

ISSTI

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

Newsletter

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In this, the first ISSTI Newsletter of the 2023 academic year, we are delighted to report on outputs from some of our ongoing projects encompassing such diverse areas as data in healthcare, communications, community organizing, vaccine engagements, artistic imagery, cultural astronomy, myth, and much more.

We also include the regular line up of community news – recognizing the achievements and engagements of our community over the last year – and celebrate new research grants recently secured.

Research Awards



“Data and the ‘HealthCare Revolutions’” (DARE)

Catherine Montgomery has been awarded a European Research Council Consolidator grant worth nearly € 2 million for a five-year project investigating how and to what effect data is changing in healthcare.

The research will provide a novel comparative and context-specific framework for understanding how informatics and medicine are re-shaping each other and how data-driven healthcare is changing conceptions of health, illness and personhood. In doing so, it will make a major sociological contribution to our understanding of healthcare in the era of digital transformation. Four ethnographic work packages will trace developments in the use of biomedical AI, clinical trials and registries to inform care: (1) ‘Home’ will investigate the changing relations between data and care that take place when wearables are designed for real-time data capture in home-based clinical trials; (2) ‘Hospital’ will analyse the shifting boundaries between research and care in the intensive care unit; (3) ‘Nation’ will examine how citizenship is being re-forged through health data nationalism in the field of dementia and (4) ‘Policy’ will interrogate the values and assumptions produced in government blueprints for the digital transformation of health systems. Through these work packages, we will investigate and compare the kinds of work taking place at the data/care nexus; the forms of care that this work enacts; and the style of learning that healthcare professionals, data scientists, patients, caregivers and policy-makers are engaged in. A transecting work stream, ‘Synergy’, is dedicated to producing a synoptic and theoretically-rich understanding of data, care and learning in relation to health. For more information, see: <https://erc.europa.eu/news-events/news/erc-2022-consolidator-grants-results>



Dr Catherine Montgomery

The project will deliver a body of work which re-defines our understanding of the data-driven ‘revolution’ in healthcare and provide new theoretical repertoires with which to conceptualize healthcare in the twenty-first century.

Knowing and Evidencing Monkeypox

Martyn Pickersgill (PI), with Joanna Chataway (UCL) (PI) and **Jaime García Iglesias** (U. Edinburgh), Jeremy Horwood (U. Bristol), Tom May (U. South Wales), Maurice Nagington (U. Manchester), and Richard Amlôt (Co-Is), have been awarded a ESRC Research Grant of £164,446 for their project entitled ‘Social Science Issues Relating to Monkeypox - Knowing and Evidencing Monkeypox: A Rapid Policy-Focused Study of Community Organising, Communication, and Vaccine Engagements’.



Professor Martyn Pickersgill

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.

Research Engagements



Science Fiction Frames

As a writer with a background in astronomy, Pippa is interested in exploring how our interactions with the night sky are influenced by our more immediate surroundings. Pippa's essay (published by the Center for Science and the Imagination at Arizona State University) on the film 'Afronauts' considers this take on the real-life 1960s Zambian Space Academy. Two essays for ArtReview examine how science can be co-opted to use nature as a backdrop for human exploration, and in particular how NASA's aesthetic choices in framing the latest images from the Webb Telescope are an attempt to convince us of the 'heroic' nature of these images. After taking part in the Vienna-based art exhibition EXTR-Activism on outer space (with fellow ISSTI member Matjaz Vidmar amongst others), Pippa wrote an essay for Elsewhere, showing how only some historical eras are allowed to be visible in that city whilst others remain hidden.

Pippa's work can be found at the links below:

- 'Afronauts' published by the Center for Science and the Imagination at Arizona State University, <https://mailchi.mp/asu.edu/imaginary-papers-issue-10-may-2022>
- 'The Webb Telescope shows the Universe as we hope to see it', published by ArtReview, <https://artreview.com/the-webb-telescope-shows-the-universe-as-we-hope-to-see-it-art-history/>
- 'We're no longer passive spectators of natural wonder', published by ArtReview, <https://artreview.com/spectators-natural-world-fire-of-love/>
- 'Outer space in Währinger Strasse', published by Elsewhere: A Journal of Place, <https://www.elsewhere-journal.com/blog/2022/5/13/outer-space-in-whringer-strasse>



Pippa Goldschmidt

Cultural Astronomy in video and podcast

Jarita has made a number of video appearances, podcasts, speeches, and lectures in the last year. Here are a few:

- "[All Space Considered](#)" at Griffith Observatory. Jarita speaks about cultural astronomy, taking risks and being from Los Angeles.
- The [Kielder Observatory Podcast](#). Jarita speaks about cultural astronomy, star stories and religion.
- Kokino, Macedonia. Jarita is also an expert on this controversial site. At about 8:43 minutes into the [video](#), Jarita discusses the importance of understanding culture to learn what interests a society has (or had) in astronomy. Jarita's contribution is in English. Find the video and associated text [here](#).



