# ISSTI

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

### newsletter

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# Linking Up With Our Alumni

2020 was a difficult year for so many around the world. Though ISSTI members were locked down for much of the time they have not been idle! In the first Newsletter of the year we include a list of papers published in the previous year. This Newsletter lists over 50 papers published by ISSTI members during 2020, mainly in refereed journals. As well as recording PhD successes during the year this Newsletter also brings news of recent awards and public engagement activities. We have also been reaching out to our alumni community during the Covid-19 pandemic and are delighted to be able to share with you some news about their careers since leaving Edinburgh.

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# WANT MORE NEWS?!

Make sure to follow ISSTI and STIS Twitter accounts at: @UoE\_ISSTI & @UoE STIS

### Grants, Grants, Grants



### Two major interdisciplinary awards

Wellcome Trust funding to extend the <u>Centre for</u> <u>Biomedicine</u>, <u>Self and Society</u> until 2024

Sarah Cunningham-Burley (PI), Sarah Chan and Martyn Pickersgill (Usher Institute) and Steve Sturdy (STIS) (Co-Is) have secured an additional award of £844,510 from the Wellcome Trust to continue the pathbreaking work of the Centre for Biomedicine, Self and Society (CBSS) until 2024. This will enable CBSS to build on its research



themes of Beyond Bodies, Beyond Disease, Beyond Global, Beyond Legal, Beyond Data and Beyond Engagement - and also to further a new thematic focus: Beyond Sex.

'Biology, Data Science, and the Making of Precision Education' Leverhulme Trust Research Grant (£151 516 Jan 2021-Jan 2023)

Advanced technologies that can process complex biological data have transformed the human sciences, and are now being used to conduct studies and generate new knowledge in the field of education. The <u>Leverhulme Trust</u> has recently awarded a research project grant (**£151 516**) to Ben Williamson (Education) (PI)

and Martyn Pickersgill (Usher Institute) and Jessica Pykett (Birmingham University) (Co-Is) to study the rise of data-intensive, computational biology in education. Aside from the empirical work itself, this project also represents an opportunity to extend conceptual conversations between education, geography, and science and technology studies.

LEVERHULME TRUST \_\_\_\_\_

### **Optometry Pilot Study (OPS)**

Robin Williams and an interdisciplinary team from Informatics (Malcom Atkinson and Aurora Constantin) and the Usher Institute (Miguel Bernabeu) have been awarded £10,000 from the DDI BEACON Build Back Better Open Call Covid-19 Award for Response & Accelerating Economic and Social Recovery in Edinburgh & South East Scotland for a pilot study for remote diagnosis service in ophthalmology



The Optometry Pilot Study (OPS) will explore optometrists' expectations and concerns about remote consultation and data sharing. Artificial intelligence could improve diagnostic precision and treatment by sharing retinal-image data between hospitals and High Street optometrists. However, they are not familiar with AI and may worry about its reliability and its potential impacts on their practice. A team, combining medical, sociological and technical viewpoints, will identify potential challenges to these new services and propose mitigations. OPS aims to ensure that advances achieved by the Scottish Collaborative Optometry-Ophthalmology Network e-research (SCONe) are translated into practice.

### **And More Grants**



### **Dr Morgan Currie Double Grant Success**

Morgan has been awarded a **Data Driven Innovation (DDI) Small Grant** (£13,656) for the <u>LeithLate Virtual Tours</u> by the Culture & Community Mapping Project

"The LeithLate Virtual Tours shows audiences Leith neighbourhood street art through hi-res images and audio guides by the artists and narrator Cameron Foster."



To read more please click <u>here</u> to visit their official website.

Morgan also received an **Edinburgh Future's Institute (EFI) award** (£5000) for <u>Culture in & out of Lockdown</u> by the Culture & Community Mapping Project

For additional information, including access to the "Art in & out of Lockdown' report which "describes how Edinburgh's cultural institutions have helped support local communities during the 2020 pandemic" please click here.

### Dr Matjaz Vidmar Heads Research Team on The New Real

Our recent PhD graduate Dr Matjaz Vidmar is leading an interdisciplinary research team (including several ISSTI members) on *The New Real* programme directed by Dr Drew Hemment. This is an initiative by Edinburgh Futures Institute and Edinburgh College of Art, working with Edinburgh's festivals and The Alan Turing Institute, that explores the extraordinary creative potential of AI to imagine and deliver novel artistic experiences, fuel new business models, and maintain and build new audiences.

