

ISSTI Newsletter

THE INSTITUTE FOR
THE STUDY OF SCIENCE
TECHNOLOGY AND INNOVATION



No.9 December 07

Welcome

With this last ISSTI newsletter of 2007, we look back on a satisfyingly busy and productive year. We've welcomed several new members to the ISSTI network and we've hosted visiting scholars from China, Spain, Sri Lanka and Korea. We've gained support for some major new research projects, and in the process built promising collaborations with academic colleagues across the University, in the UK, Europe, China and the US, and with industry and government agencies. We look forward to starting on these and other ventures. We've said congratulations and farewell to several new PhD and MSc graduates – but fortunately found ways to keep some of them here. Our new Masters programme in Science and Technology Policy and Management has taken in its first cohort of students, and we've secured three new staff positions to help build our teaching activities. And we've been working hard to get ISSTI better known and recognised in the University and beyond as a leading centre for work in the field of science and technology studies and policy.

We wish all our colleagues and friends across the globe a prosperous 2008!

New project on China and EU Information Technology Standards

The European Union is to support the ISSTI-led China EU Information Technology Standards Research Partnership under Framework Programme 7. The project brings together seven leading European and Chinese centres to undertake a comparative investigation of ICT standardisation processes and the policies that influence them.



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Yet another award for our esteemed colleague

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David Edge studentship

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Translating Translational Medicine

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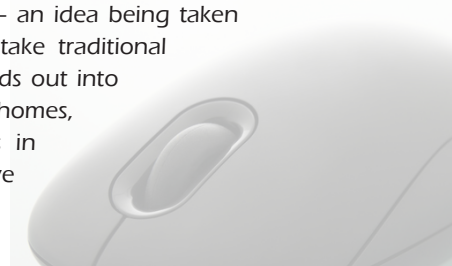
Is new technology safe?

[See page 3 for full report](#)

Developing the Scottish Living Lab

ISSTI is heading a strong consortium of Scottish universities, business groups and public agencies in the development of a Scottish Living Lab – an exciting new type of experimental facility for innovation in mobile and wireless applications and services. Living Labs – an idea being taken up in many countries – take traditional design and testing methods out into cities, workplaces and homes, and closely involve users in stimulating more effective and creative innovation.

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Research News

David Edge studentship 2008/09

ISSTI has announced a new studentship for its MSc Science and Technology Policy and Management programme. The studentship honours the life and achievements of David Edge, and will provide support for a full-time student for the academic year 2008/09.

David Edge (1932-2003) was founder of the Science Studies Unit, a central figure in the development of the field of STS, and a valued colleague and mentor over many years to people now working in the field at Edinburgh and beyond.

The studentship covers the costs of the University UK/EU fees for the one-year full-time course – £4600 – plus £420 research expenses. ISSTI invites applications from within or outside the European Union, but the studentship does not cover the full costs of fees for non-EU students.

The MSc Science and Technology Policy and Management programme took in its first cohort of students in September this year. It currently offers specialist strands in Information and Communication Technologies and in Life Sciences and Biotechnology. ISSTI plans to add a further specialism in Energy and Environment from 2008/09.



More information on the studentship, including details of the application procedure and criteria for selection, and details of the MSc Science and Technology Policy and Management programme, can be found at <http://www.issti.ed.ac.uk/study>

Postgraduate courses in eHealth

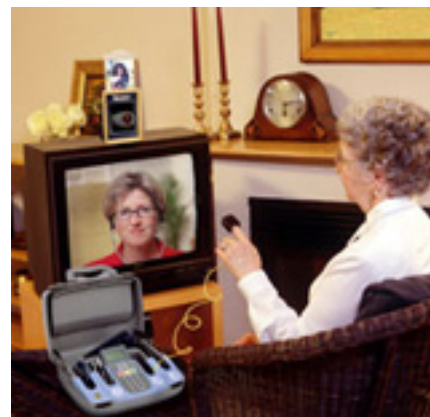
New postgraduate courses relevant to eHealth are adding to the University's capacity to promote capacity building and skills transfer, including:

- International MSc in Health Informatics
- MSc in Information Governance
- MSc in Translational Medicine
- MSc in e-Learning
- MSc in Neuroimaging
- MSc in Innovation
- MSc in Technology and the Law

Exciting new project for eHealth Research Group

Intel and Tunstall healthcare have teamed up with Lothian Community Health Partnership and the University's Interdisciplinary eHealth Research Group to trial a new home telecare platform for patients with chronic disease.

