# ISSTI

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

# newsletter

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# Highlighting Our Diverse Engagements

### A Visit to Expand Ties with Korea's KISTI

On 23<sup>rd</sup> August we hosted a visit from Prof Hee-voon Choi, the **President of the Korean Institute** for Science and Technology Information (KISTI). KISTI is one of Korea's leading national science technology and research institute. Its mission is to invigorate knowledge sharing and promote a data ecosystem that can exploit science and technology knowledge resources.

ISSTI members from across the University discussed changing understandings of innovation and how it might be promoted with a team from KISTI, which included our own former PhD student, Eun-Sun Kim. John Crawford from



Scottish Development International and Neil Robertson, Dean International Partnerships, College of Science and Engineering explored issues about how to develop further collaborations with Korea.

## ePAMS+ Major Award Builds on ISSTI Work on Electronic Prescribing

Professor Aziz Sheikh, Professor Robin Williams, Dr. Kathrin Cresswell, Dr. Hajar Mozaffar, have secured a major, £2.5 million National Institute for Health Research (NIHR) Programme grant in collaboration with University Hospitals Birmingham NHS Foundation Trust.

The funding is to develop and evaluate an intervention to safely reduce inappropriate antibiotic use in adult medical in-patients. Robin, Kathrin and Hajar will develop and trial a computer-based tool to help clinicians manage the use of antibiotics in a more timely and effective manner.

## **Dritsas and Schyfter contribute to Frankenbook**

STIS lecturers Dr Lawrence Dristas and Dr Pablo Schyfter are amongst the diverse contributors to Frankenbook, a collective reading and collaborative annotation of the original 1818 text of Frankenstein; or, The Modern Prometheus, by Mary Wollstonecraft Shelley.

The project has been led by the Center for Science and the Imagination at Arizona State University, in partnership with The MIT Press and MIT Media Lab, and funded by the Alfred P. Sloan Foundation. The full Frankenbook, "annotated for scientists, engineers, and creators of all kinds," along with additional resources including essays, video, and audio, can be found at <a href="https://www.frankenbook.org/pub/book">https://www.frankenbook.org/pub/book</a>

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.

# "Talking STS"



# STIS Staff & Colleagues Publish "Talking STS" About Past, Present, and Future of STS

Talking STS, a collection of interviews and accompanying reflections on the origins, present, and future of Science and Technology Studies (STS) is now published with the openaccess journal Engaging STS, under their Traces section.



The volume assembles thoughts and recollections from leading figures involved in the making of this field at the fiftieth anniversary of the founding of the University of Edinburgh's Science Studies Unit (SSU). While the Unit is a recurring theme of the volume, the interviews have a broader purpose – to present interviewees' situated and idiosyncratic experiences and perspectives on STS, going beyond the contributions made to it by any one individual, department or institution. Together with the reflections from the interviewer, they prompt further discussion, reflection and questioning about this constantly evolving field.

#### Contributions include:

- <u>"Things Can Be Done Here That Cannot So Easily Be Done Elsewhere"</u>: Jane Calvert Talks with Arie Rip
- Cracking the Crystal in STS: Marcelo Fetz Talks with Harry Collins
- Imagining Alternative and Better Worlds: Isabel Fletcher Talks with Adele E. Clarke
- "These Were Not Boring Meetings": Miguel García-Sancho Talks with Karin Knorr Cetina
- STS and the Importance of being a Collective: Gill Haddow Talks with Barry Barnes
- The Whole World is Becoming Science Studies: Fadhila Mazanderani Talks with Bruno Latour
- STS as a Program of Ontological Disobedience: Koichi Mikami Talks with Steve Woolgar
- ST(&)S: Martyn Pickersgill Talks with Sheila Jasanoff
- STS and its Challenging Obligations: Pablo Schyfter Talks with Donald MacKenzie
- Ways of Knowing and Doing STS: Niki Vermeulen Talks with Wiebe Bijker
- It's Important to Go to the Laboratory: Malte Ziewitz Talks with Michael Lynch
- <u>Challenging Power, Constructing Boundaries, and Confronting Anxieties: Michael Kattirtzi</u> Talks with Andrew Stirling
- On SSK and Conversing with Scientists: Eugénia Rodrigues Talks with Michael J. Mulkay

### **MacKenzie Awarded Progress Medal**

Donald MacKenzie has been awarded a 'Progress Medal' by the Society for Progress. Based in INSEAD, the Business School in Fontainebleau, France, the Society seeks to promote scholarship and leadership on societal fairness and well-being. MacKenzie's medal is for 'exposing how fundamental financial theories and models don't just explain but also, by rationalizing and legitimating practices and regulations, cause financial products, markets, and outcomes'. This idea, originally developed by the French economic sociologist and STS scholar, Michel Callon, has become known as the 'performativity' of economic models. MacKenzie received his prize at an award ceremony in the Palais de Fountainbleau in June.



