## SSTINewsletter

THE INSTITUTE FOR THE STUDY OF SCIENCE TECHNOLOGY AND INNOVATION



to the fourth edition of the ISSTI newsletter! We start the academic year with a busy schedule of seminars from colleagues who will be well known to the STS community - Charles Perrow, Harry Collins, and Michel Callon. We expect these to be popular events so are asking people to pre-register to ensure a place.

Over the coming months we are also looking forward to welcoming several visitors to ISSTI. Information about new staff and visitors, together with news about our latest projects and publications are included in this issue.

We would welcome feedback from our readers about the newsletter and would also like to hear from users of our website www.issti.ac.uk. Does the website contain the sorts of information you are looking for? Is the website easy to use? Please get in touch if you would like to make any suggestions <a href="mailto:c.lyall@ed.ac.uk">c.lyall@ed.ac.uk</a>.

#### Donald MacKenzie receives Chancellor's Award

Donald MacKenzie was one of three outstanding academics who received awards from HRH Prince Philip, Duke of Edinburgh, Chancellor of The University, at a special dinner in the Palace of Holyroodhouse at the beginning of August. The awards, now in their fourth year, recognise innovation, creativity, personal dedication and relevance to society. The Chancellor's Award was presented to Donald for his internationally acclaimed research on the sociology of information technology and in recognition of his groundbreaking work on a variety and expanding range of topics – from the history of statistics, via the sociological history of missile accuracy, to the sociology of financial markets. His work, which is both socially and politically engaged, has helped to shape the field of social studies of science and technology.



Photograph courtesy of Douglas Robertson Photography

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#### Staff and Visitors

#### New Head of School of Management and Economics



Professor Nick Oliver from the Judge Business School, University of Cambridge joins the School in January 2007

Nick's early research work centred on the psychology of employee commitment. At that time interest in Japanese management methods was gathering pace, and employee commitment was frequently cited as a major reason for Japan's success. This was the trigger to Nick's interest in Japan, which he still retains today.

From the mid 1980s through to the early 1990s Nick researched the transfer of Japanese management methods, in particular manufacturing methods, to the West. At this time, many industrialists and academics were greeting Japanese manufacturing techniques such as just-in-time production with a startling evangelism. With colleagues at Cardiff Business School, Nick explored the thesis that a convergence in the nature of *production* systems required a convergence in the nature of the *social* systems within which production was carried out. This work was originally written up in the first edition of *The Japanization of British Industry* (1988), and later in the substantially revised and updated second edition in 1992.

Between 1992 and 2002 Nick was involved in a series of benchmarking studies, initially of manufacturing operations, but later now product development processes, in a variety of sectors – automotive, consumer electronics and food processing.

In 2003 Nick co-founded the Centre for Competitiveness and Innovation (CCI) one of a number of joint Cambridge and MIT "Knowledge Integration Communities". The underlying philosophy of these communities is to provide an integrated approach to research, education, and industry engagement in defined thematic areas. CCI's thematic area is the management of innovation, more how value is created, delivered and captured from product and process innovation. There is an academic-industry community around CCI where industry practice and theory are combined to provide insight into real-world problems.

Nick is currently writing a book with two co-authors on the collapse of MG Rover.



### New Deputy Director at the ESRC Genomics Policy and Research Forum

Dr Steve Sturdy has been appointed Deputy Director at the ESRC Genomics Policy and Research Forum www.genomicsforum.ac.uk

#### Current and forthcoming visitors to ISSTI include:

Dr Byung-Sang Hwang, Korea Basic Science Institute, Daejon, Korea, July 2006 - June 2007

Dr Sampsa Hyysalo, University of Helsinki, October 2006 - December 2006

Dr Fabio Niespolo, Santa Ana University, Pisa, Italy, September 2006 - short visit

Prof Xiao-min Zhu, Institute of Policy & Management, Chinese Academy of Sciences, October - December 2006

Mr Siguang Zhang, PhD student, Chinese Academy of Sciences, Beijing, China, October 2006 - September 2007

Ms Haidan Chen, PhD student, Zhejiang University, Hangzhou, Ching, October 2006 - September 2007

Ms Lu Lan, Associate Professor, Hangzhou Dianzi University, Zhejiang, China, October 2006 - March 2007.



## Sampsa Hyysalo visiting ISSTI

Dr Sampsa Hyysalo from the University of Helsinki will be a visiting fellow at ISSTI over the autumn.

