

Welcome

Welcome to the Spring 2008 edition of the ISSTI Newsletter which brings news of exciting new initiatives and awards since the start of the year. Forthcoming workshops and seminars will address a broad array of topics - ranging from the biography of software, through dependable innovation and biofuels, to data sharing in the biosciences. These point to the breadth of ISSTI's expertise and engagement. Through Catherine Lyall's Interdisciplinary Masterclasses we are seeking to strengthen such research - especially work crossing the border between natural science/medicine and social sciences. Stewart Russell's brief paper on Sustainable energy use is the first in an occasional series of ISSTI research and policy Perspectives. ISSTI continues to disseminate this work - not just through academic publications and international presentations but also through various non-academic dissemination and engagement activities, to bring it to the attention of policymakers and the wider public.

The Biography and Evolution of Standard Software Packages

[See page 2 for full report](#)

Major award on remote healthcare

[See page 2 for full report](#)

ISSTI Perspective on ... Sustainable energy use



Like colleagues elsewhere, ISSTI researchers have been bringing STS insights to bear on the question of how to shift sociotechnical systems to a sustainable basis. What do developments in the field tell us about the strategies, challenges and obstacles?

[See page 4 for full report](#)

The new ICT ecosystem

Martin Fransman's recently published book, *The New ICT Ecosystem – Implications for Europe* (2008), explains how The New ICT Ecosystem (the combination of computers, telecommunications, the



Internet, and media) works and how it evolves. It analyses how innovation drives the both the system and its global competitive performance. The implications for Europe are examined in the areas of government policy and regulation.

[See page 6 for full report](#)

Promoting Interdisciplinary excellence

[See page 7 for full report](#)

Data Sharing in the Biosciences workshop

[See page 7 for full report](#)

Contents

Welcome/Highlights	1
Research News	2

Events	5
Staff and Visitors	8

Other News	9
AlumniSTS	9

Research News

Software and Organizations

Neil Pollock and Robin Williams have just completed a book called *Software and Organizations: The Biography of the Enterprise-Wide System or How SAP Conquered the World* which will be published by Routledge in summer 2008.

The modern enterprise-wide information system has become a software package. A small number of software suppliers, of which the software giant SAP is the clear leader, have apparently succeeded in deploying their enterprise resource planning (ERP) solutions across many different organisations, sectors and countries around the globe.

Large organisations now appear to be dominated by a new breed of standardised software package. These are not the locally specific, tailor-made systems experts had predicted would prevail but the most highly generic kind of information system. This illustrates a significant shift – involving the reshaping of the corporate information system. How has this happened? How did SAP conquer the world with its ERP system?

The received wisdom amongst social scientists within Science and Technology Studies and the Social Study of Information Systems is that such standardised solutions could only have limited applicability: there is no such thing as a one size fits all universal solution. Given the diversity of organisations and sectors, they insist that generic systems can only work to the extent that they are adapted by user organisations through messy localisation processes. They cannot explain the success of packaged solutions.

This book seeks to overcome this gap in our understanding of the origins of this kind of software and its extension to all sectors. It analyses the sophisticated strategies developed by suppliers to develop generic solutions, focussing upon the ways in which they manage their relationships with their current and potential customer base.

The book arises from an ESRC funded study of *The Biography and Evolution of Software Packages*. The project, which involved Luciana D'Adderio, Rob Procter and James Cornford as well as Neil Pollock and Robin Williams, will shortly be completed (see <http://www.erp-online.co.uk/>). Its findings form



the centre of an international research workshop on 19-20 March called *New Approaches to the Study of Organisational Software*.

This workshop, part of the ESRC-funded project *Biography and Evolution of Standard Software Packages*, will bring together leading social scientists interested in the design, implementation and use of organisational information technologies. Its aim is to shift current thinking on information systems and packaged software through exploring and developing new research approaches/theories for the study of information technology in an organisational context.

There will be talks from researchers at Edinburgh discussing their recently completed ESRC project on the 'Biography of Software Solutions' as well as presentations from a number of high profile international academics. Attendance at the workshop is by invitation only.