## **ISSTI** Retreat 2018 Videos Published



The annual ISSTI retreat is where the Edinburgh research community comes together to exchange ideas and develop new perspectives. Video recordings of talks and panels from the 2018 ISSTI retreat Linlithgow Burgh Halls (7-8 June 2018) have been made available on the ISSTI YouTube channel (https://www.youtube.com/EdinburghISSTI).

You can find the full playlist for the ISSTI 2018 Retreat here: <a href="http://bit.ly/ISSTI\_Retreat2018-Playlist">http://bit.ly/ISSTI\_Retreat2018-Playlist</a> or have a look at individual videos:

Robin Williams – Welcome and opening remarks <a href="https://youtu.be/YQQKCCtl6BY">https://youtu.be/YQQKCCtl6BY</a>

Donald MacKenzie – Power and the Mundane Political Economy of Finance <a href="https://youtu.be/40vm-tRZxJY">https://youtu.be/40vm-tRZxJY</a>

Gian Marco Campagnolo, Yazmin Morlet Corti, Wifak Gueddana, Rhodri Leng, James Stewart - Methodological and Epistemological Challenges in Digital Social Research <a href="https://youtu.be/OeMVknNIYsY">https://youtu.be/OeMVknNIYsY</a>

Barry Barnes – Where has all the power gone <a href="https://youtu.be/5ruAcq15">https://youtu.be/5ruAcq15</a> pA

A Praxis of Intervention? - Jane Calvert (chair), Rob Smith, Robin Williams, Mark Winskel https://youtu.be/Zjm38oxl27k

Morgan Currie and Lukas Engelmann – From Agonism to a Politics of Refusal: Political Theories of Data Activism https://youtu.be/ARZdt4XwqOq

Alexander Borda-Rodriguez, Chrysa Lamprinopoulou, Fumi Kitagawa, Luis Soares and James Stewart – The Concept of Resilience https://youtu.be/frX9BGHXXrQ

Tiago Moreira – Translating Cell Biology of Aging? On the Importance of Choreographing Knowledge
https://youtu.be/WY510e8cnDQ

Robin Williams – Round up and look forward <a href="https://youtu.be/Kw\_AabDvvW8">https://youtu.be/Kw\_AabDvvW8</a>

## Focus on Research



# The Second Most Important Pitch: How Digital Start-Ups Must Navigate the Endorsement Economy

The 'pitch' software entrepreneurs give to venture capitalists to secure funding has become the stuff of legend. But there is another – just as important – pitch that the entrepreneur must make if their fledgling venture is to survive and prosper. The UK is one of the leaders in promising new digital ventures worldwide. However, there are concerns that many will fail.

The aim of this 3-year ESRC funded project run by Prof Neil Pollock (University of Edinburgh) and co-investigators Dr Luciana D'Adderio (University of Strathclyde) and Prof Richard



How digital ventures must navigate the 'endorsement economy' to scale

Neil Pollock, Duncan Chapple, Suwen Chen, Fabio Rocha

Harrison (University of Edinburgh) is to foster a discussion around a pivotal evaluative hurdle that influences the ability of new digital ventures to prosper. One thus far unrecognised factor influencing whether a new digital venture can grow is the backing of industry analysts (analysts wield influence over technology adopters and investors regarding their choice of technology vendors). There is anecdotal evidence that those ventures endorsed by these important market actors receive a significant boost and, conversely, where this form of backing is not forthcoming, it becomes a block or impediment to progress. We term this hurdle the 'second most important pitch'.

We will analyse the 'pitches' made by new digital ventures to analyst firms and investigate how the analysts subsequently assess the venture's viability and potential as compared to other players. While much has been written about the first equity pitch a start-up will make to an investor, little is known about how ventures make these second important pitches to analysts to win their endorsement. We theorise the second pitch as an integral part of an 'endorsement economy' that has developed within the digital and broader information technology sector.

