

Welcome

to the second edition of the ISSTI newsletter! The past few months have continued to be busy times at ISSTI, with new members of staff joining the Institute. The ISSTI website has been revamped along with our seminar series. Meanwhile new projects have got underway and current ones are reaching their conclusions. In this edition we bring you up-to-date with all these exciting developments, and hope you'll enjoy reading about this and other news from the Institute, including details of the honours bestowed on ISSTI staff Joyce Tait and Donald MacKenzie.

Don't forget to check out our newly re-designed website www.issti.ed.ac.uk for full details of all our current and most recent projects, to get all the latest news from ISSTI or to get in touch with any of our ISSTI researchers.

Rewarding Excellence – ISSTI Collaborators Receive Prestigious Awards for their Work

The work and achievements of Joyce Tait and Donald MacKenzie were recently recognised for their excellence in two distinguished ceremonies.

Professor Joyce Tait, Director of the ESRC Innogen Centre at ISSTI (*pictured right*) received in 2005 a CBE for services to social science. At the beginning of March 2006 she was also elected a Fellow of the Royal Society of Edinburgh. Fellows of the RSE are chosen in recognition of their extremely significant contributions to their fields and achievement in public service.

Professor Donald MacKenzie who is currently leading an ESRC Professorial Fellowship Project on Social Studies of Finance, was awarded the 2005 John Desmond Bernal Prize. The prize is awarded jointly by the Society for Social Studies of Science (4S) and the Institute for Scientific Information. It is the highest honor 4S can bestow upon an individual, and is awarded in recognition of "Distinguished Contribution to the Field".



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New Staff Join ISSTI

A number of new staff joined ISSTI in 2005. Here we take time to introduce four of the arrivals in the School of Social and Political Studies at the University of Edinburgh: Steve Yearley who took up the post of Professor of the Sociology of Scientific Knowledge and who is also Senior Professorial Fellow of the ESRC Genomics Forum, Francesca Bray - Professor of Social Anthropology, Dr Alex Preda who is part of the Social Studies of Finance ESRC Professorial Fellowship Research team, and Dr Adi Bharadwaj, Lecturer in Medical Sociology.



Professor Steve Yearley

Steve Yearley moved up to the University of Edinburgh from York as Professor of the Sociology of Scientific Knowledge. He is primarily interested in social studies of science and in environmental sociology. Steve is particularly concerned with areas where these specialisms overlap: for example in environmental controversies with a pronounced scientific element (such as with recent disputes over the safety or otherwise of GMOs) or, for example, in attempts to foster public engagement in technical decision-making in environmental areas (for instance, through his work on citizen engagement in urban air-quality issues). Additionally, Steve has been closely involved - primarily through the Wellcome Trust - with work on social aspects of human genetics and with social science questions relating to bioethics. In Edinburgh, he has been appointed Senior Professorial Fellow of the ESRC Genomics Policy & Research Forum.

Steve is beginning a new project on stakeholder engagement in environmental management and is writing a book on participation in science, technology and decision-making. His most recent book, *The SAGE Dictionary of Sociology*, which he co-wrote with Steve Bruce of the University of Aberdeen, has appeared at the start of 2006. Aside from the Dictionary, Steve's latest books are *Making Sense of Science* (Sage 2005) - on science studies and social theory - and *Cultures of Environmentalism* (Palgrave/Macmillan 2005) - a collection of empirical studies in environmental sociology.



Professor Francesca Bray

Francesca Bray has been appointed in Social Anthropology and has a wide range of interests related to ISSTI. She began her research at the Needham Research Institute in Cambridge, working on the history of agriculture in China and on comparative agricultural development. Since then she has worked at the CNRS in Paris, in the department of Anthropology at UCLA, at the Centre for the History of Science, Technology and Medicine at the University of Manchester, and most lately in the department of Anthropology at UC Santa Barbara. She has conducted research in China, Taiwan, Korea, Malaysia and California.

Her publications include: the volume on *Agriculture* in the series *Science and Civilisation in China* (1984); *The Rice Economies: Technology and Development in Asian Societies* (1986; 1994); *Technology and Gender: Fabrics of Power in Late Imperial China* (1997); *Technology and Society in Ming China, 1368-1644* (2000); and the co-edited volume on China in *Enciclopedia della storia della scienza* (2001). She has also recently published on genetically modified crops, on spatial practices and on sustainable landscapes, and she is co-editing a volume on illustration in China. She is currently preparing a study of the micro- and macro-politics of domestic technologies in California, tentatively entitled "The Tomato, the Telephone and the Toilet".

