

ISSTI

THE INSTITUTE FOR
THE STUDY OF SCIENCE
TECHNOLOGY AND INNOVATION

newsletter

no. 19 October 2011

Dr. Stewart Russell

6th August 1955 - 17th September 2011

It is with very great regret that we report the death of our colleague Dr. Stewart Russell. We give an appreciation of Stewart's life on page 3.



The Royal Academy
of Engineering

Launch of IT-SAFE: major funding by The Ove Arup Foundation and the Royal Academy of Engineering for social science study of fire safety [page 2](#)



Coming soon - new taught MSc programmes. Further details on the [Graduate School of Social and Political Science web site](#). Including, in 2012, an exciting new MSc programme which we are developing: Management of Bioeconomy, Innovation and Governance (MSc BIG) [page 10](#)



TASM Special issue - China and Global ICT Standardisation and Innovation [page 8](#)

CONTENTS

Research	4
Teaching	10
Appointments	11
Grants and Awards	12
Community	13
News	17
Recent events	19
Upcoming events	21
Publications	24

Feature: Interdisciplinary research
[pages 5-7](#)

ISSTI: The most interdisciplinary Science and Technology research centre

Mapping interdisciplinarity

New book: Interdisciplinary research journeys

Launch of IT-SAFE

The University of Edinburgh is proud to announce the launch of **Integrating Technical and Social Aspects of Fire Safety Engineering & Expertise (IT-SAFE)**, an interdisciplinary programme of social-science research designed to improve fire safety and the quality of our built environment by better interaction and integration of social and engineering research, supported by the University of Edinburgh, The Ove Arup Foundation (TOAF), and the Royal Academy of Engineering (RAEng).

This major research programme is motivated by the recognition that technical advances in fire safety must be integrated with changes in policy and in the practices of other professions and the wider public.

As we reported in Newsletter 18, IT-SAFE represents a major investment by Ove Arup and the Royal Academy of Engineering. This will support a senior social science researcher, The Ove Arup Foundation/Royal Academy of Engineering Senior Research Fellow, who will provide day-to-day leadership of a programme of research, knowledge transfer and engagement activities. Applications for this prestigious role have now closed and are now being considered by the project team, led by Professor Robin Williams.



THE UNIVERSITY
of EDINBURGH



The Royal Academy
of Engineering

The University of Edinburgh has been an important institution in the field of Fire Safety Engineering for over three decades.

Many of those who are now leaders in the field came to Edinburgh to study and research under the supervision of the late Professor David Rasbash, one of the main pioneers of the discipline, and Professor Dougal Drysdale, author of the definitive text book on the subject, 'Introduction to Fire Dynamics' (Wiley, 2nd edition 1998).

Teaching and research in fire safety continues at Edinburgh under the leadership of Professor Jose Torero, appointed to the BRE/RAE Chair in Fire Safety Engineering in 2004.

Presentations

Steven Torrie, Head of the Scottish Fire and Rescue Advisory Unit

Professor Robin Williams, Director, ISSTI

Sir Duncan Michael, The Ove Arup Foundation

Drinks and canapés

5.30 – 7.00 pm

Monday 7 November 2011

Old College, University of Edinburgh

and

5.30 – 8.00 pm

Tuesday 8 November

Ove Arup, 13 Fitzroy Street London W1

By invitation only. For further information, please contact Robin Williams at R.Williams@ed.ac.uk

Afternoon seminar

The presentations are preceded by an open seminar:

In Case of Fire, Please Use the Elevator: Simulation Technology and Organization in Fire Engineering

Professor David Gann,
Imperial College Business School

3.30 – 5.00 pm

Monday 7 November 2011

Raeburn Room, Old College,
University of Edinburgh.

This event is free and open to all to attend.

Dr. Stewart Russell

6th August 1955 - 17th September 2011

With great sadness we mourn the untimely death of our friend and colleague, Dr. Stewart Russell, Senior Lecturer in Science, Technology and Innovation Studies and Deputy Director of the Research Centre for Social Sciences

Stewart Russell personified a new generation of interdisciplinary academics who crossed the boundary between natural and social sciences to constitute the newly emerging field of Science, Technology & Innovation Studies (STIS).

A Cambridge graduate in physical sciences, Stewart secured one of the path breaking cross-research council doctoral awards from the 'joint committee' of the Science and the Social Science Research Councils (as they were then known). His PhD at the Technology Policy Unit at Aston University addressed the political shaping of energy innovation through a meticulous empirical analysis of the limited progress of combined heat and power in the UK in comparison to its mainland counterparts.

This established two themes that remained at the centre of his academic career:

Developing an analysis of the 'social shaping of technology' that addressed the multiplicity of socio-technical interactions at local and more general levels – this informed his theoretical contributions to founding debates in the emergence of the STIS field in the 1980s between 'constructivist' and 'social relations' analyses, and also to the reconceptualisation of the social shaping of technology in the new millennium; *and*

Applying these insights and methodologies to the challenges of environmental sustainability through critical, policy oriented studies across a range of energy technologies.

From 1988 to 2006, he was Lecturer and later Senior Lecturer in Science, Technology and Society at the University of Wollongong, New South Wales, Australia. He contributed to a number of Wollongong's research programmes: Research Programme in Science and Technology Analysis, Science and Technology Policy Research Group, Technology and Environmental Strategies Group, Environment Research Institute, Institute for Social Change and Critical Inquiry (ISCCI), Centre for Research Policy and Innovation Studies, and the Centre for Asia Pacific Transformation Studies (CAPSTRANS).

Stewart joined the University of Edinburgh in 2006 as Deputy Director of the Research Centre for Social Sciences. He helped build the interdisciplinary research



programmes of the Institute for the Study of Science, Technology and Innovation in the arena of energy and environmental sustainability. His continued efforts, particularly in developing our joint postgraduate programmes with the Science Studies Unit, paved the way for these centres to come together as the Science, Technology and Innovation Studies subject group.

He was tireless in his support for colleagues in their work - always available for students wanting to explore some knotty

Continues on page 4

Research

Stewart Russell continued
from page 4

analytical question. He was keen to build links between STS and other scholarly communities and with wider audiences. He worked as a consultant to trade unions and community groups as well as to government and industry.

At Edinburgh he developed an innovative Understanding Technology public lecture series with the National Museum of Scotland.

Stewart sought to live his life in a way consistent with his intellectual, political and environmental convictions. For example, in the months before he died he and his partner Lorraine were planning to build a carbon neutral house for themselves. One of the many sad aspects of his premature passing is that he never got the chance to see this project brought to fruition.

He will be greatly missed. Our thoughts are with Lorraine and other members of his family.

We are planning to hold a commemorative event in the new year.

We have created a space where friends, former students and colleagues can record appreciations and recollections:

http://www.stis.ed.ac.uk/stewart_russell

GM food solutions at risk from lobbyists, report suggests

Powerful lobby groups opposed to genetically modified (GM) food are threatening public acceptance of the technology in Europe, a report suggests.

They are also hampering Europe's response to the global challenge of securing food supplies for current and future generations, researchers claim.



Joyce Tait

Drawing upon a decade of evidence, researchers from the University of Edinburgh and Warwick University say that Europe's regulation of GM crops has become less democratic and less evidence-based since the 1980s.