The first phase of this work started with two commissions funded by the Data-Driven Innovation Covid-19 relief fund and Creative Scotland, premiered for the Edinburgh International Festival in March 2021. Currently, the team is working on a £100k Resilience in the New Real demonstrator project for the Edinburgh International Science Festival, funded by the SFC Beacon Design Lab demonstrator grant, which is to be followed by a £450K UKRI/AHRC Covid-19 resilience grant for 3 pilot projects over the next 18 months.

More can be found out about "The New Real" projects here.







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.

### Public Engagement



# Dr Jarita Holbrook Featured in National Geographic Episode, Runs Online Astronomy Event and is accepted onto Senior Leadership Programme for Women of Colour

The National Geographic Explores episode entitled "How Ancient Astronomy Mixed Science with Mythology" can be watched <a href="here">here</a>.

Dr Holbrook's online event "Two Eyed Seeing: African Indigenous Astronomy & NASA Moon to Mars" took place on Friday, February 26, 2021. A link to the event poster pictured below (left) can be found <a href="https://example.com/here">here</a> and to watch the event replay please click <a href="here">here</a>. Dr Holbrook's film "Black Suns: An Astrophysics Adventure" also won the Science and Engineering Award at the Natourale Film Festival in Wiesbaden, Germany. To view the film please click <a href="here">here</a> and to watch the award ceremony please click <a href="here">here</a>.

To find out more about the programme, which is specifically tailored for University of Edinburgh, and for BAME women please click <u>here</u>. Dr Holbrook was also featured in an article on Astrobites entitled '#BlackInAstro Experiences: Dr. Jarita Holbrook' which can be found here.



### Dr Sarah Parry Calls Attention to Women in Climate Change

In December 2020, Dr Parry was the academic expert for an online training programme run by the Educational Centre Visio and Green European Foundation, with financial support from the European Parliament, called Feminist Climate Ambassadors, which aimed to address how feminism should influence climate policies. Dr Parry was also cited in an article published in The Geographical Magazine, Nov 2020, Vol 92, Issue 11. The piece is entitled "Women's Work: evidence suggests that, on average, women are both more affected by climate change and more environmentally conscious than men. Are attempts to tackle environmental issues without discussing gender therefore futile?"

### **Community News**

## We are delighted to welcome a new colleague.

#### **Prof John Vines**

John joined the University of Edinburgh in January as Chair in Design Informatics, based in the School of Informatics and codirecting the Institute for Design Informatics (with Chris Speed). His research is in the



field of human-computer interaction, and he has particular interests and expertise in participatory media, participatory and socially responsible approaches to design and research, and in understanding the role of data-driven technology in social contexts. He conducts research on technology and experience around a variety of domains, such as ageing and the lifecourse, health and wellbeing, financial inclusion, and civic and civil society. John has joined Edinburgh from Northumbria University's School of Design. where he co-founded the CoCreate research group, and prior to that was a post-doc and academic at Newcastle University's Open Lab.



# Professor Martyn Pickersgill launches the Social Dimensions of Biomedicine Programme

Based in Edinburgh Medical School, this programme of research, training, and engagement is concerned with elucidating and illuminating the societal and interpersonal processes structuring biomedical knowledge production and application, alongside the circulation of biomedicine within society. Programme members are currently working as part of externally funded activities in excess of £12m, and Associates are based in Africa, Australasia, Asia, Europe, and North America. You can follow the Programme on Twitter: @SocialBiomed

# Social Dimensions of Biomedicine

# The Institute for Advanced Studies in the Humanities (IASH) Announces New £750,000 Three Year Programme of Fellowships

"The Institute Project on Decoloniality 2021-24 (IPD'24) project offers funding for scholars from around the world to visit Edinburgh and conduct research on themes such as decolonising the curriculum, the British Empire, slavery, contemporary inequalities and reparations." For further information please click <a href="heterogeneering-neeri

### Vassilis Galanos Contributes to Al Foresight Discussions

Vasilis Galanos offered his perspective at the European Trade Union Insitute's "ETUI Strategic Foresight Project- scenarios workshop" More information <a href="https://www.nee.">here</a>.
He also delivered an online talk as part of a Seminar Series on The Digital Future for Business & Society: Perspectives on Al Challenges and Opportunities which can be viewed <a href="https://www.nee..org/here/">here</a>.