Enquiries should be made to Neil.Pollock@ed.ac.uk

Remote healthcare research programme attracts major funding

The remote healthcare research programme within Community Health Sciences is developing rapidly. In February, Brian McKinstry, Claudia Pagliari, Aziz Sheikh, Hilary Pinnock and colleagues from Edinburgh University's School of Medicine and Veterinary Medicine, were awarded a £950K programme grant from the Scottish Chief Scientist Office to undertake a series of controlled trials on remote monitoring in long-term conditions.

This will explore the clinical, economic and qualitative impacts of three home-based monitoring systems involving different levels of integrated telecare, targeting chronic obstructive pulmonary disease, diabetes, stroke and hypertension. The project will utilise devices from a range of suppliers.

The group is currently undertaking pilot work for a trial utilising a new complex telehealth platform, sponsored by Intel and the Scottish Centre for Telehealth. This is exploring the organisational context for implementation, stakeholder expectations and usability issues and will collect baseline outcomes data.

Also in February, Aziz Sheikh and Claudia Pagliari were awarded £300K from the NHS Connecting for Health Evaluation Programme to undertake a systematic review of the impact of healthcare ICT on the quality and safety of care, focusing on consumer health informatics and telehealthcare.

This follows a related review on clinical information and communications technologies linked with the NHS national



programme for IT, which will be published in Summer 2008.

Other new grants include £263K from BUPA to evaluate remote blood pressure monitoring with SMS support (Brian McKinstry, Claudia Pagliari, Paul Padfield and others) and £224 from Asthma UK to pilot mobile asthma self-monitoring and support (Hilary Pinnock, Claudia Pagliari, Aziz Sheikh, with colleagues from Aberdeen).

A symposium on telehealth research in Lothian will take place on May 7th at the Royal Infirmary, Little France.

Details from claudia.pagliari@ed.ac.uk

Innogen PhD Studentship 2008

The ESRC Centre for Social and Economic Research on Innovation in Genomics (Innogen) invites applications for an ESRC doctoral studentship starting in September 2008.

We particularly welcome proposals that address one of the following topics:

- Translational research: the changing relationship between public and private
- The emerging new sciences of systems biology and synthetic biology
- Life science innovation and health equity
- Internationalisation of the pharmaceutical and life science industries
- Mapping global public private partnerships for neglected diseases
- Biosciences and institutional transformation of global agricultural and health organisations
- Assessing democratic governance of new life science technologies
- Multi-level governance and its limitations
- Risk and life science innovation beyond the precautionary principle
- Intellectual property and life science innovation
- Exploration of new interdisciplinary methodologies for exploring the diffusion and impact of genomics innovation
- Innovation and regulation interactions in the development of clinical stem cell therapies

However, the studentship can be in any area of Innogen's work and we encourage other innovative proposals for PhD research.

The current pool of potential supervisors includes: Jane Calvert, Sarah Cunningham-Burley, Gill Haddow, Graeme Laurie, Catherine Lyall, Donald Mackenzie, James Mittra, Sarah Parry, James Smith, Robin Williams, David Wield at the University of Edinburgh, and at the Open University, Joanna Chataway, Norman Clark, Mariana Mazzucato, Theo Papaioannou, Paul Quintas, Peter Robbins, and Roberto Simonetti. Further information about staff, their research interests and the application procedures can be found at www.genomicsnetwork/innogen.ac.uk

Selected New ISSTI publications

Bruce, A. GM animals - another GM crop? *Genomics, Society and Policy*, vol.3, no.3, 2007, pp.1-14. <http://www.gspjournal.com/>

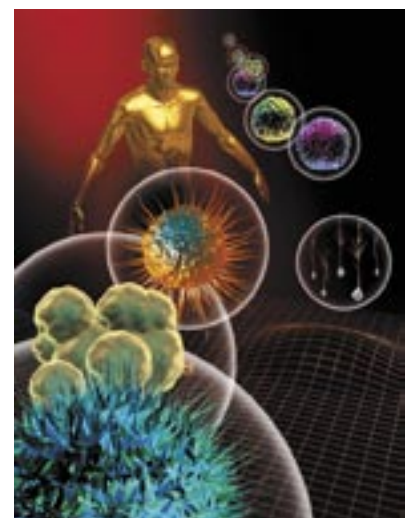
Haddow, G., Cunningham-Burley, S. (forthcoming) "Tokens of Trust or Token Trust?: The case of Population Genetic Data Collections" in "Trust, Health and Illness" (eds) Alexandra Greene, Julie Brownlie and Alexandra Howson, Routledge.