Sampsa's work explores the design and appropriation of health care information communication technologies (HC-ICT), placing particular emphasis on forms of interaction and learning between producers and users. Effectiveness of such "social learning" has been shown to be one of the critical success factors for the several HC-ICT innovations studied by the Finnish research group. His current position as a fellow at the Collegium for Advanced Studies, University of Helsinki, Finland. Sampsa received his PhD in behavioural sciences, University of Helsinki in 2004, and his M.a and Phil Lic. degrees in cultural history, University of Turku, Finland.

Sampsa's research has strong parallels with the work of ISSTI researchers on social learning in ICT innovation as well as research conducted by Edinburgh's social informatics cluster on health care ICTs. In fact, the Edinburgh research groups and the Finnish group have independently arrived at a set of findings and theoretical and methodological advances since the mid 1990s. The aim of the visit is to share, compare, and advance these experiences. Among the discussions Sampsa would like to pursue while in Edinburgh are those related to comparing findings on the dynamics of social, technical and organizational change related to design and introduction of ICTs and theory building on "social learning" between producers, users and third parties. He is also interested in appropriate methods for examining in sufficient detail the even decade long and geographically dispersed "biographies" that HC-ICTs typically form before their usefulness, usability and commercial potential is fully realized as well as in methods for identifying, intervening and augmenting those moments in the development processes where social science expertise can make a positive difference.

These themes are central to a book manuscript that Sampsa is currently preparing under the working title Designs of Use – Social learning in health technology innovation and in the preparation of an English edition of his 2006 Finnish book User Knowledge and methods of user research.

Sampsa Hyysalo's publications and current work are outlined at <a href="https://www.helsinki.fi/collegium/hyysalo/hyysalo.html">www.helsinki.fi/collegium/hyysalo/hyysalo/hyysalo.html</a>

# Connecting with Chinese STS Networks

Edinburgh has been seeking to build more effective research collaboration between the European STS community and the embryonic network of Chinese researchers in the field. In 2002. Professor Robin Williams and Dr Xiaobai Shen co-organised the Joint British Council and Chinese Academy of Social Sciences Sino-European Symposium on the Social Shaping of Technology in Bejjing; and earlier this summer ISSTI hosted a visit from the Chinese Academy of Sciences, Institute of Policy and Management. To further such interactions, Xiaobai Shen recently attended the Pan China Science and Technology Studies Annual Conference (Weihai, China, 5-8 August 2006). The conference themes ranged widely from philosophical thinking the relationships between S&T and economic and social development; foresight of information and life science technology in the world; national S&T policies in different regions/nation states; to critique of S&T policy in relation to their negative outcomes. One important omission was the lack of detailed case studies. This was acknowledged by the conference chair, Professor Zhengfeng Li, who announced that the main criteria for the selection of papers for the Annual Conference 2007 would be detailed, qualitative research based on case studies.

#### Research News

#### Public Policy Network Launched

The University of Edinburgh launched its Public Policy Network at the Scottish Parliament this summer. The Network aims to increase awareness and further understanding of the University's contribution to public policy in Scotland and the rest of the UK. In so doing it hopes to encourage knowledge transfer, foster greater co-operation between experts in related fields and ensure an effective contribution to the policy formation process.

The Network exists as a resource for academics, policy makers, those interested in influencing policy and interested members of the public. It is hoped the Network's website <a href="www.publicpolicynetwork.ed.ac.uk">www.publicpolicynetwork.ed.ac.uk</a> will act a reference point for individuals planning to commission research or seeking an expert opinion on a particular area of public policy. The Public Policy Network operates under the aegis of the University's Institute of Governance and includes information about a number of ISSTI staff.

The key objectives of the Network are to:-

- Bring together the University's collective contribution to public policy on a regional, national and international level by gathering together in one place details of the current work and research strengths of staff members;
- Encourage increased collaboration amongst academic colleagues contributing to policy dialogue, often from different perspectives; and
- Raise the level of the contribution made to public debate and increase external awareness of relevant researchers' expertise.

#### New Heat Pumps Project

With colleagues from research groups in Germany, France, Sweden and Bulgaria, a team at RCSS is starting work on a project to investigate ways of increasing the take-up of heat pumps for residential and commercial use. Heat pumps are seen as a crucial technology in the reduction of energy consumption in buildings. The work, for two and a half years from October 2006, is supported by the EU's Intelligent Energy - Europe initiative. Edinburgh's contribution will focus on the policy context and its direct and indirect effects on adoption. It will examine the extent and success so far of official campaigns to boost heat pump use - contrasting the UK, Sweden and Norway - and propose new interventions. A key activity will be round tables bringing together industry and government personnel to examine possible policy measures. For further information contact stewart.russell@ed.ac.uk

### Innogen's Executive Development Programme commences with 'Life sciences companies: Managing a turbulent future'

Managers in the pharmaceutical industry and related sectors are facing fundamental and unpredictable changes in research and development processes, in international political and regulatory environments, in changing market conditions, in interactions with patients and in public attitudes. They form a complex system of interactions that can only be tackled effectively by managers who understand these challenges and how they might evolve in the future. The first offering in Innogen's Development Programme will prepare high-potential executives to become better managers and leaders—and to strategically position their organisation for future success.