The project will be managed by the division of Community Health Sciences (Brian McKinstry, Claudia Pagliari and colleagues), as part of its wider portfolio of telemonitoring and telecare research, but will integrate expertise from other disciplines.



Brian McKinstry, Claudia Pagliari and colleagues Senior Lecturer in Primary Care Centre for Public Health and Primary Care Research

MSc in Translational Medicine gets off to a flying start

Innogen colleagues James Mittra and Joyce Tait are contributing to the University of Edinburgh's new distance learning MSc in Translational Medicine. The programme was launched at the end of September with 24 registered participants (against a first year target of 10 registrations).

The course began with a face-to-face event in Edinburgh between 27 and 29 September which went extremely well and the first online course (Translational Medicine: Introduction and Definition) will finish at the end of October.

The enrolment includes a number of mature students, and a range of backgrounds is represented - clinical, scientific, industry and regulatory. There has also been substantial external interest in the course. Parts of it will be used for the successful Wellcome Trust Clinical PhD portfolio programme which is being incorporated into the Edinburgh Clinical Academic Track (ECAT) Lectureship Scheme, guaranteeing five clinical students per year. In addition, colleagues involved in the course have been invited to a couple of International Translational Medicine congresses to describe the course, since it remains the only distance learning course of its kind available globally.

For further details see www.transmed.ed.ac.uk

China EU Information Technology Standards Research Partnership

The People's Republic of China (hereafter China) has in recent years begun to be remarkably active in a number of areas of ICT interoperability standards. This raises a number of issues for China about standardisation processes: their standardisation strategy and its relationship with technology promotion policy. The outcome of these processes could have important consequences for the global ICT market and for the European economy.

The European Union has agreed to fund the China EU Information Technology Standards Research Partnership. This project will promote research collaboration and engagement between research, innovation and policy communities in relation to Information Technology standardisation in China and Europe. This project brings together leading European and Chinese centres for research into ICT Interoperability Standards to undertake a comparative examination of ICT standardisation processes and associated policies between EU and China. This project, led by Robin Williams, Ian Graham, James Stewart and Xiaobai Shen at ISSTI, is in collaboration with the University of Oslo (Norway), RWTH-Aachen University and ISI Fraunhofer Institute (Germany), Vytautas Magnus University (Lithuania) as well as Chinese partners: Tsinghua University and the Chinese Academy of Sciences, Institute of Policy and Management.

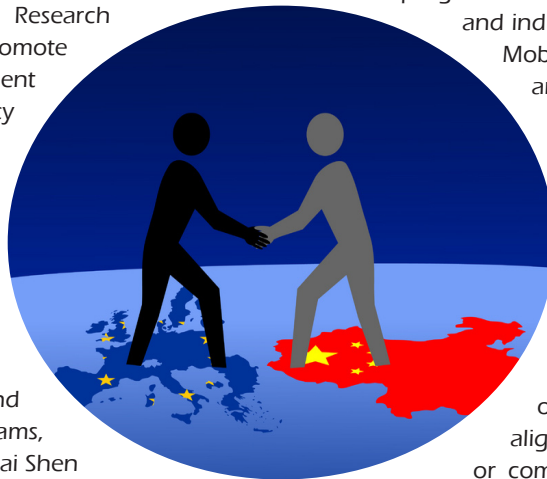
The 24 month project, due to start in February 2008, will develop a knowledge network of leading players in the field, in Europe, China and beyond. The project will examine the

new ICT standardisation activity emerging in China, apparently linked to its goals to promote indigenous technology. It will compare these emerging standardisation processes with those that have emerged and are being currently pursued by European players.