Anti-GM groups such as organic food lobbyists and

environmental non-governmental organisations (NGOs) dominate the decision making process, they claim, resulting in greater restriction of plant biotechnology research and development in Europe compared with most other parts of the world.

Some developing countries resist GM crops, even though they might benefit from the reduced crop losses and increased yields of GM technology, because they would not be able to sell their produce in Europe, the researchers found. **Professor Joyce Tait** of the University of Edinburgh's ESRC Innogen Centre, first author of the report, said:

"At a time when an increasing number of people are living in hunger and climate change threatens crops, the system that regulates GM food sources ought to become more based on evidence and less subject to the influence of politically motivated NGOs."

The findings, [published in EMBO reports](#), were funded by the Economic and Social Research Council.

Feature: Interdisciplinarity

Journal Rankings biased against interdisciplinary research

Interdisciplinarity is increasingly seen as key both to the creation of new fields of technological research and to tackling complex social challenges such as climate change, health and food security.

Though UK Research Councils have sought to improve the quality and impact of the research they fund by policies to favour interdisciplinary research collaboration, researchers pursuing interdisciplinary paths have flagged the institutional barriers they face in a higher education system in which quality assessments are often pursued through a mono-disciplinary lens.

In the UK, research quality assessments by Higher Education Funding Councils such as the upcoming Research Excellence Framework (REF) drive the increasingly competitive allocation of significant streams of public funding to academic units. In some areas (notably Economics and Business & Management Studies) we find increasing importance being attached to journal rankings as an indicator of quality. In these areas especially, academic institutions, crafting strategies to improve their performance, are pushing researchers to publish in high ranked journals.

A recent study by colleagues at the University of Sussex, SPRU – Science and Technology Policy Research have been developing novel science mapping techniques to explore how interdisciplinary research can be mapped and measured and its performance assessed.

The study has identified, by applying scientometric methods, the risk that journal rankings are biased in favour of mono-disciplinary research and may disadvantage interdisciplinary. Findings are reported in a working paper by Ismael Rafols, Loet Leydesdorff, Alice O'Hare, Paul Nightingale and Andy Stirling:

[How journal rankings can suppress interdisciplinarity.](#)

A comparison between innovation studies and business and management is available online at <http://www.interdisciplinaryscience.net>

The paper by Ismael Rafols and co-workers compares the degree of interdisciplinarity and the research performance of leading UK innovation

studies units and business and management schools. Using various metrics the study shows that Innovation Studies units are consistently more interdisciplinary than Business and Management schools. However the top journals in the Association of Business Schools' rankings span a less diverse set of disciplines than lower ranked journals, which results in a more favourable performance assessment of the performance of business and management schools, which are more disciplinary-focused. Resort to journal rankings will bias quality assessments - with detrimental consequences for the evaluation and associated financial resourcing of interdisciplinary organisations.

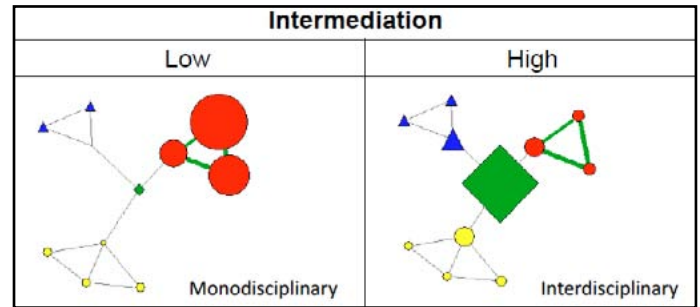
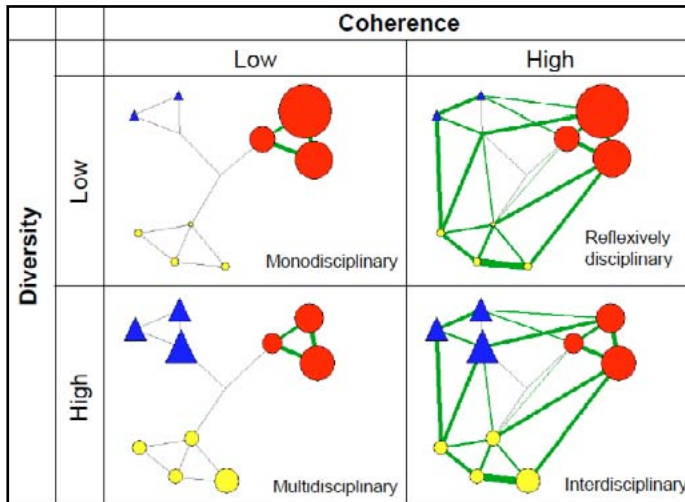
This poses particular challenges for the innovation studies units that will be submitted to the Business and Management Studies panel in the forthcoming Research Excellence Framework.

ISSTI tops the interdisciplinary stakes

[Novel science mapping techniques compare the top three UK Innovation Studies centres & Business Schools](#)

The University of Edinburgh Institute for the Study of Science, Technology and Innovation (ISSTI) stood out in terms of its exceptionally high level of cross-disciplinary engagement reflected in the range of journals in which we publish and where our work is cited. See the maps on the following page.

Mapping Interdisciplinarity

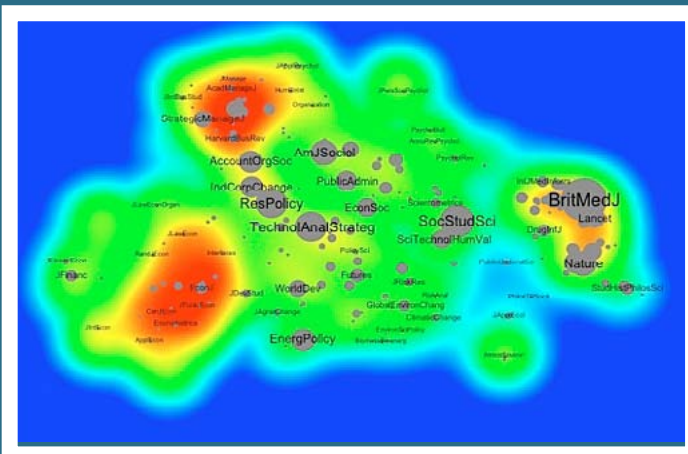


Conceptualisation of interdisciplinarity as intermediation. Intermediation is achieved when an organisation is active in subdisciplines that occupy an interstitial position, i.e., between other subdisciplines

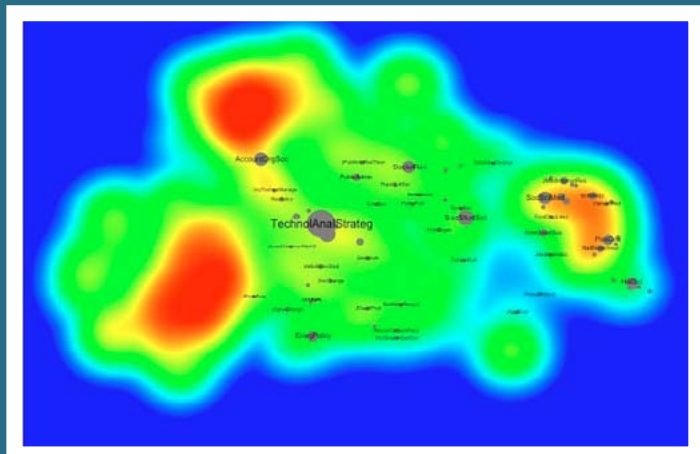
Conceptualisation of interdisciplinarity in terms of knowledge integration. Each node in the networks represents a subdiscipline. Knowledge integration is achieved when an organisation is active in diverse subdisciplines and interlinks them.