Haddow, G., Cunningham-Burley, S., Bruce, A., and Parry, S. (accepted) "Generation Scotland: consulting publics and specialists at an early stage in a genetic database's development?" *Critical Public Health*.

Lee, L., Faulkner, W. and Alemany, C. PROMETEA: Empowering Women Engineers in Industrial and Academic Research : Deliverable no.18 : periodic progress report on WP6 results. 49p, inc.bib.refs.

Russell, S. Sustainable energy use : setting out a social shaping agenda. *Soziale Technik*, 4, 2007, pp. 13-16

Williams, B., Entwistle, V., Haddow, G., and Wells, M. (accepted) "Promoting research participation: why not advertise altruism?", *Social Science and Medicine*



An ISSTI Perspective: Sustainable energy use

Stewart Russell sketches out a social shaping agenda

Like colleagues elsewhere, ISSTI researchers have been bringing STS insights to bear on the question of how to shift sociotechnical systems to a sustainable basis. What do developments in the field tell us about the strategies, challenges and obstacles?

Changes in patterns of use – in energy, water, transport and materials – will be crucial. So attention has turned to the role consumers must play. Often they are depicted as the key 'obstacle' to a sustainable future. But underlying the typical explanations of their roles and responses, and the suggestions for bringing about change, we find some very unsatisfactory conceptual frameworks.

One approach treats environmental improvements as essentially a technical matter: if we develop new technologies, and if they are economic, their uptake will be automatic. We only need to point out the problems of existing technologies and the benefits of more environmentally sound ones, and that will bring about change. A second strand relies on models from psychology of attitudes and behaviours – as stable individual attributes that can be gauged through questionnaires or social experiments. Measures for 'behaviour change', and implicit messages about who is responsible, are targeted at the individual: we must get them to 'do the right thing'. Third, many economists treat energy use as a matter of cost calculation by rational actors – something that can be fixed with the right price signals.

The explanations are unconvincing, and they have had limited practical impact. In energy use in the UK we are faced with some perverse results. Price fluctuations within any reasonable bounds seem to have little effect. Awareness campaigns, crucial though they remain, have not led to overall reductions in domestic energy use. Increased expectations of comfort are part of the explanation, but it is also clear for example that certain trends in renovation or building services have reintroduced energy inefficiencies into housing envelopes and services.

For us, the twin goals of a better explanation for users' sometimes contrary behaviour and their responses to stimuli for change, and better guidance for industry and policy makers,

point us away from the current limited technical, psychological and economic framings – towards a blend of insights from technology studies with those from sociological and cultural studies of consumption. We share this agenda with others in the field, but it has yet to make much of a dent in the dominant approaches to this issue.

To the extent that energy behaviours are a matter of conscious choice, we need a much greater emphasis on the ways that circumstances structure and constrain it. The contexts, and their interfaces with users, are highly complex and variable: multiple players and competing systems; interrelated markets for energy forms, energy appliances, and other energy-consuming or -conserving technologies and home improvements; the existing infrastructure, particularly the housing stock; a shifting array of intermediaries between suppliers and users, like installers, retailers, housing authorities, consultants, advisers and advertisers; plus traditions, fashions, aspirations, norms of comfort, lifestyle choices, environmental values and awareness, and technology-related sub-cultures.