A set of empirical studies will focus upon a selected sample drawn from the five areas of standardisation flagged in the European Union *Information Societies Technologies* RTD programme as bearing critically on European technology and industrial strategy, including 4th Generation Mobile Telephony and Audio-Visual Systems and Mobile Broadcasting. The studies will examine the standardisation approach adopted and the strategies of public policy, technical and industrial players in relation to standards. It will explore the likely implementation and uptake of standards and their outcomes for technological innovation and markets.

A particular interest is whether the outcomes will be open standards, alignment between regional economies, or competitive standards processes leading to so-called "standards wars" or the fragmentation of global markets. Attention will be paid to processes of social learning among standardisation bodies, technology and industrial players and policy actors. The study findings will be discussed with Chinese and European standards bodies and policy communities, who will assist in drawing out the policy implications.

Contact Prof. Robin Williams (R.Williams@ed.ac.uk)



Is new technology safe?



Today it is no longer sufficient for technologies to be innovative. They also have to be dependable - that is reliable, available, safe and secure. Technology validation, including virtual simulation and physical testing, is the principal means by which dependability can be achieved; yet testing remains a neglected feature of the innovation process. This gap is all the more crucial in the face of growing technological complexity and specialisation and increasing globalisation of productive knowledge and activities. The validation challenge in this context is how to verify the properties of products (processes and services) whose design, production and maintenance are distributed across extended organisational networks and span a diverse range of functional, cultural and geographical boundaries.

ISSTI researcher Dr Luciana D'Adderio will address the challenges to 'managing dependable innovation' in a 2-year project that commenced in October 2007. 'Making Innovation Dependable (MInD): Validating Complex Technologies Across the Network Organisation'

is an interdisciplinary enquiry rooted in Innovation, Organization and Dependability Studies. The analysis will be based on qualitative ethnographic research and international case study comparison. Luciana will lead an interdisciplinary network including scholars from leading international institutes as well as practitioners from industrial, standards- and policy-making organisations.

Contact Dr Luciana D'Adderio at L.D-Adderio@ed.ac.uk.

Scottish Living Lab (SLL)

ISSTI is leading the development of a Scottish Living Lab for the mobile and wireless application and service sector, together with a consortium of Scottish Universities, business and public bodies.

What is a Living Lab

A Living Lab is a new sort of innovation facility that opens up the generation, testing and development of services and technologies to a broad set of potential users and stakeholders. Living labs are currently being developed in many countries, supported by business and public sector bodies looking for new ways to stimulate more effective and creative innovation.

The Living Lab takes traditional design and testing methods out of the laboratory into 'real life' - cities, workplaces, homes. It uses methods inspired by 'open' innovation and user-led design and bridges the gap between research and development and taking a new product or service to market.

The SLL offers unique services to industry, university researchers and public bodies. The SLL conducts general research on issues of users and usage in particular sectors, offering advice and expertise to SLL clients. It recruits and manages a large network of potential users and advisers in these sectors who form the 'Living Lab', testing and providing feedback on particular applications and services. This will also enable business and public sector organisations to have early access to many of these new services, and play a role in their development and implementation.

A key aim of the Living Lab concept is to find ways to make a broad range of social science knowledge and methods accessible in a useful way to business, and in a form that can be integrated into the development and commercialisation processes. Equally it will open the way for tools and products developed by industry to be brought into the academic research arena more quickly and integrated into research methods. The activity will be multidisciplinary, drawing on and feeding into research in social sciences, informatics and digital media and design. It addresses issues of innovation between digital media and wireless technology, and the problems of bringing together users and diverse business interests.

The Consortium

The Consortium currently consists of six higher education institutions: The University of Edinburgh, University of Glasgow, Napier University the Edinburgh College of Art, Glasgow School of Art, and Dundee University. Each of these institutions has a long record in researching, developing and testing innovative ICT products and services, and in developing advanced methods and research insights into the engagement of potential users in the design and innovation process. These partners will offer the core user research expertise and facilities. The SLL is not a closed network, but open to new partners with expertise to contribute.

A key aim of the SLL is to support the growing and successful wireless applications and services sector in Scotland. To this end, the SLL is working with Wireless Innovation, operated by Innovation Centres (Scotland) Ltd. Wireless Innovation is a business dedicated to supporting and investing in this sector, with over 140 clients. It is involved in the SLL as a strategic move to support these businesses.