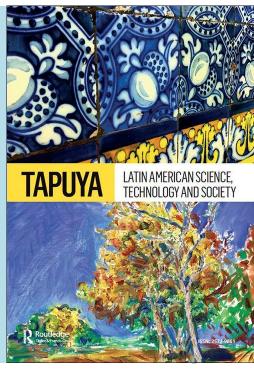
To develop this concept, we build on studies from Economic Sociology that have looked at how perceptions of the value of new ventures stem from such things as 'credentialing' and 'affiliation'. In this project, we extend the range of topics that fall under the Science and Technology Studies umbrella. Whilst STS has been productively applied to the study of the economy, financial markets and business, there are relatively few examples where it has been used to throw light on entrepreneurship, and no examples where it has been applied to Digital Entrepreneurship.

## Call for Papers: The Grey Zones of Innovation

Óscar Moreno and Javier Guerrero, respectively current PhD and alumnus are developing a special edition of the Journal Tapuya: Latin American Science, Technology and Society on The Grey Zones of Innovation They are inviting proposals for papers analysing illegal and informal innovation in Latin America and other geographies in the global south, going beyond traditional framings in terms of security and economic approaches to address the kind of knowledge, designs, technologies, techniques, learnings or shrewdness flowing through contexts of illegality and informality. Creativity expressed in workarounds, repair, maintenance, reuse, as well as the production of craft machines and artefacts are crucial for this call.

The deadline for abstracts: 31st March 2019, If accepted, a full 8000-word draft would be due July 2019. This cluster is planned to be published between late 2019 and early 2020.

More information can be found at: <a href="http://explore.tandfonline.com/cfp/est/ttap-submissions?utm-source=CPB&utm-medium=cms&utm-campaign=JMJ02597">https://explore.tandfonline.com/cfp/est/ttap-submissions?utm-source=CPB&utm-medium=cms&utm-campaign=JMJ02597</a> or <a href="https://tapuya.la/2018/10/04/tapuya-call-for-papers-the-grey-zones-of-innovation-the-illegal-and-the-informal-in-latin-america/">https://explore.tandfonline.com/cfp/est/ttap-submissions?utm-source=CPB&utm-medium=cms&utm-campaign=JMJ02597</a> or <a href="https://explore.tandfonline.com/cfp/est/ttap-submissions?utm-source=CPB&utm-medium=cms&utm-campaign=JMJ02597">https://explore.tandfonline.com/cfp/est/ttap-submissions?utm-source=CPB&utm-medium=cms&utm-campaign=JMJ02597</a> or <a href="https://explore.tandfonline.com/cfp/est/ttap-yallows-tap-utm-source-che-submissions">https://explore.tandfonline.com/cfp/est/ttap-yallows-tap-utm-source-che-submissions</a> or <a href="https://explore.tandfonline.com/cfp/est/ttap-yallows-tap-utm-source-che-submissions-tap-utm-source-che-



# **Community News**



# We are delighted to welcome a new arrival.

#### **Dr Laura Watts**

Laura Watts is a writer. poet. and 'ethnographer of futures' who has just ioined as Interdisciplinary Senior Lecturer in Energy & Society, based in Geography, GeoSciences. She comes over from the



IT University of Copenhagen, where she was Associate Professor in the Technologies in Practice research group for the past six years. Before that, she was based at the Centre for Science Studies at Lancaster University.

Laura's research is concerned with the effect of 'edge' landscapes on how the future is imagined and made, along with an exploration of different writing methods for future-making. For the past decade she has been working with people and places around energy futures in the Orkney islands.

Her latest book 'Energy at the End of the World: An Orkney Islands Saga' is due to be published by MIT Press. She is also co-author of 'Ebban an' Flowan', a poetic primer to marine renewable energy, and she won the International Cultural Innovation Prize 2017, along with Madeira Interactive Technologies Institute, Community Energy Scotland, and Eday Renewable Energy, for a community-built energy storage solution designed from spare parts.

For more on her work see her extensive website at <a href="https://www.sand14.com">www.sand14.com</a>, or follow her on twitter @laurawatts, or get in touch and go for a coffee.

#### TRANSGENE goes to the Fringe

On 22nd August, TRANSGENE took part in the Edinburgh Festival Fringe, the largest arts festival in the world. As part of the 'Cabaret of Dangerous Ideas' strand, James Lowe presented a show entitled 'Will Pigs Save Our Bacon?' at The Stand's New Town Theatre on George Street.