In the European project ProHeatPump we have been looking in this way at the uptake of ground source heat pumps and what might be done to boost it. Adoption of energy saving measures and devices is not adequately described by conventional diffusion models nor by economic models of

markets. Nor do energy users' decision processes follow the rational models of much decision theory. We have to identify the evaluation frameworks – formalised and unarticulated – used by users and intermediaries, and how they respond to pressures and signals. Evaluations and decisions are certainly influenced by economic logics. But, first, these are themselves shaped by market structures in delivered energy forms, conservation measures and technologies, by cost structures in building, and by other conditions, many of them strategic choices by institutions. And second, evaluation frameworks are not straightforwardly derived from economic conditions: market signals are combined with, attenuated and sometimes overridden by cultural constructions. Financial calculations interact with media 'infotainment', advice from designers and architects, advertising, and house design and renovation fashions.

Domestic energy use however is not solely about decisions to acquire energy-using or energy-saving devices, nor simply



a matter of conscious choices of whatever sort. We need to understand how particular practices and expectations with implications for energy use come to be taken, in Elizabeth Shove's terms, as 'normal and necessary'; how rationales for behaviour evolve with them; and how standards of comfort have tended to ratchet upwards. The physical constraints of building design and condition, installed building services, forms of delivered energy, and the design of appliances, are key determinants of patterns and levels of energy use. If it is enforced or learned routines around these that largely constitute use patterns, rather than individual 'choices' and 'attitudes', then interventions for change must address these conditions, as well as directly targeting users.

The work we plan on domestic energy use will focus on how these complex conditions shape users' views and practices. We expect to find a variety of experience, awareness and understanding of the issues around energy use and sustainability – and ambivalent or inconsistent views on the issues. These can only be understood adequately from a close examination and contextual understanding of people's varied statements and actions. There is limited value in the surveys that consumer research has tended to rely on.

We also want to follow through what this means for strategies for change. Users' practices and views may be entrenched, but they can be expected to change, as conditions, meanings and values shift. Indeed they should be amenable to deliberate influence, though not solely through information campaigns and price signals. Instead, we shall need to find ways to challenge assumptions and routine practices and encourage people to rethink them; to devise opportunities for deliberation

to help them develop their understandings; and to develop ways to demonstrate and explore different configurations of energy services in the home. That is not to claim that technical fixes will solve the problems, but it is to recognise that a major route to reshaping energy use has to be through change in the systems of provision as they confront users – particularly by making sustainable technologies and practices more convenient and attractive, and by removing practical disincentives.

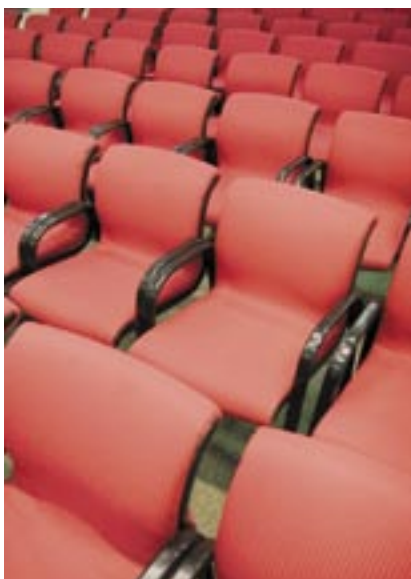
On the one hand, then, government efforts to encourage sustainable energy use in the home will have to be aimed as much at producers, suppliers and intermediaries in the sector as at end users. On the other hand, our argument points to the benefits of greater user involvement in the design, operation and control of the systems that provide their energy and other services – to help reshape their practices and views, to promote and gain acceptance for new practices and technologies, and to channel vital user perspectives into their design. The challenge is to find suitable vehicles for these stimuli and to experiment with them.

A closer focus on user practices might seem at first sight to move us away from the meso and macro preoccupations of those working say in the transition management framework, and that informed ISSTI's earlier work on energy innovation and supply systems and governance regimes. On the contrary: it is a crucial part of that bigger picture. The supply and use sides cannot be treated separately.

The ideas here have been developed in collaboration with European partners in a proposal under the Framework Programme 7. A longer version of this article appeared in Sozial Technik, published by the Inter-University Research Centre for Technology, Work and Culture (IFF/IFZ), Graz.