The course will cover:

- Innovation Processes
- Regulation and Governance
- Stakeholder Influences

Conducted in collaboration with Christopher-Paul Milne, associate Director of the TUFTS Center for the Study of Drug Development, the course will be held in Edinburgh from 25–27 April 2007. Please visit the Innogen website <a href="http://www.innogen.ac.uk/Events/CPD-Programme">(http://www.innogen.ac.uk/Events/CPD-Programme</a>) for further information.

### Conference Report: Genomics for Development? The Life Sciences and Poverty Reduction

The ESRC Innogen Centre held its annual conference at Regent's College in London on 5-6th September. The conference provided a venue for international delegates from over 20 countries to discuss the role of science and technology, particularly related to genomics, in providing solutions to ending hunger, disease and poverty around the world. Two days of discussions took place covering the impact of genetically modified foods on reducing food insecurity to the role of genomic technologies in building scientific capacity in developing countries of Africa, Asia and Latin America and the role of regulatory mechanisms in enabling this process. Full coverage of the conference can be found at www.innogen.ac.uk/events/annual-conference

#### Oz-AQUAREC

With colleagues at the University of Wollongong, RCSS Deputy Director Stewart Russell is currently completing work on a major project on water reuse. It is part of Oz-AQUAREC, a multidisciplinary effort funded by the Australian Government to examine technical and social issues facing the greater adoption of recycling in the drought-prone country. It has run in parallel with an EU 5th Framework project, AQUAREC, coordinated from Aachen, and the Wollongong group has cooperated with Cranfield's School of Water Sciences on the social science input to the project.

Most consultation exercises in the sector so far have been cursory and late in the day – providing limited information and seemingly more about getting people to endorse a detailed plan than genuinely seeking their input. Much academic work on the topic, meanwhile, has relied on survey-based snapshots of people's 'attitudes', and has tried, with inconsistent results, to relate people's support for reuse to demographic characteristics. Taking a different tack, the Oz-AQUAREC group has been experimenting with small group information and discussion sessions, both as a consultative mechanism providing an opportunity for deliberation, and as a means of exploring qualitatively how people process and evaluate information and arguments, and how their views develop.

Dominated so far by social psychology and particularly psychometrics, the public response to water reuse is proving interesting territory for more sociological and cultural approaches, and for bringing to bear ideas from STS, particularly on the public understanding of science and on responses to risk. Stewart is now keen to shift the focus of his work onto broader questions of governance and innovation in the sector, and how it can be shifted towards sustainability.

Details of the Oz-AQUAREC work on public responses and consultation can be found at: <a href="https://www.uow.edu.au/arts/staff/srussell/oz-aquarec/oz-aquarec.html">www.uow.edu.au/arts/staff/srussell/oz-aquarec/oz-aquarec.html</a>

#### Riskbridge

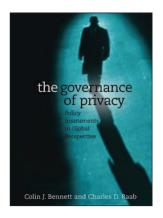
Joyce Tait is participating in the EU co-ordinated action Risk-BRIDGE (Building Robust, Integrative Inter-disciplinary Governance models for Emerging and Existing risks). The project aims to develop an integrative risk governance approach connecting risk assessment – management and –communication based on a resilient and discursive approach. It takes:

- an open project architecture rather than a specific model as starting point;
- policy learning as the central mode of operation, allowing for input across different science fields, geographical boundaries and science-policy interfaces;
- cases related to complex risk fields (Biotechnology/stem cells, Radioactive waste, Nanotechnology, Climate change, Sediments and Electromagnetic fields) where the agreement of risk government approaches is limited.

