in energy technologies, and especially combined heat and power.

Science & Technology Studies (2014) Volume 27, Issue 3

Special Issue: The Politics of Innovation for Environmental Sustainability: Celebrating the Contribution of Stewart Russell (1955–2011)

#### **Guest Editorial**

Robin Williams, Sonia Liff, Mark Winskel and Fred Steward

The Politics of Innovation for Environmental Sustainability: Celebrating the Contribution of Stewart Russell (1955–2011)

#### **Special Issue Articles**

K Matthias Weber

The Success and Failure of Combined Heat and Power (CHP) in the UK, Germany and the Netherlands: Revisiting Stewart Russell's Perspective on Technology Choices in Society

#### Janette Webb

Evaluating Urban Energy Systems in the UK – the Implications for Financing Heat Networks

David J C Hawkey District Heating in the UK: Prospects for a Third National Programme



Stewart Russel (1955-2011)

# The Dr Stewart Russell Student Award Fund

In the immediate aftermath of Stewart Russell's death, his colleagues at the University of Edinburgh put up a blog and were overwhelmed by a flood of messages from friends and former colleagues who wanted to record memories of his inspiration and support for their intellectual development.

We established a fund to create a studentship to commemorate Stewart's commitment and passion in helping students achieve their full potential and to carry forward scholarship in this area. The fund will be used to support an award for students on our MSc (Research) Science and Technology Studies.

Click here for more information and how to donate.

### **Events**



# Jane Calvert attends World Economic Forum in Davos (20th-24th January 2015)

Jane Calvert survived for five days on a diet of canapés alone at the World Economic Forum in Dayos (20th-24th January 2015). She was speaking as part of a session called 'The potential of synthetic biology with the European Research Council', which included three other ERC grant-holders (Uri Alon, Maarten Merkx and Birger Moller).



programme had several other 'ideas lab' science sessions, as well as discussion sessions on ranging topics from climate change, to health and diet, to comedy and empathy. There were also talks by heads of state including Hollande and Merkel, who both swept through the conference venue surrounded by their aides and a swarm of photographers.

There was a mindfulness and meditation session every morning and cocktail parties every night. Optional dinners included 'the State of the World with Nobel Laureates in Science' (you had to choose which Nobel Laureate you wanted to sit next to), and the 'Cultural Leaders' dinner, with a short but inspiring talk from Will.i.am. Non-programme highlights included the dancing and live band at Russian night and singing the Sound of Music on the Kloster's bus with the former head of the NASDAQ.

For those who were willing to step outside the conference venue

(with its airport-style security and brightly lit juice-bar), a school building half an hour's walk away hosted a simulation of living on two dollars a day. All participants, including black-suited CEOs, had to sit on the floor desperately trying to make enough paper bags to pay for food and rent. We ended up selling watches, iPhones, shoes and kidneys. The session ended with a discussion about how conference attendees (the global elite) could something to contribute to the alleviation of poverty.









# Community





**Antti Silvast** 

#### Welcome Antti Silvast

Welcome to Dr Antti Silvast who has just joined STIS to take up a 3 year postdoctoral fellowship funded by the Scottish Government through ClimateXChange (CXC), Scotland's national centre of expertise on climate change. The aim of the fellowship is to analyse European energy policy developments in terms of their impacts on (and opportunities for) Scottish and UK energy system transition, including markets and trading, infrastructure and low carbon investment. Antti will work with Ronan Bolton and Mark Winskel, and joins a growing number of energy-engaged STIS researchers.

Ph.D. in sociology from the University of Helsinki, Finland focused on risks in critical electricity infrastructures. He serves as an editor of Science Technology Studies (the official journal of the European Association for the Study of Science and Technology), and is the vice coordinator and newsletter editor of the European Sociological Association's (ESA) Conflict and Social Crisis Research Network. From 2014 to 2015, he was a postdoctoral research associate in Princeton University, Princeton Institute for International and Regional Studies, Global Systemic Risk Research Community.