The SLL is also supported by MX Alliance, the trade body for many firms in the mobile and wireless sector in Scotland.

SLL Operations

The SLL is run by a board representing the consortium members, which selects projects proposed from within the network and by clients. The commercial activities will be run by an operating entity, taking responsibility for managing contracts and for issues of confidentiality and IP. The research activities are run by the University consortium members.

Convenor: Dr James Stewart (j.k.stewart@ed.ac.uk)

New ISSTI publications

CHATAWAY, Joanna, TAIT, Joyce and WIELD, David Frameworks for pharmaceutical innovation in developing countries : the case of Indian pharma. Technology Analysis & Strategic Management 19 (5), 2007, pp. 697-708

HARDIE, Iain and MACKENZIE, Donald Constructing the market frame : distributed cognition and distributed framing in financial markets. New Political Economy 12 (3) 2007, pp.389-403

LEE, Lisa Exploring processes and outcomes of wireless internet in higher education: a case study of a university's early experience. Learning, Media and Technology 32(4) 2007, pp. 369-380

LEE, Lisa The impact of young people's Internet use on class boundaries and life trajectories. Sociology 42 (1), February 2008.

MACKENZIE, Donald Zero is a clenched fist [review of Zalom, Caitlinn Out of the pits : traders and technology from Chicago to London] London Review of Books, 1/11/07, pp.22-3

PARRY, Sarah, CUNNINGHAM-BURLEY, Sarah, FAULKNER, Wendy and BATES, Stephen Reflections on the perils of public engagement: Genomics Network, Sept. 2007, pp.28-9

RUSSELL, Stewart Water, yuck and consultation. Science & Public Affairs, September 2007, p.20

STEWART, James Local experts in the domestication of information and communication technologies. Information Communication and Society 10 (4) 2007 p.547-69

Events

ISSTI Seminar Series

Denaturalizing the public domain: How to use science studies to rethink IP

Prof Mario Biagioli, Harvard & Aberdeen Universities,

Public experiments and the trials of social order

Prof Simon Schaffer, University of Cambridge

Date: 10 December 2007

Time: 14.30 - 17.00

Location: Boardroom G43, Ground Floor, Paterson's Land, Holyrood Campus

****ATTENDEES MUST PRE-REGISTER FOR THIS EVENT****

To register - please email Angela.McEwan@ed.ac.uk or call 0131 650 9113.

For further information about accessibility please contact Angela McEwan on 0131 650 9113 or Angela.McEwan@ed.ac.uk

See www.issti.ed.ac.uk/events for details of subsequent seminars.

PROSIT Workshop

Producing Standards for the 'Internet of Things',

Zurich, Switzerland, 26 March 2008

Imagine a network of billions of mobile nodes integrated into everyday devices, such as cars, in the home and in shopping centres, for the purpose of intelligent homes, car safety and goods tracking. This unprecedented penetration of virtually everyone's lives will need to be monitored and scrutinised to allow standardisation of the information and communication technologies that will be developed in the wide deployment of these applications.

This workshop aims to discuss the development of adequate standards setting processes for the Internet of Things. The current situation in ICT standards setting, the current legal situation with respect to standards, and the development of recommendations on how to adapt the processes to adequately serve the environment, will be addressed through insights from various disciplines.

This workshop is being held in conjunction with the International Conference *Internet of Things 2008*.

www.the-internet-of-things.org

EGN Conference Report



ESRC Genomics Network
Genomics and Society:
Today's Answers, Tomorrow's Questions
25-26 October 2007,
One Great George Street, Westminster, London, SW1P 3AA

The first Genomics Network conference brought together policymakers, researchers and natural scientists in a landmark gathering that provided a showcase for important research findings from the first five years of work by the Network – ranging across five UK universities and involving more than 100 researchers – as well as examining big new questions emerging as it moves on to a second exciting phase.