Mapping results for ISSTI

Intermediation: Journals of References

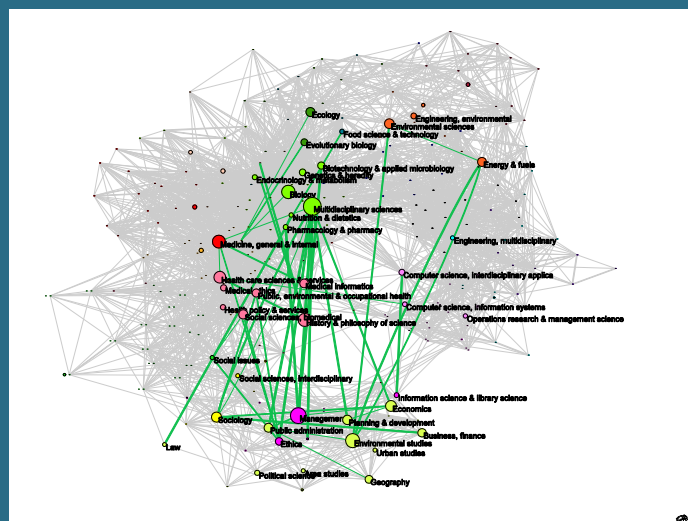


Intermediation: Journals of Publications

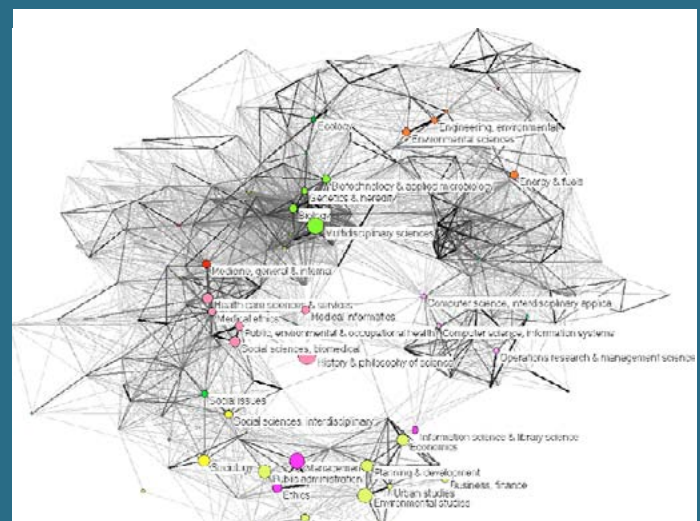


Coherence: Cross-Citations Observed/Expected

Only Observed/Expected >5 shown, Log-scale



Diversity: Disciplines of Publications

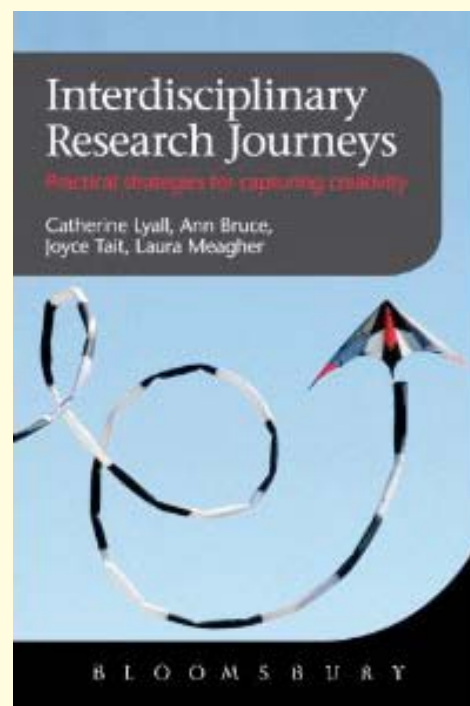


Interdisciplinary Journeys

Innogen's recent book *Interdisciplinary Research Journeys: Practical Strategies for Capturing Creativity*, written by Catherine Lyall, Ann Bruce, Joyce Tait and Laura Meagher, was published by Bloomsbury Academic earlier this summer.

Described by reviewers as 'rigorously researched' and an 'important turning point in the literature [which] brings together conceptual insights with wisdom of practice', **readers can find a full-text version available free online.**

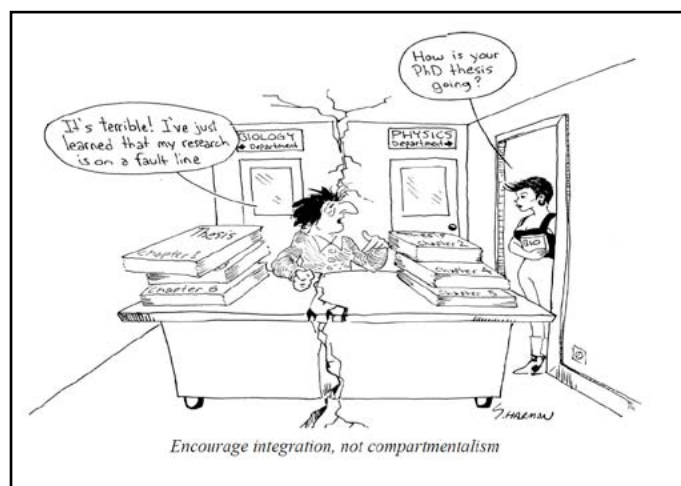
Bloomsbury's innovative approach to 21st century book production will, we hope, ensure wide dissemination and uptake of this work.



This work pulls together insights from Innogen's long-term programme of research into interdisciplinarity.

Innogen researchers have advised UK Research Councils and others looking to develop interdisciplinary research strategies at a personal, institutional and multi-institutional level. One recent research project led by Catherine Lyall for the UK Natural Environment Research Council suggested practical enhancements to modes of collaborative working and contributed to future research council investments by providing valuable organisational learning and

transferable lessons to both the funders who frame, assess and manage interdisciplinary initiatives and the researchers who lead, conduct and generate impacts from them.



Cartoon: Shawn Harmon

This summer has seen Ann Bruce and Catherine Lyall present these findings at international conferences in

the UK, USA and Switzerland.

Our analysis of this latest set of case studies led us to identify five key success factors for interdisciplinary programmes, summarised in our briefing

note *Key success factors in the quest for interdisciplinary knowledge* - available online, together with a set of ten 'short guides' giving advice to researchers, funders, evaluators and leaders of interdisciplinary initiatives.

Go to our wiki site www.tinyurl.com/idwiki which also includes a link to

Bloomsbury's website and a 50% discount voucher for the *Interdisciplinary Research Journeys* book.

Research

Special Issue of Technology Analysis & Strategic Management

Volume 23, Issue 7, 2011

The People's Republic of China has recently become remarkably active in the development of interoperability standards across many areas of Information and Communications Technology (ICT). This is linked to the Chinese government's strategy to develop indigenous technologies and, in some cases through involvement in international standardization bodies, to put China at the heart of the next generation of global technological infrastructures. In this way China seeks to go beyond its globally competitive productive capabilities to acquire technology innovation capabilities.