In other words: the Coordinated Action project "RISKbridge" aims to make "bridges" between: different kinds of "risk fields"; scientific disciplines; policy making and science. The project takes policy learning as the central mode of operation, allowing for input across different science fields, geographical boundaries and science-policy interfaces. The project has six partners and 30 members (scientists and policymakers) and Professor Tait is leading the stem cells case study.

www.issti.ed.ac.uk/research/Current%20Research%20Projects

#### The Governance of Privacy



MIT Press has recently published the second edition of Colin Bennett and Charles Raab's book *The Governance of Privacy. Policy Instruments in Global Perspective.* In this updated paperback edition Bennett and Raab analyse a broad range of privacy policy instruments available to contemporary advanced industrial states, from government regulations and transnational regimes to self-regulation and privacy-enhancing technologies. They consider two possible dynamics of privacy regulation—a "race to the bottom," with competitive deregulation by countries eager to attract global investment in information technology, versus "a race to the top," with the progressive establishment of global privacy standards

http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=10836



#### **AlumniSTS**

Each issue we aim to feature one of our previous graduates and update readers on their current work. If you would like to tell us about where you are now and something about what you are working on, please contact c.lyall@ed.ac.uk

Takuji Hara graduated with a PhD from the Research Centre for Social Sciences in 2001. He is now an Associate Professor at the Graduate School of Business Administration, Kobe University, Japan where he is working on the sociology of technology and the management of technology, especially in the area of pharmaceuticals, medical instruments and specialty chemicals. His current interest is the process of drug development in the bioinformatics era and he has recently published on Innovation in the *Pharmaceutical Industry: The Process of Drug Discovery and Development* (Edward Elgar, 2003).

Dr Hara also teaches the management of technology to business people and engineers both within and outside the university and he has written on the *Roles of Technology Licensing Organizations (TLOs) in the Commercialization of Life Sciences: Japan's Situation and Problems.* With colleagues at Kobe, he is currently working on a book on innovation in Japan. Takuji Hara can be contacted at the Graduate School of Business Administration, e-mail: harat@kobe-u.ac.jp

## Partnerships in African crop biotech

Innogen colleagues, Seife Ayele, Joanna Chataway and David Wield published an article in Nature Biotechnology in June (Vol. 24/6 pp.619-621) which showed that even sub-Saharan Africa's nations, agbiotech progressive partnerships are still poorly oriented to end users, fragmented in scope and of limited impact in achieving the United Nation's Millennium Development Goals. The work was funded by the ESRC Science in Society Programme and supported by the Open University and the ESRC Innogen Centre

www.innogen.ac.uk/Research/Scienc e-in-Society-Project-innogen



#### Seminars

#### Disasters evermore? Reducing US vulnerabilities to natural, industrial, and terrorist disasters

The US cannot fully protect itself from natural, industrial, and terrorist disasters, but we can reduce our vulnerabilities by deconcentrating populations in risky areas, deconcentrating storage of hazardous materials, and deconcentrating the organizations in the electric power, chemical, telecommunications, and agricultural industries that have made us so vulnerable. These concentrations have risen sharply in three decades and could be reversed. The concentration represented by forming the Department of Homeland Security should also be reversed; it has made us less safe from natural and industrial disasters, and the threat of a massive terrorist attack has been greatly exaggerated.



Charles Perrow, emeritus professor of sociology at Yale University and a visiting scholar at CISAC, delivered his seminar entitled "Disasters evermore? Reducing US vulnerabilities to natural, industrial, and terrorist disasters" on Friday 29 September. An organizational theorist, Professor Perrow's current research focuses on US vulnerabilities to natural, industrial and terrorist disasters. Among his award-winning research is Organizing America: Wealth, Power, and the Origins of American Capitalism (Princeton 2002), winner of the Max Weber award for best book on organizations from the American Sociological Association in 2003. His recent articles include "Organizational or Executive Failures?" and "Inside the Nuclear Plant's Executive Office," both published in Contemporary Sociology.

This seminar was jointly organised by the School of Social and Political Studies and the School of Management and Economics (San-Ei Gen Lectures).

#### Forthcoming seminars

#### "Some experiments on the nature of expertise"

Thursday 5th October

Professor Harry Collins, Centre for the Study of Knowledge Expertise Science, Cardiff University

1–2.30pm Seminar Room 1 Chaplaincy Centre (sandwich lunch at 12.30pm followed by the seminar 1–2.30). Attendees must pre-register for this event in order to secure a place, please email <a href="mailto:angela.mcewan.ac.uk">angela.mcewan.ac.uk</a> or call 0131 650 9113 if you would like to attend.

In a paper called 'The Third Wave of Science Studies,' Evans and Collins argue for a new programme 'Studies of Expertise and Experience' (SEE). In this seminar Professor Collins will report on some experiments that form part of the beginning of that programme. In particular, the experiments explore the notion of interactional expertise. For those who would prefer to prepare themselves for a critical onslaught before the talk rather than hear it fresh on the day, all is already revealed at <a href="https://www.cf.ac.uk/socsi/expertise">www.cf.ac.uk/socsi/expertise</a>.

