

ISSTI

THE INSTITUTE FOR THE
STUDY OF SCIENCE
TECHNOLOGY AND INNOVATION
www.issti.ed.ac.uk

newsletter

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ISSTI Retreat 2019

Links to YouTube videos of all presentations are on Page 5

This issue of ISSTI Newsletter celebrates new awards and a host of new staff appointments in the new academic year. As well as reviewing research outcomes, we celebrate many events where our community comes together, including the annual ISSTI Retreat.

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WANT MORE NEWS?!

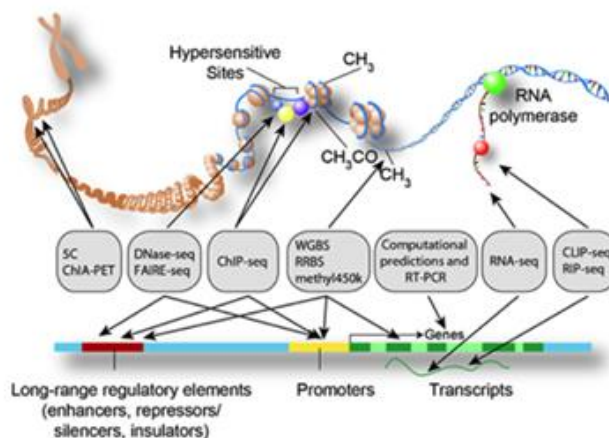
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[@UoE_ISSTI](https://twitter.com/UoE_ISSTI) & [@UoE_STIS](https://twitter.com/UoE_STIS)

H2020 Award for Agri-tech Research and Engagement

Ann Bruce is part of a major new H2020 project "BovReg: Identification of functionally active genomic features relevant to phenotypic diversity and plasticity in cattle"

The 20-partner consortium coordinated by Germany and including partners from the EU, Canada and Australia, will receive ~ 6 M€ in research funding over four years. BovReg brings together a critical mass of interdisciplinary researchers covering a range of disciplines, including specialists in ruminant research, bioinformatics, molecular and quantitative genetics, animal breeding, reproductive physiology, ethics and social science.



Despite the revolution in genome analysis, a wide gap in understanding associations between the (epi)genome and complex phenotypes of interest currently remains. This project will develop biology-driven genomic prediction tools that will integrate biological knowledge on regulatory genomic variation, into genomic selection schemes for local and global cattle populations. This improved knowledge will be useful for re-focussing cattle production, fully taking into account societal awareness, environmental and animal-welfare aspects, as well as bio-efficiency. Ann Bruce will be developing a 'game' that will enable non-specialists to discuss future directions for cattle breeding that can inform development of the genomic prediction tools.

Exploring Mental Health in Malawi

Martyn Pickersgill (Usher Institute) is a Co-I with Andrew Macintosh on 'Generation Malawi', a new £3.6 Million MRC project

A collaboration between the Malawi College of Medicine and The University of Edinburgh (with additional input from LSHTM), the project brings together mental health researchers and clinicians with social scientists and humanities scholars to explore the social and biomedical underpinnings of maternal and childhood mental ill-health in Malawi.



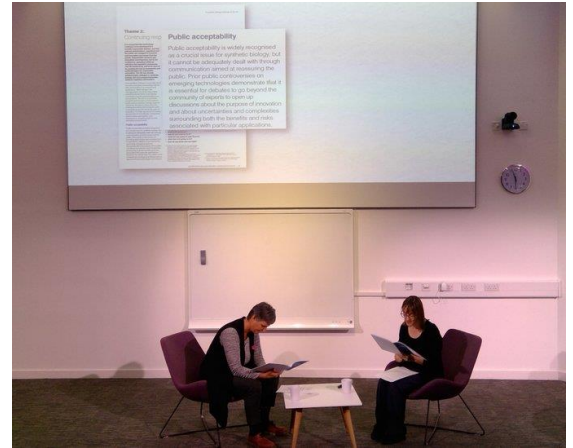
This is the Newsletter of the Institute for the Study of Science, Technology and Innovation (www.issti.ed.ac.uk) This interdisciplinary network, founded in 2000 by Robin Williams, brings together colleagues from across the University studying science, technology and innovation and is hosted by the Science, Technology and Innovation Studies (STIS) Subject Group.

Science, Technology and Innovation Studies (STIS) Subject Group at the University of Edinburgh is internationally recognised as a leading centre of research, teaching and knowledge exchange in this important interdisciplinary field. With more than 40 staff, STIS enjoys outstanding ratings for its scholarly publications and impact, sustains research intensity with a high volume of external research income, and excels in teaching through a suite of undergraduate and postgraduate courses and programmes. For more information, see our website: www.stis.ed.ac.uk.