Embryonic stem cell research, genetic databases and biobanks, and the potential for huge advances in medicine, physical health and psychiatry, featured among topics covered in lectures, debates, seminars and exhibitions. Jon Marks, distinguished author and Professor of Sociology and Anthropology at the University of North Carolina, Charlotte, delivered a keynote speech, whilst a debate, hosted with the Institute of Ideas, ensued on the battle over ethics and regulation.

Innogen colleagues contributed to sessions on biobanking, genomics in developing countries, stem cells regulation, pharmaceutical innovation, systems biology, and patenting.

Innogen research briefings from the conference are now available to download from the Innogen website www.innogen.ac.uk/Publications/EGN-Conference-Innogen-Research-Briefings.

The ESRC Genomics Network's Second International Conference will take place 27-28 October 2008 at Savoy Place, London. Details of the programme will be available shortly on www.genomicsandsociety.org

A workshop that did exactly what it said on the tin...

...according to one of the students who took part in ISSTI's first Interdisciplinary Masterclass for Postgraduates (3-5 December).

Funded by the ESRC Researcher Development Initiative (www.rdi.ac.uk), 24 PhD students with backgrounds spanning some 50 disciplines, came to Edinburgh to learn how to design, manage and conduct interdisciplinary research projects that span the social and natural sciences.

The workshop programme included talks from experienced interdisciplinary researchers from ISSTI and Innogen, as well as speakers from the Scottish Government and ESRC who described some of the career and funding opportunities open to interdisciplinary researchers.



The workshop included a series of exercises and activities that also enabled the students to contribute to the design of a concise set of guidelines for supervisors of interdisciplinary PhDs (available shortly from the ISSTI website).

There was also plenty of time for networking and learning from other students' experiences which participants seemed to find particularly valuable.

Workshop debrief



A two day workshop entitled "The Promises and Challenges of the Life Sciences in Central and Eastern Europe" took place on the 18th and 19th of October 2007 in Prague. The event was organised and funded by Innogen, PASOS and OSI. Additional sponsorship was provided by MEDON and AstraZeneca. The workshop aimed to bring together policy makers, industry representatives and academics in order to discuss the current issues facing the life science industry in CEE and draw lessons from more global case studies.

The full program which featured 20 presentations was well attended and created a forum for a lively and high level discussion on a range of topics including governance, policy, innovation and ethics. As well as the attendance of many excellent academic speakers, the

workshop program included presentations from the current president of the Czech Academy of Sciences and the chairman of the GMO committee of the Polish Ministry of Environment. Organisers Peter Robbins and Farah Huzair from Innogen at The Open University were particularly pleased with the positive feedback and the many excellent papers that were submitted for discussion and subsequent publication.

by Farah Huzair, Innogen PhD Student

Staff and Visitors

Yet another award for Donald...



Congratulations to ISSTI associate Donald MacKenzie, who has been awarded the British International Studies Association (BISA) International Political Economy Group (IPEG) Book Prize for 2007, for his book "An Engine, Not a Camera: How Financial Models Shape Markets", MIT Press, 2006.

Professor MacKenzie examines an important and timely issue for contemporary political economy in this book by drawing out the performativity of financial market models and their ability to shape the realities they are supposed to describe. This book offers a detailed but accessible analysis of the importance of recognising the role of financiers' and bankers' understanding of the market when examining financial market practices and effects. Linking an account of Finance Theory with financial crashes, and the development of the current characteristics of the financial sector, this book is required reading for anyone trying to understand the current upheavals in the finance sector.

New communications officer for Innogen



Lara Crossland has been appointed as the Communications & Networking Officer for Innogen. Lara has a degree in genetics and previously worked in another University department where she managed a public engagement outreach project. She is combining the 2.5 day post at Innogen with a second part-time post as the

Scotland Regional Coordinator for Researchers in Residence, based at King's Buildings.

Developing links with Vietnam



A delegation from the International Cooperation Department, Vietnamese Ministry of Science and Technology, and the Vietnamese Academy Science and Technology is visiting ISSTI on December 7.

ISSTI student flies the coop. Well, almost...

Jonathan Suk has taken a post as a Scientific Officer with the European Centre for Disease Prevention and Control (ECDC), an EU Agency based in Stockholm. Based in the ECDC's Scientific Advice Unit, he working primarily on projects related to climate change, social inequalities and changing patterns of communicable disease spread in the EU.