#### "What does it mean to say that economics is performative?"

Prof Michel Callon, Monday 4th December, 4–5.30pm, Lecture Theatre 1, Management School, Bristo Square – followed by reception. Attendees must pre-register for this event in order to secure a place, please email <a href="mailto:Charis.Stewart@ed.ac.uk">Charis.Stewart@ed.ac.uk</a> or call 0131 651 3238.

Michel Callon's 1998 book *The Laws of the Markets* has become a major focal point of economic sociology, anthropology and economics. In it, Callon put forward what has become a much-debated notion: the "performativity of economics," the idea that economics does things, helping to create the phenomena it describes, rather than analyzing markets as external things.

In the paper on which this seminar will be based, Callon will reflect on the notion of the performativity of economics, on the debates around it in the last eight years, on the alternatives to it, and on how work in this area should be taken forward. Participants in the seminar should read the written version of his paper, which can be downloaded from the working papers section of <a href="https://www.csi.ensmp.fr">www.csi.ensmp.fr</a>. This seminar is being jointly organised by the School of Social and Political Studies and the School of Management and Economics (San-Ei Gen Lectures).

## University of Edinburgh Postgraduate Degrees in Science and Technology Studies

Science and Technology Studies is an interdisciplinary field that provides new ways of addressing some of the biggest challenges facing the modern world.

The University of Edinburgh is internationally recognized as a leading centre of research and teaching in Science and Technology Studies, with particular expertise in the following areas:

- sociology of scientific knowledge
- social shaping of technology
- · gender, science and technology
- management of innovation
- · genomics, biotechnology and reproductive technology
- science, politics and the public
- history of science and medicine
- sociology of financial markets
- management of technology
- information and communication technologies

The University of Edinburgh offers the following postgraduate degrees in Science and Technology Studies:

MSc - MSc by Research - MPhil - PhD

FOR MORE INFORMATION ABOUT THESE DEGREES, CONSULT OUR WEBSITE AT: http://www.ed.ac.uk/gsss/sts/index.html

We welcome applications from students from a wide range of backgrounds, including science and engineering, social sciences and humanities, business, industry and government.

## RCUK Academic Fellowship in socio-economic aspects of translational research

The University of Edinburgh is currently inviting applications for a Research Council UK Academic Fellowship based in the Institute for the Study of Science, Technology and Innovation and the associated ESRC Innogen Centre. This prestigious Fellowship is for a period of five years, and is intended to lead to an open-ended academic appointment.

Applications are invited from candidates with research interests in the social scientific analysis of science and technology. An interdisciplinary background, including some familiarity with scientific and technical fields, may be an advantage.

See <a href="www.jobs.ed.ac.uk">www.jobs.ed.ac.uk</a> for further details. Informal enquiries may be made to: Professor Robin Williams, Director ISSTI,

email: robin.williams@ed.ac.uk

tel: 0131 650 6387

Closing date: 6 October 2006.

#### Other Research News in Brief...

- Innogen Research Fellow, Dr Gill Haddow, featured in the *Sunday Herald* in July in an article that described results from her study showing that, while one in five Scots back cash-for-organs, donor families object to 'immoral' financial incentives for transplants <a href="https://www.innogen.ac.uk/News/Innogen-News">www.innogen.ac.uk/News/Innogen-News</a>
- Through her role on the Scientific and Technical Council of the International Risk Governance Council, Joyce Tait will be presenting a paper at the World Knowledge Forum, Seoul, Korea, 17–19 October. The overall theme of the conference is "Creative Economy" and Joyce will be taking part in a session on Risk Management under the overall heading of 'Growth'. Her co-presenter will be Kun Mo Chung, President of Myongii University and the session is moderated by Donald Johnston, Secretary General of OECD <a href="https://www.wkforum.org/WKF/main\_e.php">www.wkforum.org/WKF/main\_e.php</a>
- Professor Charles Raab has been part of a team commissioned to write a report on *The Surveillance Society* for the UK Office of the Information Commissioner. The report should be available in November 2006.
- ISSTI working papers are now available via the website <a href="http://www.issti.ed.ac.uk/publications/workingpapers">http://www.issti.ed.ac.uk/publications/workingpapers</a>
- Dr Fumi Kitagawa from the Department for Higher Education Research, National Institute for Educational Policy Research in Japan visited ISSTI earlier this summer. During this visit she met with Catherine Lyall and representatives from the Scottish Funding Council Knowledge Transfer and Innovation Group. We are hoping to build on this collaboration through a proposal to ESRC's Impacts of HEIs on Regional Economies call which would hopefully see Fumi returning to ISSTI as a Visiting Fellow.