Newly Published Books (please click citations below for more information)

Vidmar, M. (2020) Innovation Intermediaries and (Final) Frontiers of High-tech. Palgrave

Macmillan.

### **ISSTI Alumni Network**



Through the ISSTI Newsletter and other channels the Institute for the Study of Science,

<u>Technology and Innovation</u> has been reaching out to former postgraduate students and
colleagues. This seems particularly important during the current Covid-19 pandemic when so
many channels for meeting face to face have been locked down. We invited our alumni to
suggest ways of strengthening our engagements. We also asked them to let us know how they
have been getting on since leaving Edinburgh.

#### Here are some of the updates they provided

We plan to make these a regular feature of the ISSTI Newsletter – so feel free to submit your news. And if you know any colleagues who have somehow fallen off the list can you ask them to email us via Robin.Williams@ed.ac.uk

#### **Dr Dave Stearns**

I was a PhD student at Edinburgh from 2003-2008, supervised by Professor Donald Mackenzie.

I became a Senior Lecturer at the University of Washington in 2013, but decided to return to the software Industry in 2018. I am now a Staff Software Engineer at Stripe (<a href="https://stripe.com">https://stripe.com</a>), where I work on the engine that processes card-based payments. You can see details on my LinkedIn profile <a href="https://stripe.com">here</a>.

My dissertation entitled "Think of it as Money": A History of the VISA Payment System, 1970-1984 can be viewed here.

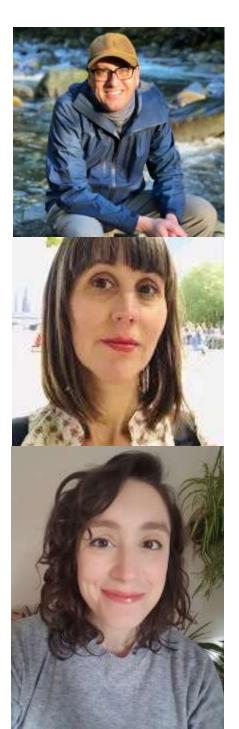
#### Dr Sara Bea

After completing my PhD in STIS in 2017, I was a postdoctoral researcher in Linköping University, Department of Technology and Social Change, working on Professor Steve Woolgar's VR grant project to develop Science & Technology Studies in Sweden.

I am currently a research associate at King's College London, Department of Global Health and Social Medicine, and deputy chair of the Biotechnology & Society Research Group. I joined in August 2020 and work on the Wellcome Trust-funded project 'Biomedical research and the politics of the human' led by Dr Amy Hinterberger. See Sara's profile <a href="https://example.com/here/beat/">here</a>.

#### Dr Leah Gilman

Since completing my PhD in 2017, I have been working as a researcher in Sociology at the University of Manchester. I work on the 'Curious Connections' project which explores the experiences of egg and sperm donors and their families in the context of increased openness in donor conception practices. I will soon be taking up a new post at the University of Liverpool where I will work on an inter-disciplinary project (sociology, bioethics, law, psychology) investigating the socio-ethical implications of direct-to-consumer genetic testing for persons impacted by donor conception. Findings from my PhD and postdoctoral research have been published in *Sociology of Health and Illness, Families, Relationships and Societies* and the *International Journal of Law,* 



### **ISSTI Alumni Network**



Policy and the Family and a book based on the Curious Connections project will be published with Emerald next year, co-authored with Dr Petra Nordqvist. I also have an interest in sociological fiction and have been collaborating with Dr Becky Tipper (fiction author and academic) on the 'Donor Stories' project since 2019. See Leah's profile <a href="https://example.com/here-exam

#### **Professor Donald Hislop**

I was connected to the STS programme in the 90s, doing the MSc in technology studies 92-93, and PhD (supervised by Donald MacKenzie), between 93-97.

I'm currently Professor in Sociology of Work and Technology, in the Business School, University of Aberdeen.

My most relevant research is on the impact of new technology on work, which is currently focussed on potential impact of AI on work, workers, and employment. See Donald's profile <a href="https://example.com/here/be/here/">here</a>.

#### **Dr Giorgos Zoukas**

I did my PhD on climate blogging under the supervision of James Stewart and Ann Bruce between 2014 and 2018, and I graduated (in absentia) in July 2019. To read my PhD thesis, please click <a href="here">here</a>.