China's involvement in the shaping of these globally significant technologies will have far reaching consequences for developed economies and global ICT markets, posing challenges for industrial strategy and innovation policies across the developed and developing world. The USA has tended to see China's search for indigenous technologies as 'techno-nationalism', potentially damaging to free trade and competition. In

contrast, the European Union has responded by seeking to align China's indigenous ICT innovation policies with the European Research Area. However, the globalisation of innovation signalled by these developments, based upon complex matrices of Intellectual Property, innovative capability and market knowledge from a wide array of industrial and research players across the world, calls into question simplistic established conceptions of 'indigenous'

technologies.

These developments are explored in a recently published special issue of Technology Analysis & Strategic Management with guest editors: Robin Williams, Ian Graham, Kai Jakobs and Kalle Lyytinen. Many of the papers arise from the recently concluded EU-funded project, led by ISSTI The China EU Standards Research Partnership <http://www.china-eu-standards.org>

Editorial

China and Global ICT standardisation and innovation

Robin Williams, Ian Graham, Kai Jakobs & Kalle Lyytinen

Papers

The role of technical standards for trade between China and the European Union

Axel Mangelsdorf

Indigenous standard development in the presence of dominant international standards: The case of the AVS standard in China

Vladislav V. Fomin, Junbin Su & Ping Gao

Limits to the regulatory state in the rule-making of digital convergence: A case study of mobile TV standards governance in the European Union and China

Håkon Ursin Steen

From 3G to 4G: Standards and the development of mobile broadband in China

James Stewart, Xiaobai Shen, Chengwei Wang & Ian Graham

Government coordination of conflicting interests in standardisation: Case studies of indigenous ICT standards in China and South Korea

Jooyoung Kwak, Heejin Lee & Vladislav V. Fomin

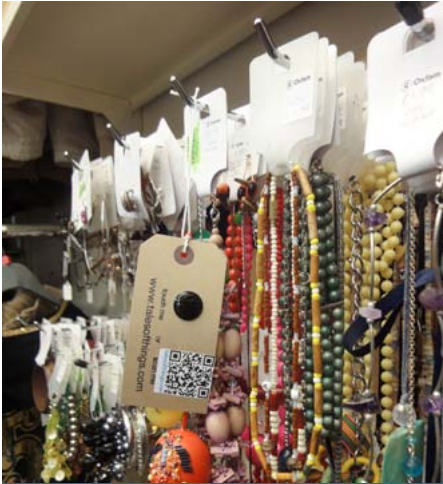
Free Access

Free Access

Free Access

**FREE ACCESS TO
SELECTED ARTICLES TO
31st December 2011**

Research



Grave to Cradle: An Internet of Old Things

"As objects become individually tagged with unique identities ..., their history is recorded and made available to others ..."

fields.eca.ac.uk/?p=261



Design-Informatics: Design with Data

With the recent merger between the University and Edinburgh College of Art, there is an opportunity for Scotland and the UK to create a distinctive dynamic, combining human interaction and conceptualisation expertise in design with deep knowledge of computational systems and innovation - Design-Informatics; these opportunities are currently being explored by Philip Inglesant and Robin Williams at ISSTI and Alan Murray, Head of the School of Design at Edinburgh College of Art.

The next generation of social media tools promises to weave together the social skills and deep intelligence of people with ever greater amounts of data and ever faster processors. The result will be a truly informatics-augmented society, supported by distinctive new – both material and intangible – ‘informatics products’. In turn, these products and processes could not exist without the underlying web of communication and computation and people.

We can harness connectivity, analysis and simulation to design tangible products and intangible services to

change the nature of future work, to bridge gaps in our provision of care, of energy, of pleasure. To make the most of the social and economic potential, we need new kinds of programmers, designers, scientists and engineers.

They need thorough technical ability, the personal skills to bridge design and informatics, and the entrepreneurial expertise to identify and tackle problems with solutions. We need to nurture a disruptive new breed of students – agents of change who want to make a difference through computational thinking and computational design.



The report was downloaded over 1000 times within the first week of its release, with over 140 mentions in print and online media.

Biofuels: ethical issues

Report published from 18-month inquiry

As we reported in Newsletter 18, a major report on the ethics of biofuels was published in April 2011, the outcome of a working party led by members of the Nuffield Council on Bioethics Working Party on Biofuels including Professors Joyce Tait and Joanna Chataway.

Caroline Spelman, Secretary of State for DEFRA – also writing for Chris Huhne, Secretary of State for DECC – were impressed with the report and felt the recommendations were well timed to inform current policy developments.

In June, Joyce Tait was invited to attend a meeting with UK Government Departments, including DECC, DfID, Defra, and the Department for Transport, working on the new government bio-energy strategy.

Teaching

Announcing the Development of a New Masters Programme in Management in Bioeconomy, Innovation and Governance

The **Masters of Management in Bioeconomy, Innovation and Governance (MSc BIG)** is being developed to meet the need for skilled people to work in the rapidly growing global bioeconomy.

Growth of the bioeconomy requires special skills to manage better use of natural resources, adding value throughout agricultural supply chains, and bringing innovative health technologies to market.

MSc BIG will provide the core knowledge and skills needed for graduates to compete in rapidly evolving, highly skilled workforce. Graduates will gain experience in applying innovation theory to practical problems in the bioeconomy related to firm strategy, policy coherence, negotiation, and management of intellectual assets.

The Programme is for students

seeking new skills, or to upgrade existing skills, through intensive course work and work-related dissertations.

The ESRC Innogen Centre provides an ideal context with its strengths, proximity to government, and collaboration with industry

Graduates will be able to seek employment in the public, private and not-for-profit sectors.

The ESRC Innogen Centre provides an ideal context for the MSc BIG, with its world renowned strengths in the life sciences and biotechnology,



David Castle

proximity to government, and collaboration with bioeconomy industries nationally and internationally.



photo by Jurvetson (flickr)

Teaching

New MSc Course: ICT for Development

ISSTI at the intersection of international development studies, Information Systems, and Science & Technology Studies.

In recent years there has been a massive expansion of ICT for Development (ICT4D) projects in developing and transitional economies. As a consequence, issues of International Development have become intricately enmeshed with ICT Design and Development.

A new course led by Dr. Gian Marco Campagnolo offers an empirical perspective, providing students with a number of cases to address questions concerning the relationship between local knowledge and IT expertise in information systems design and implementation.

The course will also address the issue of whether existing geographical information systems, digital archives, databases and information infrastructures can be designed taking into account the need of local users when the involvement of traditionally marginalized communities is at stake.



**Gian Marco
Campagnolo**

Illustrations will be provided from projects to bridge the digital divide and the social inequalities in terms of access to eHealth and eGovernment

services at a national and international level.

The course incorporates guest lecturers:

Jenny Ure (Informatics), Tom Molony (African Studies), Claudia Pagliari (Medical School), Xiaobai Shen (Business School), Gianluigi Viscusi (University of Milan, Italy).