The Cabaret of Dangerous Ideas brings academics into the festival, and was pioneered by comedian Susan Morrison, who hosts all of the shows. It is supported by the Beltane Public Engagement Network, of which James has been a fellow, and is produced by Stephen Wright of the Fair Pley production company.

The topic of the show was the prospect of the transplantation of organs from pigs to humans – xenotransplantation. With audience participation, games and discussion, James covered some of the scientific, technical, ethical and regulatory issues and problems associated with making xenotransplantation work. He was able to draw upon the history of transplantation and share his own insights from the history of pig genomics and the role of immunological research in that.

Professor Alan Archibald of the Roslin Institute provided an account of recent developments in the field of genome editing, and James then related the potential use of these techniques to remove potential viral threats to recipients of transplanted organs and to help combat immune rejection.

The show, and the preparation for it, are just one part of the wider engagement efforts of the TRANSGENE team, with more to be unveiled over the coming months.



Dr James Lowe at the Cabaret of Dangerous Ideas (photo: Niki Vermeulen)

# Community News



#### **New Appointments for Xiaona Wang**

Having completed a predoctoral fellowship at the Max Planck Institute for the History of Science in STIS Berlin. PhD student, Xiaona Wang, has now been awarded a pre-doctoral fellowship at the Herzog August Bibliothek Wolfenbüttel. Germanv. from November December this year.



This generously funded stipendiary award is very prestigious in the field of intellectual history. On completion of her PhD (due at the end of December), she will take up a post-doctoral fellowship at the Warburg Institute, University of London, a leading centre for the study of Renaissance thought.

Her project at the Warburg Institute is concerned to discover when and how gravity first came to be regarded as an attractive force. Gravitational fall was never regarded as the result of an attractive force among the Ancients, and Medieval philosophers followed the Aristotelian view that bodies simply moved themselves to their natural place at the centre of the universe. In the mechanical philosophy, first developed in the seventeenth-century, it was claimed that falling bodies must be pushed to the ground by descending streams of invisible particles. But, when Newton suggested that gravity was an attractive force he never claimed this was a new idea, unique to his Principia mathematica (1687).

The question arises, therefore, as to what earlier sources held gravity to be an attractive force; what sources did Newton have in mind, which he drew upon in the Principia? Remarkably, historians of science have so far failed to address this question (or even to notice there was a question), and Xiaona's project should open up a new area of research.

## Knowledge Exchange 'Out of this World'...

STIS PhD student, Matjaz Vidmar, was invited to deliver a series of knowledge exchange and outreach events for <u>Orkney International Science Festival</u> (OISF) between 6th-12th September 2018. In particular, Matjaz spoke to the local community about going "From Standing Stones to Blasting Rockets: Scotland is Off to Space!"

The talk draws on his extensive ESRC-funded doctoral research of the development of ("New") Space Industry in Scotland, in particular examining emerging networks, innovation intermediaries and changes to new product development processes. With the recent announcement of UK Government investment into the creation of vertical launch capability in the North of Scotland, this is a particularly topical contribution to the discussion in many communities. He also visited and spoke to pupils of local schools to discuss emerging opportunities through which young people can engage in science, technology and innovation, including studying it form a social-scientific perspective.

As part of the festival, Matjaz also presented some thoughts on the deep connections between scientific research, arts and society as explored through his participation in the recent Social Dimensions of Outer Space network's Edinburgh Futures Institute "Scotland in Space" project. He outlined the main points from my essay on the topic in a talk entitled Universe: The Love Story, as part of the <a href="mailto:skyranMoon exhibition">skyranMoon exhibition</a> in Stromness.

In addition, Matjaz is embarking on a short tour with a new talk/show "What are They Really Doing up There?", combining several of his previous Cabaret of Dangerous Ideas (CoDI) Edinburgh Fringe shows. The resulting mix is light-hearted exploration of life in and out of various orbits with topics on covering anything form astronaut food in space and on Earth (2018), to satellite surveillance of your back yard (2016) and establishing a new empire in the sky with Lunar and Martian colonies (2017). More info is available from: http://www.roe.ac.uk/~vidmar/



Matjaz Vidmar at the Cabaret of Dangerous Ideas with his 2018 show: "Is Astronaut Food the Future?" (photo: Julija Pustovrh)