Dr Jarita Holdbrook

Global Digital Exemplar Programme Evaluation: Investigating the Digitization of the NHS

Professor Robin Williams, together with Dr Kathrin Creswell (Usher Institute), contributed evidence to an Expert Panel of the House of Commons Health and Social Care Committee. The panel's report, recently published, criticized the UK Government for not meeting the commitments to digitise the NHS made in a 2022 Government policy paper regarding the delivery of records that integrate both care and health data, progress with the NHS app, and digital skills amongst the workforce. The panel stressed that digitization of health and social care is essential to realize the promise of improved and better integrated health and social care services. In series of [outputs and a final report](#), the panel concluded that digitization efforts have thus far been inadequate and have not fulfilled previous commitments.

Covid-19 Testing in Scotland

Dr Isabel Fletcher and Professor Catherine Lyall, both from STIS, recently concluded their learning review on behalf of the Scottish Government into the development of the programme of wastewater testing for Covid-19 in Scotland during 2021.

They interviewed more than 40 key participants to understand the collaborations that took place between researchers, government and the water industry during the initial response to the pandemic and beyond. These data provide a unique case study of how to build rapid research collaborations in response to crisis situations. Findings have been presented as part of the opening keynote of the 2022 Science of Team Science conference and were submitted to the Scottish Parliament Covid-19 Inquiry.

The report of this research, including recommendations to the Scottish Government was published at the end of last year and is available [here](#). A shorter version of this report just dealing with the Lessons Learned research is also available [here](#).

Artificial Intelligence and Health

Our growing research cluster on Artificial Intelligence and health hosted a visit from the [Norwegian Centre for E-health Research](#) on 14-15th March 2023. We exchanged ideas about burgeoning attempts to apply AI in medical diagnosis and beyond, the difficulties encountered of implementing, validating and rolling these out sustainably and at scale and the challenges for studying this rapidly evolving

Norwegian Centre for

E-health Research:

- Kristian Malm-Nicolaisen,
- Line Linstad
- Dr Line Silsand
- Mari Kannelønning

University of Edinburgh:

- Xiao Yang
- Dr Kathrin Cresswell
- Prof Stuart Anderson
- Dr Sue Hinder
- Dr Hajar Mozaffar
- Prof Robin Williams
- Dr Andrey Elizondo

landscape.



This event came fast on the heels of occasional seminars from leading international scholars - Prof Sally Wyatt and Dr Flora Lysen from Maastricht University (Examining patient perspectives on artificial intelligence in health care 10th March 2023) and Professor Eric Monteiro from the Norwegian University of Science and Technology (Digital Oil 13 March 2023). Eric is spending some sabbatical time in the University of Edinburgh Business School. His book *Digital Oil. Machineries of Knowing*, was published by

Community events: Mark your Diaries!

- Edinburgh Science: Can Robots Care? April 12, The Bayes Centre.
 - 16:00 Knowledge Café
 - 18:00 Discussion
 - <https://www.sciencefestival.co.uk/event-details/can-robots-care>
- ISSTI 2023 retreat. May 25-26th at the historic Linlithgow Burgh Halls at Linlithgow Palace
 - <https://www.historicenvironment.scot/visit-a-place/places/linlithgow-palace/>

- **Congratulations to Professor Martyn Pickersgill for being elected to the Scottish Science Advisory Council.**
- **Congratulations also to the following early-career researchers for completing their PhD:**
 - Andrey Solano
 - Vasileios Galanos
 - Maram Zahraa
 - Rodrigo Liscovsky
 - Antonio Ballesteros
 - Benedetta Catanzariti

Market Futures — Future Markets

Edinburgh's **Neil** Pollock, Teea Palo and Liz McFall are hosting the 7th Interdisciplinary Market Studies Workshop (#IMSW2023). IMSW will be hosted for the first time in collaboration with the *Journal of Cultural Economy*.

Notable keynote speakers include Professor Sharon Zukin, Dr Lana Swartz, Professor Michel Callon (in a pre-recorded conversation with Koray Caliskan), and Professor Pierre-Benoît Joly.

The workshop will coalesce on the theme of **Market Futures – Future Markets**, and will include submissions concerning accountable futures, concerning futures, designing futures, financial futures, hyping futures, and technological futures, among others.

For more info and registration see <https://www.imsw2023.business-school.ed.ac.uk/>

Edinburgh, 31 May to 2 June 2023.



ISSTI Co-hosting Major International Conference on Engineering, Technology, and Innovation – ICE 2023

We are delighted to be co-hosting the ICE 2023 conference, together with the School of Engineering and the IEEE Technology and Engineering Management Society (TEMS) in June (19th-21st). This will be preceded by the NITIM Doctoral School (15th-17th June) - an international graduate school for research on Networks, Information Technology, and Innovation Management.



This year, the ICE Conference, chaired by Dr Matjaz Vidmar, Prof Jamie Fleck and Prof Robin Williams, and the annual NITIM Doctoral School have a specific focus on data-driven engineering, innovation, and entrepreneurship under the theme of **Shaping the Future**.

For more info see www.ice2023.org

Call for papers and doctoral school are open – both close on 31st March.

Registration opens in April.



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