Among the weekly themes are: use of mobile phones in Tanzania; examples of tele-health in Latin America and Upper Amazonia; how China acquired indigenous ICT capability; GIS in India; eGovernment projects in Italy, Morocco, Tunisia and Palestine.

Appointments

Innogen Appointments

James Smith has been appointed trustee and board member of Practical Action, which works with some of the world's poorest women, men and children in the developing world through the innovative use of technology. <http://www.genomicsnetwork.ac.uk/innogen/news/title,24935,en.html>

Shawn Harmon has been appointed editor of *Medical Law international*; first editorial to be published December 2011. Medical Law International is a peer-reviewed legal periodical, dealing with the legal and ethical aspects of medicine.

Graeme Laurie has been elected as Fellow of the Academy of Medical Sciences. The Academy of Medical Sciences (FMEDSci) is the independent body in the UK representing the whole spectrum of medical science.

<http://www.genomicsnetwork.ac.uk/innogen/news/latestnews/title,24709,en.html>

Grants and Awards

No study's perfect

Dr. Daniele Fanelli was awarded the Committee on Publication Ethics Small Research Grant, to conduct the first large quantitative analysis on published corrections of the scientific literature.

Entitled "*No Study's Perfect: A Cross-Disciplinary Analysis of Published Errata*", the project will apply quantitative and qualitative analyses to a sample of over 3,000 corrections published in all disciplines.



Daniele Fanelli

Results will provide the first accurate data on the frequency of errata over the years, the types of errors that are most common, the impact of such corrections, and will identify characteristics of studies and journals that

are most strongly associated with the publishing of a correction.

These data will help answer important questions on the integrity of the literature and its preservation, will point out strengths and weaknesses in the current publication system, and will draw attention to areas that might need improvement, hopefully stimulating new approaches to ensuring best editorial and research practices.

Daniele Fanelli was invited to record an interview for Epigeum, a company producing online training courses for higher education. Epigeum is currently preparing an online course on research integrity for Universities within and outside the UK, and video excerpts from the interview will be used as part of the course materials.

Knowledge Exchange Success

NERC Fellowship



Ann Bruce

Congratulations to Dr. Ann Bruce who has been awarded a Knowledge Exchange Fellowship by the Natural Environment Research Council (NERC).

Over the next two years she will engage across the agri-food sector, enabling businesses to access NERC research outputs and capability to address key environmental and sustainability challenges through access to relevant cutting-edge science.

Ann has also recently completed a PhD on *The Textures of Controversy: Values and Interests in Disputes Around Genomics*. This makes an impressive addition to the completed Innogen doctorates. Congratulations again, Dr. Bruce!

Community

Robin Williams at launch of new Belgian STS Network

Robin Williams was one of the keynote speakers at the official kick-off event of the Belgian Science and Technology Studies (BSTS) Friday September 30, 2011.

This event brought together over fifty colleagues from the main centres for Science and Technology Studies across Belgium. They discussed the potential for and benefits of greater cross-disciplinary, cross-centre and cross-national collaboration. It provided an opportunity for interested researchers to learn about developments in the field in Belgium and beyond.

It was also an opportunity for joint reflection on what it

means to study science and technology, how to conceive of the relation between science and society, and what the roles are, and should be, of STS agents.

This was followed by a debate with contributions from STS researchers, Dr. Nicole Dewandere (European Commission), and Robby Berloznik (Flemish Parliamentary Technology Assessment). Member institutions of the BSTS



STS:

Anticipating socio-technical futures?

- or caught in the novelty trap?

network presented their research work, programmes and activities in a poster session. There was plenty of room for questions and discussion throughout the day.

ISSTI retreat 2011

This year our annual retreat was a bit closer to home than in previous years, in beautiful North Berwick, with windows giving presenters a magnificent view over the Firth of Forth.

Thirteen presenters covered a wide variety of topics in STS around the theme “*Techno-scientific practice, expertise and public policy*”.

Robin Williams led off with a thoughtful reflection of 25 years of world-leading research at Edinburgh. Ann Bruce set a provocative tone by asking, “*are cow farts the number one cause of global warming*” (and what can we do about it)? In fact,

cow “burps”, not farts, are the problem, but this is not such a good headline.

There were presentations expanding the theoretical foundations, such as GianMarco Campagnolo and Robin Williams on

the Biography of Artefacts perspective. Alongside these, some solid new research including neoliberal impacts on the delivery of forensic science services from Chris Lawless. Finally, Daniel Fanelli gave us a post-positivist account of the Hierarchy of the Sciences, “*From Comte, through Quine, to Chaos and back*”.



Wikimedia Commons
by Kurpalzbilder.de

Community

Joint PhDs: Edinburgh & National University of Singapore

The University of Edinburgh has recently agreed to offer joint PhDs with the National University of Singapore (NUS).



**Professors
Dorothy Miell &
Brenda Yeoh**

A Memorandum of Understanding (MOU) was recently signed with the NUS Faculty of Arts and Social Sciences (FASS) to offer a joint PhD programme, under which postgraduate students can pursue a PhD in any of the subjects offered by FASS and Edinburgh University College of Humanities and Social Science.

The MOU was signed by Professor Dorothy Miell, Vice Principal and Head of the College of Humanities and Social Science, and Professor Brenda Yeoh, Dean of the Faculty of Arts and Social Sciences at NUS.

The programme will allow

students from both universities the opportunity to spend time at each other's campus, undertaking research activities and interacting with the faculty members there. Supervision of the candidate's thesis will be overseen by a joint committee comprising faculty members from both institutions who are experts in the candidate's field.

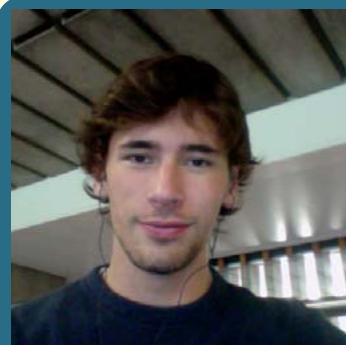
The College and FASS share a number of research interests, including Science, Technology and Innovation Studies (or Science, Technology and Society, as it is known in Singapore), and the joint programme has emerged from and been launched around these common interests

First Joint Edinburgh & NU Singapore Students



Liz Chee

My PhD research project studies the changing role of animals in the production of Traditional Chinese Medicine (TCM), using both historical and anthropological methodologies. More specifically, my research looks at the marketplace dynamics around TCM. I will use bear bile farming as my case study. I'm spending one academic year (2011-2012) here in Edinburgh, returning to Singapore next September, and mainland China for fieldwork.



Zack O'leary

Contemporary wired society needs to deeply examine internet governance, particularly censorship. Comparing international approaches to this type of policy rarely reveals any agreement on methodology, though.

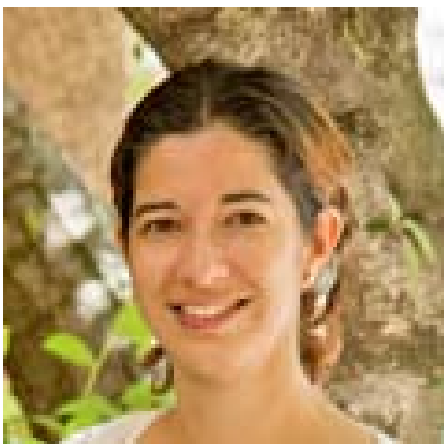
Singaporean censorship shows potential as a basis for forming best practices, due to transparency surrounding the processes of internet governance there.