For more details on her research and teaching interests, and her online study of domestic technologies, see <http://www.anth.ucsb.edu/faculty/bray/>



Dr Alex Preda

Alex is currently Lecturer in Sociology and researcher on Donald MacKenzie's ESRC Professorial Fellowship project: Social Studies of Finance. Dr Preda's research interests cover several areas of sociology, including sociology of knowledge and science (including forms of vernacular science; forms of non-academic expertise; non-academic forms of economic knowledge; vernacular theories of/in financial markets); sociology of technology (especially communication technologies in market settings; price-recording technologies); sociology of medical knowledge (AIDS research; virology); economic sociology (especially financial markets); sociology of culture (economic cultures); the historical sociology of financial markets. He has recently published *AIDS, Rhetoric, and Medical Knowledge* (Cambridge University Press, 2004) and co-edited with Karin Knorr Cetina *The Sociology of Financial Markets* (Oxford University Press, 2004).

Dr Aditya Bharadwaj

Aditya (Adi) Bharadwaj teaches Medical Sociology. His principal research interest is in the area of New Reproductive, Genetic and Stem Cell Biotechnologies and their rapid spread in diverse global locales ranging from South Asia to the United Kingdom.

His past research has examined issues surrounding gender and reproductive health care with special reference to medically mediated childbirth, food and nutrition and immunisation. His recently concluded research, funded by ESRC's Innovative Health Technologies Programme, was located in South Wales. The research explains the consequences of population screening for genetic disorders based on the case of haemochromatosis. This rapid growth of reproductive and genetic biotechnologies around the globe frames his current research examining the proliferation of stem cell technologies in India and the UK. The project uncovers transnational complexities in research on biogenetic materials such as human gametes and embryos in the broader context of governance frameworks in India and the UK that control and contain the development of stem cell technologies.

After completing a co-authored book on New Genetics and Kinship (Berg), Adi is currently writing a monograph on *Conceptions: Infertility and Technologies of Procreation in India* and co-authoring a book titled *Local Cells and Global Science: The Proliferation of Stem Cell Technologies in India* (Routledge).

Dr Catherine Lyall appointed in new post to develop and coordinate research at ISSTI



Catherine Lyall moved in January 2006 from her post as Innogen Research Fellow to take up the new role of ISSTI Interdisciplinary Research Coordinator. She will be working on the Institute's research development and knowledge transfer strategy, helping develop and contribute to the consolidation of ISSTI's expertise in interdisciplinary research. She continues in her new role to be closely involved in Innogen research activities, and co-organised Innogen's event for 2006 Social Science Week with the National Centre for Research Methods (NCRM) and the National Centre for E-Social Science. Entitled "Interdisciplinary Working across the Natural and Social Sciences: Process, Practice and Progress", this event, run via the access grid, included presentations and discussion of the challenges, opportunities, barriers and benefits of interdisciplinary working across the natural and social sciences in the area of genomics. Speakers and participants were drawn from Innogen, Cesagen and NCRM and were located at venues at the Universities of Edinburgh, Manchester and Southampton.

Postgraduate Excellence

The Edinburgh postgraduate programmes in Science and Technology Studies continue to go from strength to strength. In the recent ESRC Postgraduate Training Recognition Exercise, we were awarded six quota awards to fund postgraduate students on our MSc by Research and PhD programmes – one of only four centres in the UK to receive such awards. This is a resounding endorsement of the excellence of our postgraduate training and of the vitality of the STS research community in Edinburgh.

The MSc and MSc by Research programmes have also seen significant expansion, with the addition of a dedicated Life Sciences strand including new courses in Genetics, Nature and Society and in The Evolution and Dynamics of Biotechnology. These courses complement our growing expertise in the sociology of the life sciences and biotechnology, especially in Innogen and the Genomics Forum, and add a further dimension to what is widely acknowledged to be the best general programme of postgraduate training in STS in the UK.

Students entering our postgraduate programmes join a thriving and lively community of taught and research postgraduates.