#### **Congratulations to Alessandro Rosiello**

Congratulations to Alessandro Rosiello, who is moving from Science, Technology and Innovation Studies to take up a postion as Senior Lecturer in the Entrepreneurship and Innovation Group in the University of Edinburgh Business Studies



#### **Catherine Lyall in the news**

1) Professor Catherine Lyall joins the Management Committee of the EU COST Action Interdisciplinarity in Research Programming and **Funding** (INTREPID) which will hold its first meeting in April.

The objective of INTREPID is to inspire change and leadership in interdisciplinarity: to better understand achieve more efficient and interdisciplinary research in Europe, in order to enhance capacity to meet Europe's challenges. It will focus on the life-cycle of programming and funding for research in the area of urban development.

2) Professor Lyall is also leading a consultancy project for the Higher Education Academy to investigate current and future challenges in interdisciplinary educational provision in UK higher education.

The study will produce:

\* A review of the literature about the effectiveness of interdisciplinary provision and the pedagogies which provide distinctive opportunities for interdisciplinarity

- \* The results of a survey indicating the scale of interdisciplinary provision and a typology of different approaches to interdisciplinarity
- \* Case studies of effective approaches to promoting, evaluating and sustaining interdisciplinarity

The final report to HEA will propose principles contributing towards the development of interdisciplinary framework for education. The project team includes Dr Laura Meagher (Technology Development Group) and STIS Master's student, Justyna Bandola.

3) In other news, Catherine has been invited to be part of a Review Panel for the James Hutton Institute



**Professor Catherine Lyall** 

#### **Congratulations to Emma Frow**

Congratulations to Emma Frow, Lecturer in STIS, who is leaving to take up a position as Assistant Professor in Bioengineering, Society and Policy at Arizona State University. She will hold a joint appointment between the School of Biological & Health Systems Engineering, and the Consortium for Science, Policy & Outcomes at ASU. We are delighted that Emma will continue to be



#### **Congratulations to Daniele Fanelli**



Daniele Fanelli is now Senior Research Scientists at Stanford University, in the recently born METRICS Center (METRICS - Meta-Research Innovation Center at Stanford).

Founded by John PA Ioannidis and Steven A Goodman, two famous epidemiologists and critics of contemporary science, METRICS is a research to action center focused on transforming research practices to improve the quality of scientific studies in biomedicine and beyond. As Senior Research Scientist, Daniele is responsible for developing and implementing the center's research agenda.

#### Alumni News: Tran Ngoc Ca

Tran Ngoc Ca was one the first students to complate our Doctoral Programme of Soci-economic Research & Technology. Dr. Tran Ngoc Ca is today Director of Secretariat for the National Council for Science and Technology Policy (NCSTP), Personal Assistant to Science and Technology Minister and Deputy Director, National Institute for Science and Technology Policy and Strategy Studies (NISTPASS), Hanoi, Vietnam. He has been working on projects on science, technology and innovation policy and management, information technology and electronics commerce, firms' technology capability and competitiveness, etc. for UNDP, UNIDO, World Bank, European Commission, ADB, CIDA, SIDA/SAREC, IDRC, etc. He is involved in various teaching and consulting works. Currently, he is Counselor and Head of Science and Technology Office in Vietnam Embassy in Washington DC. Dr. Ca was educated with an engineering degree at Moscow Mining University (former Soviet Union), master degree on science and technology policy in Lund University (Sweden) and Ph.D. on economics of innovation at the

University of Edinburgh (UK). He spent time in some US universities as UC Davis, UC Berkeley and Stanford as visiting Fulbright scholar. He has published many articles, chapters in books and a book by Ashgate Publishing (UK): Technological capability and learning in firms: Vietnamese industries in transition. He is a member of several professional associations in Vietnam and abroad.