Community

Welcome to new staff members

Dr. Fraser Stewart joins us from Sociology, where he recently completed his PhD "*Scotland's Rubbish: Domestic Recycling, Policy and Practice in Everyday Life*".

He will be working with Dr. Sarah Parry for the next 18 months on the 'Engagement, Interaction and Influence' project as part of the Sustainable Practices Research Group. Fraser is based in Chisholm House



Congratulations to Dr. Emma Frow who has been appointed to the new lectureship in Science, Technology and Innovation Studies.

Before taking up this post, Emma will spend a year in USA on a National Science Foundation fellowship with Sheila Jasanoff at Harvard working on regulation and governance of new biological entities. She will be staying in touch and will contribute to discussions about research and teaching developments here.

Dr. Isabel Fletcher joined Innogen on 1 September 2011 following the recent completion of her PhD at the University of Edinburgh. She brings with her interest and experience in the history of nutrition science, twentieth century chronic disease epidemiology and the relationship between scientific and popular understandings of healthy eating.

During her fellowship, Isabel will focus on the intersection of natural and social scientific issues around food security and food poverty.



Welcome to Dr. Matthias Wienroth to the ESRC Genomics Forum. With a background in the social study of science and technology Dr. Matthias Wienroth joins the ESRC Forum Team as an Academic Research Fellow.



At the Forum Matthias will be combining his interests in emergent science and technology fields, their practices and governance, and the engagement with science through art. Earlier this year, Matthias completed a Durham University-based ethnographic research project on the UK governance of innovation by policy intermediaries.

Since August 2011, he has worked alongside a medical engineer and an ethicist at the University of Newcastle on public engagement and co-enquiry work with patients about failed medical devices.

Community

Welcome new MSc students



At the start of term we welcomed 28 new postgraduate students

James Smith selected for RSE Young Academy of Scotland New Academy to be launched in November

The Royal Society of Edinburgh (RSE), Scotland's National Academy, recently announced the first members of the new RSE Young Academy of Scotland. The Young Academy has been established to bring together innovative young academics, entrepreneurs, artists and professionals in Scotland.

Lord Wilson of Tillyorn, the RSE President said, "This is an exciting and important initiative ... we believe that the future vitality of Scotland will depend on how we support and engage with the most talented and creative members of the rising generation. I have no doubt that there will be many in this group who will go on to make a significant contribution, both within Scotland and

internationally in the years ahead."

ISSTI congratulates Professor James Smith on his membership of the new RSE Young Academy of Scotland.

For more details on the Young Academy, to be launched in Edinburgh in November, visit [The Royal Society of Edinburgh webpage](#).



James Smith

News

Creative Space

The ESRC Genomics Forum has a commitment to explore innovative avenues to promote social research on the contemporary life sciences.

Creative engagements form a valuable part of this work helping to reach new audiences.

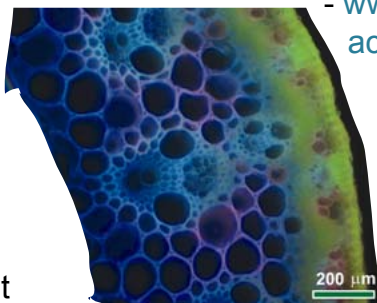
From poetry to short stories, artistic residences to art installations, science fiction discussions to design workshops and the Human Genre Project, the ESRC Genomics Forum is involved in a wide range of exciting

creative ventures.

Now for the first time they are presented together so visitors can explore our current work with Resident playwright, Peter Arnott or read genomics

inspired poetry and fiction all on-line at - Creative Space

- www.genomicsnetwork.ac.uk/forum/creativespace/



U.S. Department of Energy Genomic Science program
<http://genomicscience.energy.gov>

New Issue of *the gen*

The latest edition of *the gen* - the newsletter of the ESRC Genomics Network is now available to view and download online at www.genomicsnetwork.ac.uk/esrcgenomicsnetwork/publications/newsletter.

In the **September 2011 edition** you will find a topical Olympic feature on the future of genetics and sport, and, continuing a series of articles highlighting the distinctive contribution made by each of the Centres members to the Network, there is a focus on The ESRC Centre for

Economic and Social Aspects of Genomics (Cesagen). Alongside regular research updates and news, other features focus on biofuels, the implications of new non-invasive pre-natal genetic testing and the Genomics Forum's new Creative Space.

Booked Up

If you missed this year's Edinburgh International Book Festival or simply want to review some of the highlights events, visit the ESRC Genomics Forum blogs on Genotype at esrcgenomics-forum.blogspot.com/search/label/bookfestival. Together with hosting three topical debates, the Forum Writers team provided Genotype with reports and author interviews from across the Festival.

Edinburgh in top 20 universities worldwide

Edinburgh University has climbed into the top 20 in the QS (Quacquarelli Symonds) World University rankings, jumping up two places on last year and making it the highest

scoring university in Scotland. Overall, the UK is very strongly represented at the top of these rankings, with Cambridge first for the second year in a row.

Edinburgh is also ranked 15th in the world for employability of students, from a survey of over 16,000 employees.

Full details of the results can be found on the [QS website](http://www.qs.com)

http://www.ed.ac.uk/polopoly_fs/1.2440!fileManager/goldenboyreflection.jpg

ISSTI

THE INSTITUTE FOR
THE STUDY OF SCIENCE
TECHNOLOGY AND INNOVATION

Scientiometrics Featured in Nature

Daniele Fanelli's paper "*Negative results are disappearing from most disciplines and countries*", published last September in *Scientometrics*, was featured in the *News & Views* section of *Nature Physics* (Vol. 7: 745).

The study analysed over 4,600 papers in all disciplines and showed that the frequency of those reporting negative results has declined dramatically over the last 20 years.

The pattern was stronger in the social and most biological sciences, and in the US compared to the UK. There is no plausible scientific explanation for the trend, which suggests that the current system of academic publication

and evaluation are distorting scientific objectivity.

Nature Physics editor Adreas Trabesinger took inspiration from famous cases of negative results in physics to report on Daniele's results.

In 2010, both Nature Physics and Nature's Blog had featured Daniele's papers showing evidence, respectively, for a Hierarchy of the Sciences and for a link between bias and academic productivity.

Daniele's paper was downloaded over 550 times in three weeks, ranking as the most downloaded paper from the journal's website in the last 90 days.

Daniele's paper "*The Black, the White and the Grey Areas: Towards an International and Interdisciplinary Definition of Scientific Misconduct*", presented at the [2010 World Conference on Research Integrity](#), will be published as a chapter in the book *Promoting Research Integrity in a Global Environment*, edited by Tony Mayer and Nicholas Steneck, World Scientific Publishing, 350pp, due in Winter 2011.



VALGEN: Coordinated workshops and scenario-building events

Innogen is a formal collaborator with Genome Canada project [VALGEN](#). The four-year project *Value Addition Through Genomics and GE³LS* (VALGEN) runs until September, 2013.

2012 will bring more events including co-ordinated workshops and scenario-building.