Contact Stewart Russell at stewart.russell@ed.ac.uk

Events



ISSTI/Innogen Seminar Series

14 April 2008
Can Big Pharma Survive New Biology?
Professor David Wield, Director, Innogen Centre, Edinburgh University

26 May 2008
Dr Monika Steffen, National Centre for Scientific Research (CNRS), France

30 June 2008
Professor Trevor Pinch, Department of Science & Technology Studies, Cornell University

All the above seminars are held from 15.30 - 17.00 in the Seminar Room 1.06, RCSS, Old Surgeons' Hall, High School Yards. Check out the <http://www.issti.ed.ac.uk/events> for details of subsequent seminars.

The new ICT ecosystem and implications for Europe: how knowledge is endogenously created, 2 April 2008

Martin Fransman, Professor of Economics and Founder-Director, Institute for Japanese-European Technology Studies, University of Edinburgh, UK is presenting at the European Communications Policy Research Conference in Seville on 2 April 2008.

The European Communications Policy Research (EuroCPR) Conference is held annually to facilitate systematic interaction between academic research, European and national policy makers, and industrial representatives in the communications sector. Discussion at CPR is of the highest quality. To optimise dialogue, the number of invited guests is limited.

EuroCPR's strategy is to bring well-grounded theoretical and empirical research to bear upon current policy issues. Research presented at the EuroCPR conference is leading edge. It is chosen for its innovative character and for the contribution it will make to current policy and business strategy analysis.

Martin's presentation is based on the recently published book, *The New ICT Ecosystem – Implications for Europe* (2008), gave a presentation analysing how new knowledge relating to new products, processes, forms of organisation and markets is created within the context of the New ICT Ecosystem.

This book explains how The New ICT Ecosystem (the combination of computers, telecommunications, the Internet, and media) works and how it evolves. It analyses how innovation drives the both the system and its global competitive performance. The implications for Europe are examined in the areas of government policy and regulation.

A version of chapter 3 of this book was published in the latest issue of *Communications & Strategies*, No. 68, 4th quarter, 2007, pp. 89-112 (special issue edited by Cristiano Antonelli and Edmond Baranes).



Edinburgh International Science Festival 25 March - 5 April 2008

One of the many events on offer at the Edinburgh International Science Festival this Easter will be an investigation of the potential ramifications of an increasing reliance on biofuels as an alternative to fossil fuels.

To be held on Thursday 3 April, the debate, organised jointly the Genomics Forum and Innogen, will run from 8-9pm at the National Museum of Scotland. 'A green future for bioenergy?', aimed at anyone with an interest in renewable energy, will address questions such as:

- Can biofuels be produced in large quantities without having an adverse impact on biodiversity?
- Will a switch to biofuels have the effect of increasing food prices by making increased demands on land water resources?
- What proportion of energy demands could be met through biofuels, and what kinds of technologies might be available in the future?

The discussion, entitled "A green future for bioenergy?" will be chaired by the distinguished botanist Professor David Ingram, Honorary Professor and Advisor on Public Understanding of Science (University of Edinburgh). The two speakers will be Professor Christine Raines, Professor of Plant Biology (University of Essex) and Dr Jeremy Woods, Lecturer in Bioenergy (Imperial College London). Jeremy was part of the Working Group for the recent Royal Society report on sustainable biofuels.

www.sciencefestival.co.uk

Advanced Institute of Management Research (AIM) Seminars on Dependable Innovation

19 June 2008

Professor Martha Feldman, University of California Irvine

20 June 2008

Professor Brian Pentland, Michigan State University

These seminars are co-sponsored by an AIM Fellowship in collaboration with the San-Ei Gen Distinguished Lectures Seminar Series and will be held at the University of Edinburgh Business School and are being organised as part of Luciana D'Adderio's AIM Fellowship on Making Innovation Dependable (MIND): Validating Complex Technologies Across the Network Organisation. For further information check out project website at <http://dependableinnovation.org/>

Interdisciplinary Masterclass, 18-19 June 2008

This workshop aims to develop participants' research management, leadership and supervisory skills in interdisciplinary projects across the social and natural sciences.