# Community

# Korean continue

#### collaborations

Prof Buhm Soon Park (Director, Graduate School of Science and Technology Policy, Korean Advanced Institute for Science and Technology), gave the opening on "Technonationalism Characteristics of the Korean Innovation System" to an ISSTI occasional seminar on Korean and UK perspectives on innovation. Additional contributions to this session from Dr Kiheung Kim, Division of Humanities and Social Sciences, Pohang University of Science and Technology and Prof Martin Fransman, Director of the Institute for Japanese-European Technology Studies at the University of Edinburgh. This seminar was the first part of an international interdisciplinary collaborative workshop on UK Korea Global Partnership: Social Sciences and Life Science Innovation. This was organised by Jane Calvert and

Robin Williams as part of a developing collaboration with Korean colleagues supported by a UK Korea Global Partnership award from the FCO Science and Innovation Network with additional support from the Korea Research Institute of Bioscience & Biotechnology.



Science + Technology

# Drug delivery drones shouldn't surprise us – smugglers have used everything else

"It will come as no surprise to anyone that drugs are big business, so when a drone crashed in a car park of a US border town weighed down with several kilos of narcotics, it was just another example of smugglers taking advantage of the latest in technology.

Studying technological innovation in the war on drugs, I'm often asked what methods smugglers use: pick any object or artefact you care to name and it's almost certainly been tried.

Over decades, drug smugglers have developed many ways of transporting and concealing their trade, often demonstrating very high levels of technical expertise, scientific knowledge, and adaptability. Drug smuggling organisations are highly innovative, so mobile phones, GPS, and better intelligence gathering strategies are used to make their business easier, and that of law enforcement more difficult.

Even if smugglers cannot always match the high-tech equipment used by law enforcement, they still remain one step ahead of their pursuers, whether by land, air or sea." (Extract from 'The Conversation', 23 January 2015)

#### **Javier Guerrero**

PhD Student, Science, Technology and Innovation Studies at University of Edinburgh

Read the full story >>>

### **Publications**



# EMILIE CLOATRE AND MARTYN PICKERSGILL Technology

ISSTI members have been participating in new work at the interface of STS and law. Dr Martyn Pickersgill, as part of his AHRC grant 'Technoscience, Law and Society', organised two events over 2014: 'Leaving your Brain to Science: Engaging with Law and Ethics', a public engagement event in Edinburgh; and, 'Regulating Bioscience: Between the Ivory Tower and the Policy Room', a one day workshop at the Wellcome Trust. Jane Calvert, Reader in STIS, acted as a discussant in the latter event, which is summarised in a blog post for the new SKAPE Centre: http://tinyurl.com/o98mtqg.

A two-day final conference ('Articulating Science, Technology and Law: Regarding, Reflecting, and Remaking Society'), for the AHRC project is taking place in Canterbury 9th-10th April 2015. Keynote speakers are Mario Biagioli (UC Davis), Amade M'Charek (Amsterdam), Barbara Prainsack (KCL), Ayo Wahlberg (Copenhagen) and David Winickoff (UC Berkeley).

> For more details, including how to register, please see: http://tinyurl.com/masz5e5.

An edited volume from the project has recently been published: Cloatre, E. and Pickersgill, M. D. (eds.) (2014) Knowledge, Technology and Law, London: Routledge (Law, Science and Society Series). This includes chapters from Alain Pottage, Sujatha Raman, and former ISSTI member Gethin Rees. A further project output is also available, and is the second most-read article in New Genetics and Society of 2014: Cloatre, E. and Pickersgill, M. (2014) 'International Law, Public Health and the Meanings of Pharmaceuticalisation', New Genetics and Society, 33: 434-449.

#### **Learning Lessons from Failure**

Why did the £450 million Intermediate Technology Initiative not produce the anticipated commercial benefits for Scotland? ISSTI Associate Geoff Gregson is one of the authors of a recent study that explores why the Intermediate Technology Initiative came to be cancelled and did not fulfil its ambitious goals

A Post-Mortem of Regional Innovation Policy Failure: Scotland's Intermediate Technology Initiative (ITI), Regional Studies

This paper has received widespread media attention - and has been picked up by the BBC and The Scotsman. The study attributes this failure to the adoption of an inappropriate strategy, based upon a linear model of innovation; a restrictive approach to intellectual property and a failure to tie the development in to Scotland's entrepreneurial ecosystem. The authors warn that unless lessons are learnt there is a risk that this failure will be repeated.



Gregson

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