Jonathan will continue to pursue his PhD in STS on a part-time basis.



Well done to Jennifer Speirs

Congratulations to Jennifer Speirs who successfully defended her PhD thesis recently. Jennifer studied donor-assisted conception, genetic knowledge and the meanings of kinship.

Jennifer was Innogen's first ever PhD student and has been very effective at communicating her research throughout. Well done Jennifer!



POSTed to the Parliamentary Office of Science and Technology



Adèle Langlois has been awarded a 3 month Wellcome Trust Fellowship to the Parliamentary Office of Science and Technology (POST). During the fellowship Adèle will write a POSTnote (policy briefing) on biomedical ethics.

Other News

Translating Translational Medicine

James Mittra, Innogen Research Fellow, has contributed to "Translational Medicine in Biopharmaceutical R&D: Enabling R&D optimization and early detection of potential failures" published by Reuters Business Insights In October 2007 (<http://www.globalbusinessinsights.com/report.asp?id=rbdd0018>).



James was interviewed by Dr Sarah Sleight and discussed how translational medicine is being exploited by the pharmaceutical industry in response to the challenges of drug innovation, particularly the phase 2 attrition rate.

Talking about stem cells... literally!



Sarah Parry has been invited to talk at the Inaugural Annual Meeting of the UK National Stem Cell Network to be held in Edinburgh, from 9-11 April 2008. Sarah will present 'Talking about stem cell research: Findings from a public engagement research project'.

Sarah also gave a talk, entitled 'Talking about hybrid embryos for stem cell research' at the Genomics Forum transpecies embryo workshop in Edinburgh on 27 November 2007.

National Natural Science Foundation of China Expert Meeting

The Forum is helping to coordinate an inaugural ESRC Genomics Network (EGN) visit to the National Science Foundation of China in December 2007. This visit follows on from an expert meeting between these two organisations, hosted by the Forum, in March 2006. A PDF report from the meeting, 'Modern biology and its social impact', is available at www.genomicsforum.ac.uk/documents/pdf/China_Report.pdf.

Robin Williams, Xiaobai Shen, Steve Sturdy and Sarah Cunningham Burley are attending from the EGN. The December event will focus on agricultural and human/medical genomics.

AlumniSTS

ISSTI graduate has 'an excellent future in consulting'

Mei Wang is a 2007 PhD graduate from RCSS. After a bachelor degree in business administration, Mei did her masters degree in IT system development in Herriot-Watt University, Scotland where she developed a strong interest in the social dimension of software development and IT related business transformation. She completed her Msc by Research in Science and Technology Studies in 2004.



Mei joined RCSS to start her PhD research on the social shaping of ICT with a focus on the software package.

Her PhD research focused on the ambition and supplier strategy of building a 'generic software solution' (i.e. a software system that in principle can be used by everyone). Drawing upon concepts developed from the Social Shaping of Technology perspective, Mei examined a biography of a software package developed by a Chinese vendor in China.

After successfully completing her PhD in May 2007, Mei Wang started to work as an IT related business transformation consultant for Capgemini Consulting, Ltd UK, based in Edinburgh.

Capgemini provides consulting services that contribute to the business transformation and economic performance of organisations, based on in-depth knowledge of client industries and processes. They look at the client's organisation and the market in which it operates, and determine short- and long-term strategies for growth. Mei is now applying in a daily business context the knowledge she gained in her doctoral studies of the politics of technology development. Her excellent performance so far has produced highly complimentary feedback from top management of Capgemini Scotland:

'We have been very fortunate over the last years in Scotland with the quality of our Consultant intake and I think this year is no exception. I think Mei has all the qualities to make an outstanding consultant as she is extremely bright, organised & diligent and shows great passion for the job. Mei is a charming & well presented individual who could have an excellent future in Consulting....' John McMullin, Business Director, Capgemini Consulting Scotland.

Her current research interest includes the social shaping of software package development, the procurement of IT solutions, the role of consultants in a knowledge economy, technology standardisation, science and technology development in China. Mei can be reached at mei.wang@capgemini.co.uk