VALGEN is investigating how Canada and the rest of the world can benefit from applications of agricultural genomics. Applications of agricultural genomics include crop biotechnology and emerging bioproducts such as biofuels from plants and microbes.

VALGEN focuses on three crucial factors that affect how scientific discoveries make their way from laboratory to the marketplace: democratic engagement, intellectual property and regulation and governance. These research themes are strengthened by research and development of new models, methods and metrics to capture the effects of innovation and combined with foresighting activities to envision future pathways.

Recent events

EGOS Colloquium “Reassembling Organizations” 7-9 July, Gothenburg



Sub-theme 37 (Re-)Assembling Routines

AIM Innovation Fellow Luciana D’Adderio (University of Edinburgh) and AIM International Visiting Fellow Martha Feldman (University of California Irvine) have jointly convened a successful conference track at the European Group for Organization Studies (EGOS) Colloquium in Gothenburg (7-9 July).

The Sub-Theme, titled “(Re) Assembling Routines. The Role of Artefacts in Organizing” included the presentation of around 26 papers and highly engaged scholarly discussion around the topic of routines/ practices and artefacts/ materiality. The interdisciplinary track, which was attended by an enthusiastic

and committed audience of around 55, provided an opportunity to bring together a community around this emergent and important topic. The track will be followed by further dedicated sessions at international conferences and the publication of a journal’s special issue.

The convenors are currently assembling a webpage containing a list of scholars who want to contribute to the debate.

Those who want to join this network can write to Luciana D’Adderio (L.D-Adderio@ed.ac.uk) expressing their interest and specifying their topic.

The Target Project final conference Jerusalem 13-15 September 2011

The Target project <http://www.targetproject.net/> held its closing conference in September in Jerusalem to launch and disseminate the project’s ‘toolkit’ – a structured and tailored set of guidelines and recommendations – to create, enhance, improve and nurture R&D policies with a focus on the life science sector.

Recent events

International Visiting Fellow Martha Feldman visit

International Visiting Fellow Martha Feldman (UCI) was involved in a series of events in Scotland last June.

The first two events were based at the University of Edinburgh Business School and included a seminar titled *"Adapting practices in the context of disruption: creating temporary normal"* centred around Martha's most recent work analysing change and stability in practices or routines on the aftermath of the Hurricane Katrina; and a capacity-building workshop titled *"What should I do next? A pragmatic approach to making sense of rich qualitative data"* which built on Martha's own experience as an academic author, trainer and journal senior editor to advise junior as well as established colleagues

about how to build theory from ethnographic data. Both events were highly successful and extremely well-attended by an audience that spanned different Schools at Edinburgh

What should I do next? Making sense of qualitative data

(Business School, Social and Political Sciences, Medicine, Informatics, Engineering, Divinity, etc.) as well as including colleagues from other Scottish Universities (St Andrews, Glasgow, Strathclyde).

Martha Feldman and Luciana D'Adderio also

gave a joint seminar at the University of St. Andrews School of Management titled "Practices, performances and performativity". This event was organised in collaboration with the AIM Practices Fellow Nic Beech.

Luciana will soon be uploading the slides for the events on her AIM Fellowship webpage at

<http://www.dependable-innovation.org/>.

NASA August 28, 2005 Public Domain Photo

Workshop: Methane emissions from sheep and cattle June 2011

Ann Bruce held a workshop to share findings on farmers' attitudes to using breeding technologies and to develop

possible policy responses with stakeholders including vets, farmers, policy makers and regulators.

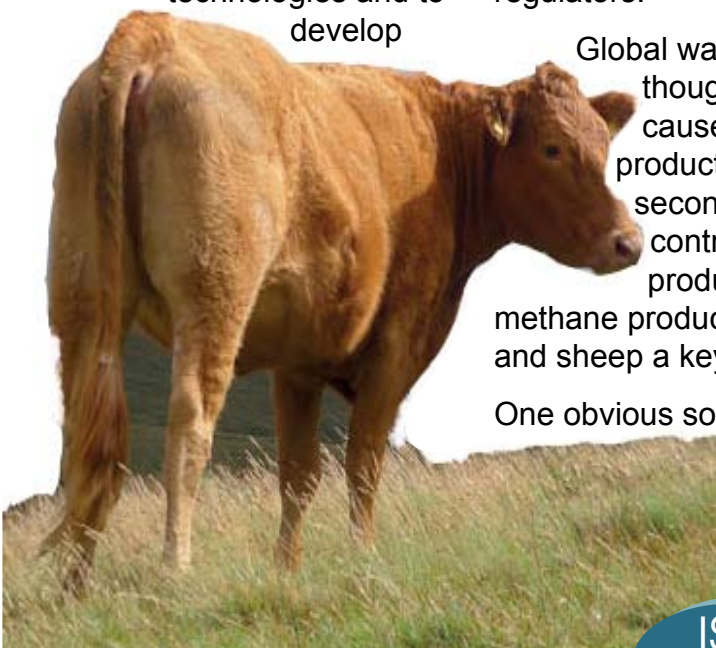
Global warming is often thought as being caused by energy production, but the second largest contributor is animal production, with methane produced by cows and sheep a key component.

One obvious solution is to reduce meat and milk consumption but grass-fed

animals (such as cows and sheep) can provide other benefits than food, such as managing biodiversity, and many upland regions of the UK cannot be used for cultivating anything other than grass.

A range of different technologies could be used to mitigate the global warming impact of farm livestock. However, how willing are farmers to raise these animals?

<http://www.genomicsnetwork.ac.uk/innogen/research/innogenresearchprojectsa-z/projecttitle,23340,en.html>



Lone Cattle by Sue Sheen

Upcoming events

October 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SCRIPT Centre Seminar Series in conjunction with ISSTI

Challenges for Anticipatory Governance of New Technologies

Professor Arie Rip

School of Management & Governance, University of Twente

This seminar will explore how actors, from technology developers and policy makers to regulators, insurers and

civil society groups, are facing the novelty and uncertainty of newly emerging technologies. Anticipation about performance and use occurs; anticipation as to governance issues, including changing responsibilities, is a challenge. Soft law is a partial answer at best.

For further information about accessibility please contact Jane Cornwell on 0131 650 2012

Tuesday 25th October 2011

18:00 – 19:30 pm

**Lecture Theatre 175
Old College**

<http://www.law.ed.ac.uk/ahrc/images/homepagefrontbanner.jpg>

October 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Innogen seminar

With Regard to Innovation.....Getting the Regulatory Environment Right

Professor Roger Brownsword

King's College London

This talk will be recorded and then made available to view on the Innogen website after the event.

In principle, there is a number of grounds on which we might judge that a particular

regulatory environment for new technologies is not right

However, if the charge is that the regulatory environment is not sufficiently supportive of innovation, how might it be answered? Which parts of the regulatory environment can claim to be innovation-sensitive and supportive?

All welcome, no need to register

Monday 31st October 2011

3.30 – 5.00 pm

**Seminar Room 1.06
Old Surgeons' Hall
High School Yards
University of Edinburgh**

November 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

Special afternoon seminar

“In Case of Fire, Please Use the Elevator”: Simulation Technology and Organization in Fire Engineering

IT-SAFE project launch in conjunction with ISSTI

**Professor David Gann.
Imperial College Business School**

See IT-SAFE announcement on page 2

This event is free and open to all to attend

Monday 7th November 2011

3:30 – 5.00 pm

**Raeburn Room
Old College
University of Edinburgh**



Upcoming events

November 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

Vampires and vegetarianism in the 21st century Public event: Rich Mix, London, E1 6LA

What should we eat when flesh and blood can be grown in the lab?