For more information about our postgraduate programmes, see the Graduate School website <http://www.sps.ed.ac.uk/gradschool/> or contact: Dr Ivan Crozier (Ivan.Crozier@ed.ac.uk – MSc programmes) or Dr Steve Sturdy (s.sturdy@ed.ac.uk – PhD programmes).

Innovation challenges in renewable energy

ISSTI researchers are preparing their final policy conclusions and recommendations following their work on the two year BREIS STP project, which has been analysing Scottish and UK energy policy aimed at promoting innovation in renewable energy technologies, especially marine energy (wave and tidal stream power). The researchers have found that policy learning based on international experiences, whilst useful, may neither recognise the full range of influences on technological change, nor the complex interplay between international developments and local context. The findings point to two areas of particular interest – the institutional and policy context of marine energy innovation systems, and multi-level governance in renewable energy policy in Scotland. This has led the BREIS researchers to examine the tensions between social and financial capital in marine energy innovation, especially in the emerging Scottish policy arena, where they found that recent policy initiatives to promote renewable innovation in the UK, though significant, face a number of continuing challenges. They have also noted that while multi-level governance presents added challenges for policy integration, it opens up new possibilities for policy reform and experimentation. Visit the BREIS website for more information and details of project outputs: www.sustainabletechnologies.ac.uk/projects/renewables.htm

Network Enterprise Results Available Online

The recently completed ESRC Network Enterprise project on the shaping of institutions and standards in e-business has compiled a brochure providing details of the project's key findings. The emergence of technologies such as XML was expected to result in widely applicable message exchange standards, opening up e-business across regions and sectors. The project showed however that the emergence of data exchange standards continues to be coordinated by 'local' institutions addressing the requirements and interests of specific users.



The dynamics of message standardisation (in case studies of health and insurance) differ sharply from hardware interoperability standards (exemplified in this study by RFID in logistics) coordinated at the level of global institutions. Much standards research has unhelpfully overlooked these differences. Download the brochure for more detailed results by visiting:

<http://www.managementschool.ed.ac.uk/research/netent/workshop/ProjectSummary.pdf>

'Non-Place' project develops design strategies for the future

Funded by the AHRC and EPSRC's 21st Century Design Programme, the 'Non-Place' project has brought together a network of 25 academic researchers and commercial practitioners from disciplines as diverse as cultural geography, architecture, user interface design, signage studies, technology studies and mobile system engineering, to investigate issues of design and use of 'non-places'. Non-places are the ubiquitous everyday spaces of late-capitalist cities: airports, malls, supermarkets, motorways, hotels and bureaucratic spaces, designed to be experienced by transitory and mobile individuals such as shoppers, commuters, tourists, migrants or virtual workers. The project has generated a multidisciplinary research agenda that will be further developed in coming years. Particular themes include the design and management of public and commercial places that are culturally rich and promote exploration, while maintaining security and open access, and understanding how cities can be made 'legible' in the future, especially with new networked personal technologies and dynamic urban screens.

Further details available at: <http://ace.caad.ed.ac.uk/NonPlace/>



Upcoming Interdisciplinary Conference in Edinburgh - Culture, Nature, Future?: Perspectives on Science and Development in Africa

The Royal Zoological Society of Scotland, The University of Edinburgh's Centre for African Studies and the ESRC Innogen Centre at ISSTI will be hosting a conference on 12 -13 April 2006. The conference will focus on three historically informed themes that intersect the relationships between Africa, science and development, namely generating scientific knowledge in Africa, the use and misuse of science and technology in Africa, and scientific narratives in Africa. For more information and to register please visit: <http://www.cas.ed.ac.uk/conference>

eHealth Research Network goes from strength to strength

The Edinburgh eHealth Research Network is playing a key role in developing new cross-disciplinary collaborations, and now counts over 40 members spanning Edinburgh University's Colleges of Medicine and Veterinary Medicine, Science and Engineering, and Humanities and Social Science, as well as NHS partners. An email distribution list has been set up to keep members informed about new projects, conferences and funding calls. The regular seminar series has attracted excellent talks from distinguished external speakers as well as in-house researchers. The network also contributed to the recent Royal Society consultation exercise on ICTs in health and healthcare, and helped coordinate the recent Scottish Science Advisory Committee meeting on eHealth. Other significant developments have included receipt of commercial sponsorship for a post-doctoral research fellowship involving patient-centred eHealth tools for chronic disease, whilst an awareness-raising day with funding organisations and the media is planned for the summer. Keep up-to-date with the network's activities by visiting: <http://www.chs.med.ed.ac.uk/gp/downloads/eHealth/index.html>