AsSIST-UK First Research Conference

2019 AsSIST-UK Conference (University of Manchester, 9-10 September 2019) attracted over a hundred scholars to discuss Critical Inquiries in Theory and Practice for Science, Technology and Innovation Studies.

This national conference provides an opportunity for colleagues across the country (and beyond) to come to present their work and share ideas. It marked an important stage in our efforts to establish the UK Association for Studies of Innovation, Science and Technology (www.assist-uk.org) as the scholarly membership organisation for our field.



Claire Marris (left) and Jane Calvert (right)

An entertaining highlight was a play performed by Jane Calvert and Claire Marris describing their experiences as STS researchers trying to engage with the field of synthetic biology - for a more formal account, see their joint paper: 'Science and Technology Studies in Policy: The UK Synthetic Biology Roadmap' that appeared earlier this year in *Science, Technology and Human Values*.

Recognitions for Prof Bray and Prof Webb

Prof Francesca Bray has been awarded the 2019 Leonardo da Vinci medal by the Society for the History of Technology: <https://www.historyoftechnology.org/about-us/awards-prizes-and-grants/the-leonardo-da-vinci-medal/>.

Prof Jan Webb has been appointed to the Infrastructure Commission for Scotland (ICS), advising the Scottish Government on the key strategic and early foundation investments that are needed to deliver sustainable, inclusive economic growth and support the delivery of Scotland's low carbon objectives and achievement of its climate change

Regional Dialogues in Study of Science, Technology and Innovation



In June 2019, ISSTI was the host of the research workshop "Regional Dialogues in the Study of Science, Technology and Innovation". Organised by the University of Edinburgh Latin American STS Reading Group, this event brought together 25 different scholars and researchers, interested or working on, different geographies across the globe, to discuss the challenges and opportunities in the application of STS concepts, frameworks and methodologies in different latitudes.

The aim of this event was to create an informal but vibrant space for postgraduate students and academic researchers, for exchanging experiences, to reflect on their own research, while discussing their methodological challenges; and to explore areas for opportunity and future collaborations. This allowed us to generate discussions and develop contacts with academics from non-hegemonic countries, which have often been overlooked in traditional academic events.

This research workshop had two main speakers Leandro Rodríguez from Universidad de las Américas, México; and Pablo Kreimer, from Maimónides University, Argentina. Other participants included: Michael Barany, Niki Vermeulen, Robin Williams, Francesca Bray, Eugenia Rodriguez and Miguel García Sancho, from ISSTI; and Michele Wahome, from the Oxford Internet Institute.

Major New Dataset to Study the History of Genomics

A new, freely available online dataset enables users to identify overlooked individuals, institutions and connections in the history of genomic science. It comprises more than 13 million records and has been compiled, after more than two years of work, by the ERC-funded project Medical Translation in the History of Modern Genomics (TRANSGENE). The dataset documents the institutions that submitted yeast, human and pig DNA sequences to the European Nucleotide Archive and other open access databases between 1980 and 2015, indicating for each institution the number of both submissions and submitted nucleotides per year. It also lists the PubMed ID, authors and publication year of the articles that describe these sequences for the first time in the scientific literature. The source code of the software that was used to compile the data can also be downloaded without restrictions.



The data collection process involved 30 million automated searches in the European Nucleotide Archive, Europe PubMed Central and Scopus. The search results needed to be structured in a new fashion in order to interlink 13.4 million sequence submissions with 28,328 fully indexed publications – more than 75% of these records are related to human sequencing. A data note describing the search strategy and cleaning protocol, as well as the design and structure of the dataset has been published in the open access and open peer review life sciences platform F1000Research.



The TRANSGENE team is now analysing a number of co-authorship networks that are derived from the data. These analyses are being combined with historical knowledge that the project has drawn from oral histories and archival searches. The results of this mixed method approach will be published in a history of science journal during 2020 or early 2021.

The Comeback of Psychedelic Healing?

Fifty years after Woodstock, psychedelic medicine is enjoying a resurgence of interest from biomedical researchers. Many of these therapies, however, were actually developed “underground” by networks of people seeking better ways to treat challenging medical problems. On 17th July 2019, Dr Martyn Pickersgill, Wellcome Trust Reader in Social Studies of Medicine, University of Edinburgh chaired a panel on “Psychedelic Healing”, comprising of citizen scientist Craig “Flash” Adams – who launched a global, patient-led research movement with his discovery that Liberty Cap mushrooms could treat cluster headaches - and Joanna Kempner, Associate Professor of Sociology at Rutgers University, who is writing a book about how Flash’s discovery went from an internet post in 1998 to a 2019 clinical trial at Yale. Angus Bancroft, Senior Lecturer in Sociology at the University of Edinburgh and expert on underground drug markets, contributed reflections on the talks.