What does stem cell research have to do with Twilight? Join social scientists from the ESRC Genomics Network to discuss how synthetic blood and meat are affecting our lives – and those of film and television vampires

Organised by:
ESRC Genomics Policy and Research Forum, University of Edinburgh as part of the ESRC Festival of Social Science

Speaker(s):
Emma King, PhD Candidate, Innogen, University of Edinburgh

Dr. Neil Stephens, Research Fellow, Cesagen, Cardiff University

Dr. Sarah Artt, Lecturer in English and Film, Edinburgh Napier University

Tuesday 1st November 2011
4:00 – 6:00 pm

Rich Mix
London E1 6LA
Note London Venue

Further details:
forum@genomicsnetwork.ac.uk
0131 651 4747

December 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

ESRC Genomics Policy & Research Forum

Changing the Form of Birth Registration? A Socio-Legal Investigation

Julie McCandless
Lecturer in medical and family law at [LSE](#)

For Abstract details visit
<http://www.genomicsnetwork.ac.uk/innogen/events/seminars/>

All welcome. Attendance is free, but you are asked to register for this event by contacting
forum@genomicsnetwork.ac.uk
0131 651 4747

Thursday 1st December 2011
3.30 pm

ESRC Genomics Policy and Research Forum
St John's Land
Holyrood Road
Edinburgh EH8 8AQ

December 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

Innogen & Public Policy Network (PPN)

Citizens and Experts in Policy Deliberation: Technical Knowledge in Socio-Cultural Context

Professor Frank Fischer, Rutgers University

This talk will be recorded and then made available to view on the Innogen website after the event.

For Abstract and details visit
<http://www.genomicsnetwork.ac.uk/innogen/events/seminars/>

All welcome, no need to register

Monday 12th December 2011
3.30 – 5.00 pm

Seminar Room 1.06
Old Surgeons' Hall
High School Yards
University of Edinburgh

Upcoming events

Events in early 2012

January 2012						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

Innogen Seminar

The complexity of science and innovation policy

Dr Edwin Horlings Rathenau Institute

Evidence-based decision making requires that politicians and policy makers have good information and a good understanding of the inner workings of the science and innovation system. The trouble is that they are themselves actors in the system, motivated by their own interests, and often have a 'linear' view of their leverage. At the Rathenau Institute, we are developing a theoretical understanding of the science and innovation system as a complex adaptive system, while at the same collecting empirical evidence to show how complex patterns emerge from individual behaviour within the structures of the science and innovation system.

During this seminar I will present some of the empirical results, including longitudinal changes in patterns of scientific and technological specialisation (emergent outcomes), the search strategies of individual research along their academic lifecycle (the rules of behaviour of individual agents), the organisation and leadership of medical research groups (local coordination), and coordination at system level. The mission of our institute is to reach out to the hearts and minds of politicians and policy makers at every level of the science and innovation system. I will present some of the implications of our work that we are trying to get across and which I would like to discuss with the seminar participants.

For details visit

<http://www.genomicsnetwork.ac.uk/innogen/events/seminars/>

All Welcome, no need to register

Monday 30th January 2012

3:30 – 5:00 pm

Seminar Room 1.06
Old Surgeons' Hall
High School Yards
University of Edinburgh

Monday 30th April 2012 - ISSTI Seminar

Dr Jane Gregory, University College London

Title and Abstract to follow

For updates visit http://www.stis.ed.ac.uk/events/issti/2011_2012

Monday 14th May 2012 (provisional) - Innogen Seminar

Dr Peira Morlacchi, SPRU, University of Sussex

Title and Abstract to follow

For updates visit <http://www.genomicsnetwork.ac.uk/innogen/events/seminars/>

Publications

Pat Byrne (2011). There's an off-line community on the line. Chapter 10 in : Ling, R.I. and Campbell, S.(eds) Mobile communication : bringing us together and tearing us apart. New Brunswick, NJ, USA. Transaction Publishers

Daniele Fanelli (2011). Negative results are disappearing from most disciplines and countries, *Scientometrics* (11 September 2011), pp 1-14 DOI [10.1007/s11192-011-0494-7](https://doi.org/10.1007/s11192-011-0494-7)

Daniele Fanelli (2011). A proxy for studying positive-outcome bias without meta-analysis. International Society for Scientometrics and Informetrics Conference, Durban, South Africa, July 2011

Daniele Fanelli (2011). Positive-outcome bias is increasing in most disciplines and countries. Office of Research Integrity Conference, Washington DC, USA, August 2011

Daniele Fanelli (2011). Unravelling the nature and causes of publication bias. MAER-Net (Meta-Analysis of Economics Research Network) Colloquium, University of Cambridge. September 2011

Donald MacKenzie (2011). The credit crisis as a problem in the sociology of knowledge. *American Journal of Sociology*, 116, 6, (May 2011) pp.1778-1841

Stewart Russell, Nils Markusson & Vivian Scott (2011). What will CCS demonstrations demonstrate? Mitigation and Adaptation Strategies for Global Change (Journal) DOI [10.1007/s11027-011-9313-y](https://doi.org/10.1007/s11027-011-9313-y)

Klaus Staubermann (National Museum of Scotland & ISSTI) (2011). (Editor) Reconstructions : recreating science and technology of the past. Edinburgh, NMS Enterprises

James Stewart, Xiaobai Shen, Chenwei Wang and Ian Graham (2011). From 3G to 4G : standards and the development of mobile broadband in China. *Technology Analysis and Strategic Management*, 23, 7, August 2011, p.773-88 **(See news item on page page 8)**

James Stewart, Mark Wright, Henrick Ekeus, Richard Coyne & Penny Travlou (2011). The memory space and the conference : exploring future uses of Web 2.0 and mobile internet through design interventions. In : Pierson, Jo et al (eds) *New media technologies and user empowerment*. Frankfurt, Lang, 2011. p.213-30.

James Stewart and Laurence Claeys (2011). Problems and opportunities of interdisciplinary work involving users in speculative research for innovation of novel ICT applications. In : Pierson, Jo et al (eds) *New media technologies and user empowerment*. Frankfurt, Lang, 2011. p.101-22.

Joyce Tait contributed to POSTnote on 'GM Crops and Food Security', published Sept 2011 <http://www.genomicsnetwork.ac.uk/innogen/news/title,25133,en.html>

Wang Neng-neng and Xu Fei (2011). Research on social shaping of technology and its implications. *Research on Philosophy of Science and Technology* [Kexue Jishu Zhexue Yanjiu] (in Chinese)

Wang Neng-neng and Xu Fei (2011). Research on triple play in China from the perspective of the social shaping of technology. *Science and Society* [Kexue yu Shehui] (in Chinese)

Robin Williams, Ian Graham, Kai Jacobs and Kalle Lyytinen (2011). China and global ICT standardisation and innovation : Editorial. *Technology Analysis and Strategic Management*, 23, 7, August 2011, p.715-24 **(See news item on page page 8)**