At the end of the workshop we hope that participants will have:

- explored their motivations for interdisciplinary research and the different modes of interdisciplinary working
- considered some of the skills needed to be a good interdisciplinary researcher, research manager and leader of interdisciplinary teams
- discussed some of the ways in which interdisciplinary collaboration may be sustained, the problems that may be encountered and tactics for addressing such challenges.

This workshop is open to any ESRC-funded researchers at postdoctoral level and above who are engaged in interdisciplinary research between the social and natural sciences. It will be of most benefit to researchers who are thinking about leading an interdisciplinary project for the first time

This Masterclass is organised by Dr Catherine Lyall (C.Lyall@ed.ac.uk) under an award from the ESRC Researcher Development Initiative www.rdi.ac.uk. As places will be limited to 15, participants are encouraged to register early for the workshop at www.crfr.ac.uk/events/isstibooking.html.

Further info can be found at http://www.rcss.ed.ac.uk/isstiwiki/ISSTI_Interdisciplinary_Wiki#ISSTI_Interdisciplinary_Masterclass.2C_University_of_Edinburgh.2C_18-19_June_2008

Supervising interdisciplinary PhD students

Arising from a previous activity under this award, a guide on supervising interdisciplinary PhD students is now available - 'A Short Guide to Supervising Interdisciplinary PhDs' - with advice for new supervisors and reflections that will also be of interest to experienced supervisors, covering:

- reflecting on aptitudes for interdisciplinary research
- exploring the nature of interdisciplinarity
- developing and maintaining a committed supervisory team
- building foundations and setting boundaries
- structuring and writing an interdisciplinary thesis
- building an interdisciplinary network
- developing a publications strategy
- mentoring and career guidance

This and other interdisciplinary guides can be downloaded from <http://www.issti.ed.ac.uk/publications/briefingnotes>

Data Sharing in the Biosciences: a sociological perspective, June 2008

Innogen and BBSRC are collaborating on a workshop that will explore this key issue shaping the future of biosciences.

This workshop aims to explore the changes in the generation, utilisation and governance of information in the biosciences; to consider the implications of these changes; and, to provide advice as appropriate. The workshop will bring together natural scientists who are having to deal with data sharing issues in their own research, and social scientists who are studying the impacts of data sharing on scientific practices.

The last decade has seen the generation of increasing quantities of biological data, driven in part by large-scale research efforts such as the human genome project and assisted by advances in automated analysis. Researchers are increasingly likely to be utilising datasets produced elsewhere. These developments mean that life scientists must develop new rules and governance procedures regarding the release and sharing of information, and to do with the standardisation of data, models and experimental protocols. Additionally, public funders of research have introduced data sharing policies that scientists are obliged to follow. These changes have consequences for research practices and for the knowledge that is produced.

This workshop will explore these issues by addressing questions such as:

- What have been the major developments in the role of information technology and data sharing in the biosciences over the last decade?
- What examples are there of emerging experience in working with biological data, and what changes has this brought about?
- What implications do these changes have for scientific practice, community behaviour and associated infrastructures? (For example, will we see the dominance of 'dry' over 'wet' biology?)
- Can experiences in other research sectors (e.g. particle physics and climatology) throw light on potential upcoming challenges for the biosciences?

This workshop will be held in June and is sponsored by the Biotechnology and Biological Sciences Research Council, in collaboration with ESRC Centre for Social and Economic Research on Innovation in Genomics (Innogen) and will be hosted in Edinburgh by the e-Science Institute.

Attendance at the workshop is by invitation only.

For more information contact
Jane Calvert (jane.calvert@ed.ac.uk)
or Robin Williams (R.Williams@ed.ac.uk)

Staff and Visitors

Joyce Tait appointment to Scottish Science Advisory Committee extended



Professor Joyce Tait from Innogen, has been invited to remain on the Scottish Science Advisory Committee (SSAC) for another 2 years. The SSAC is a group of experts from Scotland's science community who provide the Scottish Government with independent advice on science and the opportunities for Scotland's economy and society.