17 July, 16:00 - 17:30, Godfrey Thomson Hall, Holyrood Road, EH8 8AQ

ISSTI Retreat 2019



Video recordings of talks and panels from the 2019 ISSTI Retreat, held at Linlithgow Burgh Halls between 10-11 June 2019, have been made available on the ISSTI YouTube channel (<https://www.youtube.com/EdinburghISSTI>).

You can find the full playlist for the ISSTI 2019 Retreat here: http://bit.ly/ISSTI_Retreat2019-Playlist or have a look at individual videos:

Robin Williams : Welcome and opening remarks https://youtu.be/83zNBRqIEw4
Paolo Quattrone (UEBS) : The Mystery of Value https://youtu.be/2TbfpWPx4bU
Steve Yearley (STIS) The politics of re-framing environmental concern in terms of “ecosystems services” https://youtu.be/2o_bBtZm-gs
Mandy de Wilde (Wageningen University): Mitigating climate change, marketizing trust: on (not) maintaining judgment devices in the Dutch energy retrofit market https://youtu.be/7QkhFgx9uHs
Algorithmic knowledge Panel Guido Sanguinetti (Director: EPSRC Centre for Doctoral Training on AI and Biomedicine), Christine Aicardi (Kings College London), Lukas Engelmann (STIS) https://youtu.be/Daz2CeF002M
Mario Biagioli (Centre for Science and Innovation Studies, UC Davis): Metrics and Misconduct: New Ecologies of Scholarly Publishing https://youtu.be/VsGYUB3nF6w
Miguel Garcia Sancho (STIS): <i>On time, history and expectations: how the narration of the past shapes the future of contemporary biomedicine</i> https://youtu.be/198BieTrkKY
Hung The Nguyen (STIS): <i>Futures and Accountability: Discerning Expectations' Credibility from a Linked-Ecologies perspective</i> https://youtu.be/QKskviaYiKU
Arno Verhoeven (School of Design, Critical Change Group): Scenario Building or Design Fiction? Differences between transitory and anticipatory approaches to technological development https://youtu.be/XzM2suXv9mE
Neil Pollock (UEBS): Two sides to every story: How accountability shapes entrepreneurial storytelling https://youtu.be/TemSd3zn4Js
Prof. Pablo Kreimer (Centro de Ciencia, Tecnología y Sociedad, Universidad Maimonides, Argentina): <i>Sociotechnical promises. A view from the periphery</i> https://youtu.be/dN-BKJsQKqM
Xiaobai Shen (EUBS): Reflecting on the power of “data traces” - from Alibaba MyBank financing millions of SMEs to the call for big-data assisting anti-corruption in China https://youtu.be/FTS55MIOQHI
Michael Barany (STIS) : Regional Hegemony and Fellowship Programmes in South America https://youtu.be/g5brXcbBpSA
Robin Williams – Round up and look forward https://youtu.be/0FKlyJ6dV7g

Staff Appointments



We are delighted to welcome an array of new colleagues.

Dr Moa Carlsson

Moa Carlsson is a Lecturer at the Edinburgh School of Architecture and Landscape Architecture (ESALA), researching histories and practices of computing in architecture and urban planning in Great Britain and the United States after 1945. Her research and teaching explore relationships between digital media, visibility and ideas of heritage, with a specific focus on the governance of open visual space. Her current project examines how views in the built environment become political instruments that are variously treated as geometric abstractions and lived realities. She was awarded her Ph.D. (2019) and M.Sc. (2013) in Design and Computation, with a Minor in STS, from MIT, and her M.Arch. (2008) from Lund University, Sweden. During the 2015/2016 academic year, Moa was a visiting researcher at the University of Cambridge Department of History and Philosophy of Science (HPS), and a research affiliate at the Museum of English Rural Life (MERL) archives in Reading.



Dr Sophie Haines

Sophie Haines is a Lecturer in Anthropology of Development in the School of Social and Political Science. Before joining Edinburgh in 2019, she was a Research Fellow at the Institute for Science, Innovation and Society (University of Oxford) 2013-19; and a researcher in the UK House of Commons (2010-12). She completed her PhD in Anthropology at University College London in 2011. Sophie's research interests include: infrastructure and anticipation; environmental citizenship; and ecologies of knowledge. Her research and teaching in Edinburgh will focus on anthropological and STS-informed approaches to international development, environment and energy, for example in ongoing research on highway



planning/construction, the production and use of weather/climate forecasts, and knowledge negotiations in watershed assessments and interventions, based on ethnographic research in Belize, Kenya and the UK.