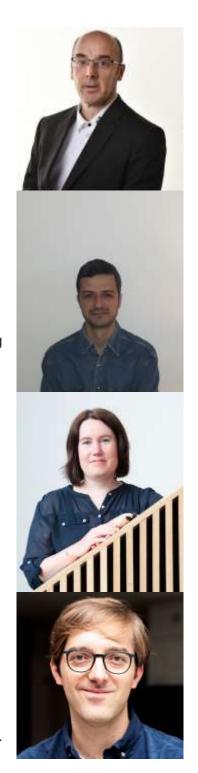
After my return to Greece, I worked as a scientific collaborator at the Greek State Scholarships Foundation and for the EU Risk Change project. Having obtained a two-year Greek/EU fellowship a year ago, I am currently a postdoctoral fellow at the Department of History and Philosophy of Science of the National and Kapodistrian University of Athens (In 2018, the department launched a STS postgraduate <a href="mailto:programme">programme</a>). My research examines the history of the appropriation of the internet by communities of environmental scientists and engineers.

#### Dr Emma King

I was at ISSTI/Innogen from 2008-2015, first doing my Masters and PhD, and then as a Research Fellow. In 2015 I moved to Stirling University to join the Nursing, Midwifery, and Allied Health Professions Research Unit (NMAHP-RU) where I am still based today. My original undergraduate was in Genetics, and moving into Health Services research has been a good mix for me of social research but with very practical applications.

#### **Dr Valeri Wiegel**

In my PhD studies I was supervised by Professor Robin Williams and Professor James Fleck. After graduating in 2016 I worked as a research fellow at the Usher Institute at the University of Edinburgh from April 2016 to April 2017. Thereafter I returned to Germany taking up a 3-months position as a visiting fellow at the Department of Sociology at the TU Berlin.



### **ISSTI Alumni Network**



It was there that I decided to depart from academia. In September 2017 I started working as an IT consultant and project manager with Deutsche Bahn AG, the German railway. Ever since I have been working on a range of projects including mentoring intrapreneurial teams, EC-funded and managing change projects. Professor Jane Calvert once asked how I am contributing to counter technological determinism in the industry. Obviously, I chose to take a very pragmatic approach in fighting it at the front line. Wherever possible I try to maintain links to academic colleagues and research institutions.

#### Alumni Dr Óscar Moreno-Martínez and Dr Javier Guerrero-Castro Publish Special Edition of Tapuya

Our recent PhD graduates **Dr Óscar Moreno-Martínez and Dr Javier Guerrero-Castro** have edited a special edition of the
journal *Tapuya: Latin American Science, Technology and Society on*"The gray zones of innovation: the illegal and the informal in
marginal worlds"

More information can be found by clicking here.



#### PhD Successes

We are delighted to record the success of another strong cohort of students of Science Technology and Innovation Studies who were awarded their PhDs in 2020

Timothy Squirrell	The Interplay of Authority and Expertise in Online Self-Improvement Communities
Sergio Orozco	How Do Planets Find Their Way? Laws of Nature and the Transformation of Knowledge in the Scientific Revolution
Tair Mukhamadiyev	Snow Leopard : Following the Footsteps of Asian Tigers? Innovation and Accession to the WTO: the Case of Kazakhstan
Rhodri Leng	Selective Citation and the Shaping of Scientific Knowledge: Citation Network Analysis and the Diet- Heart Debate
Jose Gomez	Infrastructuring Yachay: Contexts in Action and Expectations in Ecuador's ¿Yachay the City of Knowledge¿
Sam Beechener	How Co-Innovation Anticipates Scaling the Modulating Function of a Co-Innovation Space
Andres Dominguez Hernandez	Distributed Infrastructuring and Innovation: An Ethnographic Enquiry into Collaborative Modes of Work in an Internet of Things Ecosystem
Uchenna Nnabuko	Motivating Personal Health Record Users Towards Providing Better Healthcare: A Trial Study (with Anderson)
Óscar Moreno-Martinez	Technology and Innovation in the Colombian War. Insurgency, Counterinsurgency, and Terror (1993-2012) (with Graham Spinardi)
Matjaz Vidmar	Scottish Space Sector and Innovation: A PERIpatetic Study of an Emerging Innovation System and the Roles of Innovation Intermediaries

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