Professor Anthony Clayton visiting ISSTI

ISSTI welcomes Anthony Clayton, Alcan Professor of Caribbean Sustainable Development at the University of the West Indies as a Visiting Professor. Prof Clayton is also a Visiting Professor at the Centre for Environmental Strategy in the School of Engineering at the University of Surrey, an Adjunct Professor, Faculty of Business and Management, University of Technology, Jamaica and an International Associate, Centre for Social and Environmental Accounting Research, University of St Andrews, among other appointments!



PhD successes



Congratulations to Matt Harsh and Rebecca Hanlin who were successfully awarded a PhD recently. Matt's project looked at living technology and development: Agricultural biotechnology and civil society in Kenya, while Becky's project looked at important value

determinants for successful working by global vaccine development public-private partnerships at national level in Africa.



Judging the National Business Awards

Dr Luciana D'Adderio, ISSTI member and Innovation Fellow with the Advanced Institute of Management, has been selected to join expert/specialist judging panel for The National Business Awards for Scotland 2008 (including the ATOS Origin Business Innovation of the Year Award and the Orange Best Use of Technology in Business Award categories).

More about the awards can be found at: www.nationalbusinessawards.co.uk/

27-28 October 2008 - a date for your diary



ESRC Genomics Network Conference
Genomics and Society:
Reinventing Life?
Savoy Place, London

Please visit our website: www.genomicsandsociety.org
or email innogen@genomicsnetwork.ac.uk to register your interest

Other News

New Innogen website launched



The Innogen website has been redesigned and relaunched as part of the new Genomics Network portal. The site has a great new look and features all the usual suspects in an easily accessible and navigable platform. Check out the Innogen pages on www.genomicsnetwork.ac.uk/innogen

Graham Spinardi on missile testing



Graham Spinardi gave a presentation 'Performance and Performativity: Why Testing isn't the Only Issue with Missile Defense' to the Science, Technology and Society seminar series at Stanford in December. The audience was an interesting mixture of arms control specialists, STS people and scientists, including one of Graham's key sources for the work from the defence industries!

EGN meeting with National Natural Science Foundation in Xishuangbanna, China

The second expert meeting of the ESRC Genomics Network (EGN) and the National Natural Science Foundation of China, on 'Modern biology and its social impact', was held in Xishuangbanna, China, on 3 and 4 December 2007.

A number of opportunities for further collaboration were identified, particularly in the area of governance in life science technologies.

A full report of the meeting is available on www.genomicsnetwork.ac.uk/forum/news/



Gill Haddow in Europe



Innogen researcher Gill Haddow was invited to speak at the European Genetic Alliances' Network workshop in Basel, Switzerland on "Generation Scotland: Consulting about Public Biobanks".

AlumniSTS

Back to the future

Klaus Staubermann was an undergraduate student at the Science Studies Unit in 1991/1992. He had started as a student in philosophy and physics at Münster University but soon became interested in the history of science. In 1998 he completed a PhD in history and philosophy of science with Simon Schaffer at Cambridge University. Klaus's thesis was based on his reconstruction of a nineteenth century photometer, situating it in existing and emerging cultures of media technology, experimental psychology and astrophysics. After a Postdoctoral Fellowship at the Dibner Institute for the History of Science and Technology at MIT he decided to continue his career as a museum curator to give him better access to the material culture his research is based on.



Klaus was a curator of scientific instruments at the Universiteitsmuseum Utrecht and Head of Astronomy at the Deutsches Technikmuseum Berlin. He has taught at the Institute for the History and Foundations of Science at Utrecht University, and the Institute for Culture and Technology at the Humboldt University Berlin, and was also a Visiting Fellow at the Max Planck Institute for the History of Science in Berlin.

Klaus is now back in Edinburgh as Principal Curator of Technology at the National Museums Scotland. His research focuses on designs and practices in science and technology and he has published extensively on this topic. Klaus has been working with colleagues at ISSTI over the past year to establish a fruitful collaboration with the National Museums. This includes a new seminar series Understanding Technology to be launched later this year, and a joint bid to host the ICOHTEC annual conference at Edinburgh.

Klaus can be contacted at k.staubermann@nms.ac.uk.