Dr Kirsten Jenkins

Dr Kirsten Jenkins joins STIS as a Lecturer in Energy, Environment and Society. Kirsten previously held positions as a Lecturer in Human Geography and Sustainable Development at the University of Brighton and as a Research Fellow in the Centre on Innovation and Energy Demand (CIED), part of the Science and Policy Research Unit (SPRU) at the University of Sussex. She completed her PhD at the University of St Andrews in December 2016. At Edinburgh, Kirsten will convene the Science, Nature and Environment course at first year level and co-convene the third year Energy Policy and Sustainability course. From September 2020, Kirsten will also co-direct the MSc in Energy, Society and Sustainability. Kirsten serves as Managing Editor for the journal Energy Research & Social Science.



Dr Catherine Montgomery

Catherine has recently joined the Centre for Biomedicine, Self & Society as a Research Fellow in Data Practices in Biomedicine. Her research to date has focused on the ways in which the design of clinical research produces particular configurations of knowledge, sociality and change. Her current work explores the notion of the 'self-learning health care system' as enacted through adaptive platform trials in the NHS. Before coming to Edinburgh, Catherine held fellowships at the Amsterdam Institute for Social Science Research (AISSR), the Institute for Science, Innovation & Society (InSIS) at the University of Oxford and the Science and Technology Studies Unit (SATSU) at the University of York.



Staff Appointments



Dr Merlin Seller

Dr Merlin Seller completed their MA and Mst at St Andrews and Oxford respectively, and obtained their doctoral thesis at



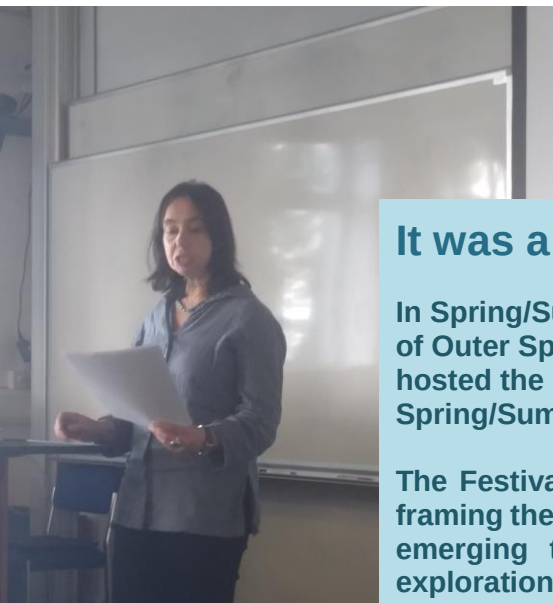
UEA on intermedium works between film, photography and painting in interwar England. With a background in Visual Cultural Studies, and a teaching background in game design they are currently a Lecturer in Design and Screen Cultures, working across visual studies, film studies and game studies. Currently they are Course Organiser for the MFA Dissertation (Design Cultures) and are also teaching on Multi-Sensory Cultures and D&SC4. Their present research interests concern Phenomenology in games, Post-digital aesthetics, Thing Theory and Queer Theory.

Congratulations to Dr Daniel Thorpe for a new position at the Fraunhofer Institute in Karlsruhe.

Our recent graduate Daniel Thorpe started work at the Fraunhofer Institute for Systems and Innovation Research (ISI) in mid-September. ISI is one of the Fraunhofer Society's 72 institutes and research units across Germany. Unlike Fraunhofer's application-oriented institutes that focus on shaping technologies and techniques (communication, radar technology, materials research, energy transition etc.), the focus at ISI is on analysing and understanding social, economic and political implications regarding possible innovation pathways (technical, institutional and organisational), such as by using scenario methods and other social science methods, concepts and theories.



With customers from industry, politics and academia, Daniel will join the currently developing Joint Innovation Hub at ISI. In this new unit, they will work on developing new projects, including alternative transdisciplinary approaches to developing, implementing and evaluating innovation projects in collaboration with different stakeholders, as well as related methods and ways of communication.



It was a Summer of Space!

In Spring/Summer our emerging Social Dimensions of Outer Space network (www.sdos.ac.uk / @S_D_O_S), hosted the inaugural Space Enlightenment Festival in Spring/Summer 2019 (11th April – 19th July).



The Festival highlighted the vital contribution of humanities and social science to framing the future of Scottish and global engagement with Outer Space, through both emerging technologies here on Earth and the expanding frontiers of space exploration and industry.

The festival also coincided with several key anniversaries, for instance the 200th anniversary of the birth of most famous Astronomer Royal for Scotland, Charles Piazzi Smyth, and the 50th anniversary of the first human landing on the Moon.

The festival combined about 15 events in total, varying from academic activities (such as a seminar series and a pedagogical workshop) to a host of public events (talks, round-tables, exhibitions).