Foresight Project: Detection and Identification of Infectious Diseases

Four Innogen researchers and associates have been working for over a year on the UK Office of Science and Technology Project on Detection and Identification of Infectious Diseases (DIID). This team was responsible for the Risk Work Package of this project, considering the future risks of infectious diseases in humans, plants and animals in the UK and Africa, with a view to providing guidance on the development of detection, identification and monitoring technology for infectious diseases. They conducted a 2-stage survey of 80 scientific experts in the UK and Africa and also commissioned a series of expert reviews of the risks of selected diseases. The launch of this project will take place on 26th April, led by Sir David King, and a conference to present the key findings will be held on 3rd May. All research materials will then be available on the Foresight website, <http://www.foresight.gov.uk/>

New and Ongoing Innogen Projects

Farmers' Understandings of Genetically Modified Crops within Local Communities

This three-year research project is investigating the attitudes, intentions and practices of farmers regarding the new technology of GM crops, in relation to their social setting. To this end, the project is exploring how farmers construct their understandings of genetically modified herbicide tolerant (GMHT) crops through their interactions with others, in particular family members, neighbouring farmers, seed companies, farming advisors and the local community. Researchers are also seeking to ascertain the acceptability to farmers (both those with experience of GMHT crops and those without) of recommended management practices for GMHT crops used in UK government farm scale evaluations of GMHT crops. The project hopes to develop models of social learning systems appropriate to support individual farmers who decide to adopt contentious new technologies such as GMHT crops. More details are available via the project website at: <http://www.innogen.ac.uk/Research/Farmers-Understandings-of-Genetically-Modified-Crops-within-Loc>

Legal and Bioethical Regulatory Mechanisms

This project, due to end in September 2007 is examining the role of legal and ethical principles in guiding the regulation of genetic research and activities, and the mechanisms by which these can take effect nationally. Key areas of concern include: the search for a universal bio-ethical code; relationships between national and international advisory and regulatory bodies in regulating scientific developments; and the role of advisory commissions and ethics committees to provide public legitimisation for scientific developments. See: <http://www.innogen.ac.uk/Research/Legal-and-bioethical-regulatory-mechanisms>

ETEPS Project:

Consequences, opportunities and challenges of modern biotechnology for Europe (BIO4EU)

Innogen members will be contributing to a European team of researchers working on this project, to provide advice for members of the European Parliament through ETEPS (a network for European Techno-Economic Policy Support). The objective is to provide an assessment of the consequences, opportunities and challenges that applications of modern biotechnology present for the EU, to identify and quantify the contributions of modern biotechnology to the achievement of major European policy objectives as formulated in the Lisbon Agenda and the sustainable development strategy. Innogen's contribution will be in mapping the adoption of modern biotechnology in primary production/agro-food in the EU and evaluating the consequences, opportunities and challenges of applications in primary production and agro-food.

Other News in Brief...

- **ISSTI Retreat** – ISSTI researchers will be heading off for their annual retreat 14–16 March. The retreat offers ISSTI staff a chance to present and discuss their research with peers, providing a unique opportunity to explore cross-cutting research themes in the beautiful setting of 'the Burn', a study centre set in the Highlands of Scotland.
- **Professor Joyce Tait** has been invited to join the RSE Inquiry into Energy Issues for Scotland.
- Innogen researcher **Dr Sarah Cunningham Burley** has just been appointed as a member of the Human Genetics Commission.
- **New website for Prometea project on Women in Engineering Research** – Visit the newly launched website of the European Project Prometea which got underway at the end of 2005. See www.prometea.info for more information.
- ISSTI submitted evidence to the House of Commons Select Committee on Science and Technology as part of its inquiry into the government's use of scientific advice. A copy of the submission is available from the ISSTI website <http://www.issti.ed.ac.uk/news>
- Innogen has announced its annual conference **Genomics for Development? The Life Sciences and Poverty Reduction** to be held on 5th–6th September 2006 in London. For more details visit www.innogen.ac.uk/events/annual-conference
- A new programme of ISSTI/Innogen seminars is being advertised on the ISSTI website <http://www.issti.ed.ac.uk/news>